



One Cambridge Place, 50 Hampshire Street
Cambridge, Massachusetts 02139
tel: 617 452-6000
fax: 617 452-8000

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BUREAU OF AIR REGULATION

December 18, 2003

Mr. Alvaro Linero
DEP, Division of Air Resources Management
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

Subject: Bay County Resource Recovery Facility
Air Pollution Control Retrofit Project
Source Modification Construction Air Permit Application

Dear Mr. Linero:

On behalf of Bay County and Montenay-Onyx, Inc., Camp Dresser & McKee Inc. is pleased to submit the Application for a Source Modification Construction Air Permit for the Air Pollution Control Retrofit Project at their resource recovery facility in Panama City, Florida. The application will be formally submitted via the EPSAP.

If you have any questions regarding this correspondence, please contact me at (617) 452-6363.

Very truly yours,

Marc C. Wallace
Senior Air Quality Scientist, QEP
Camp Dresser & McKee Inc.

cc: Bill Hudson, Bay County
John Zebroski, Montenay-Onyx, Inc.
Charles Cook, CDM
David Collins, CDM
Anthony LoRe, CDM
Joseph J. Kwiatkowski, CDM

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Bay County, Florida

**Resource Recovery Facility
Air Pollution Control Retrofit Project
Source Modification Construction Air Permit
Application**

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Application

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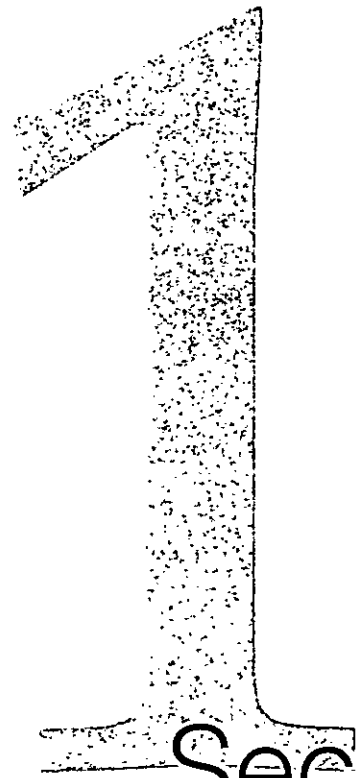
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Section
One

Section 1

Introduction

The Emissions Guidelines for Small Municipal Waste Combustors (MWC), 40 CFR 60 Subpart BBBBB, and 62-204.800(8)(e), F.A.C. require that the Bay County Resource Recovery Facility (Facility) meet more stringent air emission standards by November 15, 2005. In order for the Facility to continue to operate beyond this date, the existing air pollution control (APC) equipment, which consists of electrostatic precipitators (ESPs) for particulate control, will require replacement with more extensive APC equipment. The purpose of this Minor State Air Construction Permit Application is to obtain a construction permit for the installation of new APC equipment that would be necessary for the Facility to meet the current regulations.

A description of the project and the proposed APC system is presented below. The air regulatory applicability analysis and compliance plan are presented in Section 2. Section 3 presents the results of the stack height evaluation for proposed new flue gas stacks. Section 4 includes the Air Construction Permit Application forms. Appendix A presents preliminary site plans and process flow diagrams of the APC system and Appendix B contains the Facility's current Title V Permit.

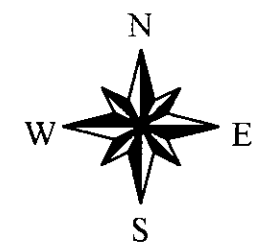
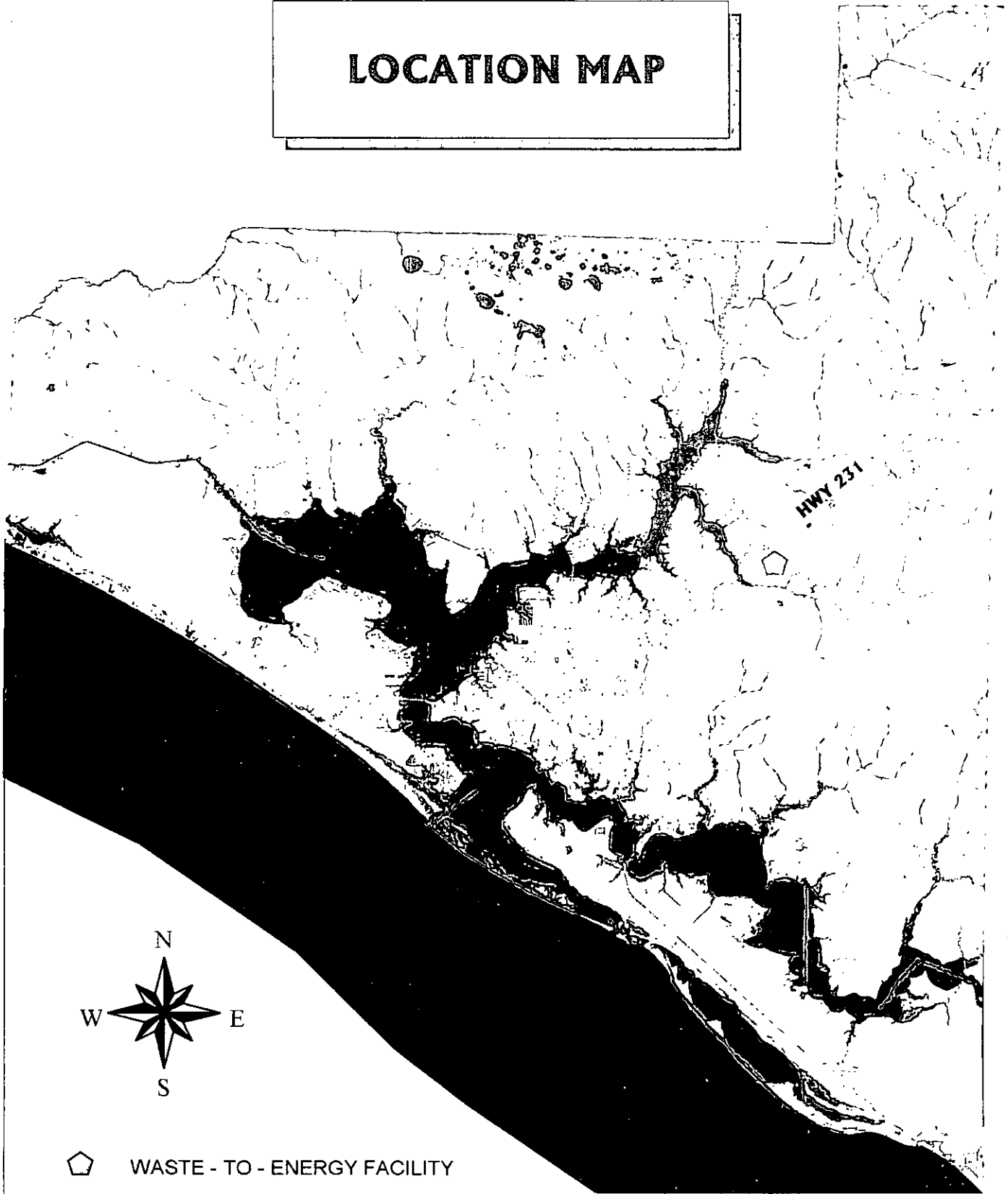
1.1 Background

Bay County (County) disposes of their municipal solid wastes (MSW) at their Resource Recovery Facility (Facility) located off of US Highway 231 North as shown on Figure 1-1. The Facility consists of two mass burn, rotary waterwall municipal waste combustor (MWC) units that operate independently of each other. The original design capacity of each unit at the design refuse heating value of 4,500 Btu per pound was 255 tons per day (tpd). The capacity of each MWC was derated to 245 tpd in 1999 making the Facility subject to 40 CFR 60 Subpart BBBBB. The Facility throughput is proposed to remain at its derated capacity of 245 tpd for each of the two combustors.

MSW is reduced in weight and volume by the combustion process and heat is recovered in the form of steam. The steam is used to generate electricity in a single steam turbine-generator. Particulate matter (fly ash) is removed from the flue gases generated by each unit using dedicated ESPs. The existing ESPs currently discharge to separate flues located within a common concrete stack shell. Bottom and fly ash are disposed at the County's Steelfield Road landfill. The Facility is operated and maintained by Montenay Bay (Montenay) on behalf of the County under a long-term Resource Recovery Management Agreement.

It is proposed that the existing ESP, on each unit, be replaced with an acid gas scrubber and a fabric filter baghouse. Other changes, such as installation of lime storage and slaking equipment, a carbon storage and injection system and a new and expanded continuous emissions monitoring (CEM) system are also proposed.

LOCATION MAP



WASTE - TO - ENERGY FACILITY

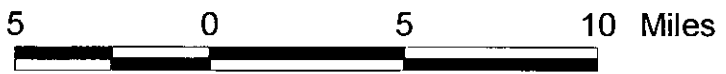


FIGURE No. 1-1
Bay County, Florida
Waste to Energy Facility

1.2 Proposed APC Modifications

1.2.1 New Air Pollution Control Equipment

In order to meet the requirements of 40 CFR 60 Subpart BBBB (Emission Guidelines for Small Existing MWCs), Bay County proposes to install a Spray Dry Absorber (SDA) and fabric filter baghouse (FF) on each unit. Powdered carbon would be injected into the flue gas ductwork upstream of the new SDA for enhanced mercury and dioxin control and lime slurry would be injected into the SDA for acid gas control. Flue gases from the SDA would be discharged to a new FF that would replace the existing ESP to provide the necessary degree of particulate removal. This APC equipment configuration was selected for the following reasons:

- This combination of equipment is capable of meeting the required emission limits on a consistent basis while providing a reasonable margin of safety;
- This combination of equipment has been used extensively in the United States over the past ten years and its performance and operations and maintenance history are well proven;
- This combination of equipment is considered maximum achievable control technology (MACT) for municipal waste combustors (60 FR 65419, December 19, 1995); and
- This option could be substantially constructed while the combustion units continued to operate with the existing control equipment and would require only relatively short unit outages for equipment tie-in.

This equipment will provide enhanced removal of particulates (TSP and PM₁₀), sulfur dioxide (SO₂), hydrogen chloride (HCl), lead (Pb), cadmium (Cd), dioxins and mercury. Add-on control equipment for carbon monoxide (CO) and nitrogen dioxide (NO) will not be needed because the Facility's emissions of these pollutants currently comply with the Subpart BBBB standards.

1.2.2 New Ancillary Equipment and Systems

The following new ancillary equipment and systems will be needed to support the installation of new SDA and FF equipment:

- Two centrifugal induced draft (ID) fans, one per train;
- One pebble lime storage silo with redundant lime slakers, a common lime slurry storage tank, and redundant lime slurry pumps;
- One powdered activated carbon storage silo with three metering and transport blower systems, one per train plus a common spare;

- Two pneumatic fly ash handling systems, one per train;
- One compressed air system with redundant air compressors and air dryers; and
- One continuous emission monitoring (CEM) system with two outlet multi-gas analyzers, one set per train plus a common spare multi-gas analyzer.

1.2.3 New Buildings and Structures

The following new buildings and structures will be needed to support the installation of new SDA and FF equipment:

- Electrical building to house new motor control centers (MCCs);
- Compressed air building to house new air compressors and air dryers;
- CEM enclosure to house new CEM analyzers;
- Lime system enclosure beneath the lime silo to house the lime slakers, slurry storage tank and lime slurry pumps;
- Carbon system enclosure beneath the carbon silo to house the carbon metering equipment and transport blowers; and
- Two free standing steel stacks, one per train. These stacks are proposed to replace the existing two-flue concrete stack due to the poor condition of the outer concrete shell.

Preliminary site plans, process flow diagrams, and general arrangement drawings of the proposed APC equipment are contained in Appendix A and are subject to change during final design. An evaluation of the proposed new stack's dispersion characteristics is presented in Section 3.

Section
Two

Section 2

Proposed Emission Rates and Applicable Air Requirements

2.1 Introduction

The Facility's two rotary-type MWC units have been in commercial operation since 1987. The maximum heat input of each unit at the permitted capacity of 245 tpd of MSW is 92 million Btu per hour (MMBtu/hr). Both units are considered "small" MWCs under 40 CFR 60 Subpart BBBBB.

This APC Retrofit Project is being permitted as a minor source because the proposed installation will result in emission reductions. Table 2-1 presents the maximum potential emission rates from the existing equipment and the proposed retrofit. The only pollutant that shows higher potential emissions is NO_x. The increase can be attributed to higher combustion airflow into the combustion chamber to ensure that CO emissions remain below 250 ppmvd. It is important to note that although the maximum potential emissions are higher, recent stack testing conducted in 2002 with the higher combustion airflow indicates that the actual emissions are approximately 45 lb/hr, which is approximately 72% of the new emission limit of 170 ppmvd.

Retrofitting the Facility with new APC equipment requires updating the Facility's existing Title V Operating Permit (0050031-002-AV). This process began in December 2002 when the County notified FDEP that the Facility was subject to Subpart BBBBB. Because the Facility's existing Title V permit had more than three years remaining in its term at the time, FDEP was required to reopen the permit and revise it to include the new requirements, even though the new/modified facility had not been constructed. The FDEP submitted an update of the Facility's permit on May 1, 2003 to reflect all of the new requirements of 40 CFR 60 Subpart BBBBB to USEPA for approval. USEPA issued an approval of the application in June 2003. The approved permit is contained in Appendix B.

This section reviews the federal and state regulations that are applicable to the Facility and the APC Retrofit Project including construction of new flue gas stacks.

2.2 Air Regulations

This section discusses the air quality regulations promulgated by USEPA and FDEP that are applicable to the Facility. Federal regulations are codified in Code of Federal Regulations (CFR) and state regulations in the Florida Administrative Code (FAC).

Federal Air Quality Regulations Applicable to Combustion Sources

- 14 CFR 77 - Objects Affecting Navigable Air Space
- 40 CFR 50 - National Primary and Secondary Ambient Air Quality Standards

**Table 2-1
Existing and Future Emissions Limits**

| Pollutant | Existing | | Retrofit | | New Air Pollution Control Equipment |
|-----------------------------------|--|---|--|--|-------------------------------------|
| | Facility Permit Limits ^{1,2} | Equivalent Annual Emission Rate (tons/year) | Emission Guidelines (EG) for Class I Existing Small MWC 40 CFR 60 Subpart BBBBB ¹ | Equivalent Annual Emission Rate ³ (tons/year) | |
| Particulate Matter (PM) | 13.5 lb/hr (137 mg/dscm @12% CO ₂) | 59.13 | 27 mg/dscm [3-run avg.] | 22.60 | Fabric Filter (FF) |
| Sulfur dioxide (SO ₂) | 71.5 lb/hr (135 ppmv) | 313.17 | 31 ppmv or 75% reduction [24-hr geometric avg.] | 78.40 | Spray Dry Absorber (SDA) |
| Nitrogen oxide (NO _x) | 53.9 lb/hr (185 ppmv) | 236.08 | 170 ppmv [24-hr arithmetic avg.] | 272.45 | --- |
| Carbon monoxide (CO) | 185.6 lb/hr (800 ppmv) | 812.93 | 250 ppmv [24-hr geometric mean] | 243.91 | --- |
| Lead (Pb) | 0.20 lb/hr (1.3 mg/dscm) | 0.88 | 0.490 mg/dscm [3-run avg.] | 0.41 | SDA/FF |
| Mercury (Hg) | 0.18 lb/hr (2.4 mg/dscm) | 0.79 | 0.070 mg/dscm, or 80% reduction ⁴ 0.080 mg/dscm, or 85% reduction [3-run avg.] | 0.24 | SDA/FF/Carbon Injection (CI) |
| Cadmium (Cd) | -- | -- | 0.040 mg/dscm [3-run avg.] | 0.03 | SDA/FF |
| Hydrogen Chloride (HCl) | 123.3 lb/hr (531 ppmv) | 540.05 | 31 ppmv or 95% reduction | 39.37 | SDA |
| Dioxins | -- | -- | 30 ng/dscm with FF [3, 4-hr avg.] | 5.02E-05 | SDA/FF/CI |
| Opacity | 15% [6-minute average] | -- | 10% [6-minute average] | -- | FF |
| Fugitive ash | -- | -- | Visible emissions for no more than 5% of hourly observation period | -- | Equipment Enclosure |
| Beryllium (Be) | 1.00E-05 lb/hr (0.079 ug/dscm) | 4.38E-05 | 1.00E-05 lb/hr (0.079 ug/dscm) | 4.38E-05 | SDA/FF |
| Hydrogen Fluoride (HF) | 0.30 lb/hr (2.4 mg/dscm) | 1.31 | 0.30 lb/hr (2.4 mg/dscm) | 1.31 | SDA |
| Volatile organic compounds (VOCs) | 14.2 lb/hr (112 ppmv) | 62.20 | 14.2 lb/hr (112 ppmv) | 62.20 | --- |

Note:

¹ Concentrations are corrected to 7%O₂

² Existing permit concentration limits were calculated based on a capacity of 245 tons per day and an air flow rate for both units at this load of 51,030 dscfm @7% O₂ (24.1 dscm/sec).

³ Emission rate calculated based on 24 hours per day / 365 days per year operation at a load of 51,030 dscfm @ 7% O₂ (24.1 dscm/sec).

⁴ The Florida Mercury Rule concentration standard of 0.070 mg/dscm @7% O₂ is more stringent than Subpart BBBBB concentration standard of 0.080 mg/dscm @7% O₂. However the removal requirement of 80% is less stringent than the 85% removal required in Subpart BBBBB; therefore, a mix of both regulations would apply (i.e., 0.070 mg/dscm @7% O₂, or 85% removal, whichever is less stringent).

dscm = dry standard cubic meter per minute

ppmv = parts per million by dry volume

mg = milligrams

ug = micrograms

- 40 CFR 51 Subpart I - Prevention of Significant Deterioration
- 40 CFR 52 Subpart K - Approval and Promulgation of Implementation Plans, Florida
- 40 CFR 60 Subpart E – Standards of Performance for Incinerators
- 40 CFR 60 Subpart BBBB – Emission Guidelines for Small Existing Municipal Waste Combustors
- 40 CFR 61 Subpart C - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Beryllium
- 40 CFR 63 Subpart B – Requirements for MACT Determinations for Major Sources in Accordance with Clean Air Act Sections 112(g) and 112(j)
- 40 CFR 64 - Compliance Assurance Monitoring Rule
- 40 CFR 70 – State Operating Permits

State Air Quality Regulations Applicable to Combustion Sources

- 62-204, F.A.C., Air Pollution Control – General Provisions
- 62-204.800(8)(c), F.A.C., State Plan for Emission Guidelines for Small Municipal Waste Combustors, November 29, 2001
- 62-210, F.A.C., Stationary Sources – General Requirements
- 62-212, F.A.C., Stationary Sources – Preconstruction Review
- 62-213, F.A.C., Operation Permits for Major Sources of Air Pollution
- 62-296, F.A.C., Stationary Sources – Emissions Standards
- 62-297, F.A.C., Stationary Sources – Emissions Monitoring

Table 2-2 presents a summary of specific requirements for each of the above regulations and their implications for the Facility. Of these regulations, the most significant with respect to the APC Retrofit Project is 40 CFR 60 Subpart BBBB, Emission Guidelines for Existing Small Municipal Waste Combustors. This rule is discussed below in more detail.

2.2.1 Performance Standards for Existing Small MWCs

USEPA promulgated Emission Guidelines for existing small MWCs under Subpart BBBB of 40 CFR 60 on December 6, 2000. The Clean Air Act Amendments (CAAA) of 1990 required USEPA to review and revise, as necessary, the Subpart BBBB

Table 2-2

Applicable Air Regulations and Implications

| Applicable Air Quality Regulation | Requirements | Implication For Bay County RRF |
|--|--|---|
| 14 CFR 77 Objects Affecting Navigable Air Space | <p>-FAA requires notification for any kind of construction or alteration described below:</p> <p>- Any construction or alteration of more than 200 feet in height above ground level at its site.</p> <p>- Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes;</p> <p>(i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport with at least one runway more than 3,200 feet in actual length, excluding heliports.</p> <p>(ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport with its longest runway no more than 3,200 feet in actual length, excluding heliports</p> <p>(iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport</p> <p>-If you meet one of the above thresholds, then a FAA Form 7460-1, Notice of Proposed Construction or Alteration, needs to be submitted to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area where the construction or alteration will be located.</p> | <p>-A new stack with a height of 141 feet exceeds the 105.6 feet above ground level limit based on the 25 to 1 slope threshold; therefore, a FAA Form 7460-1 will be submitted to the FAA regional office.</p> |
| 40 CFR 50 | Ambient Air Quality Standards | <p>-EPA has established primary and secondary air quality standards for criteria air pollutants to protect the public health and public welfare.</p> |
| 40 CFR 51, Subpart I, Incorporated in Rule 62-212.400, FAC | Prevention of Significant Deterioration (PSD) | <p>-Applies to major stationary sources belonging to a list of 28 specified categories which have the potential to emit 100 tons/year or more of any criteria pollutants regulated under the Clean Air Act (CAA). Municipal waste combustors charging more than 50 tons per day are one of the specified categories.</p> <p>-A modification to an existing major source is subject to PSD regulations if the source is located in a PSD attainment area and the changes to the source constitute a major modification. Otherwise it is considered a minor modification.</p> <p>-A major modification is a physical change or a change in the method of operation of a major source which would result in a significant net emissions increase of a regulated pollutant</p> |
| 40 CFR 52, Subpart A, Section 52.24 | Non-Attainment New Source Review | <p>-A source modification is subject to non-attainment New Source Review (NSR) if the modification results in a Significant Net Emission increase of a pollutant for which the source is major and is located in an area designated as non-attainment.</p> |
| 40 CFR 52, Subpart K | Approval and Promulgation of Implementation Plans, Florida | <p>The state of Florida has been delegated full authority by EPA to administrate the State Implementation Plan (SIP). Additionally, FDEP has accepted delegation from EPA to issue permits for new and modified sources, and thereby satisfy the requirements of the PSD regulations (40 CFR 51.166). EPA's role in permitting a proposed source in Florida includes a review of assessment protocols for compliance with the SIP and guidance for policy decisions on as-needed basis.</p> |
| 40 CFR 60, Subpart E | Standards of Performance for Incinerators | <p>-Applicable to each MWC capable of charging more than 45 metric ton/day (50 tons/day) of MSW and that commenced construction modification after August 17, 1971</p> <p>-Particulate matter emissions limited to 0.18 grams/dscm (0.08 gr/dscf), corrected to 12 percent CO₂</p> <p>-Daily charging rates and hours of operation shall be recorded</p> <p>-Compliance with particulate matter emission limit shall be demonstrated by conducting a performance test.</p> |
| | | <p>Air quality in the vicinity of the facility is currently unclassified or better than the AAQS for all pollutants.</p> <p>-The facility is classified as a municipal waste combustor capable of charging more than 50 tons of refuse per day, and therefore, subject to the PSD regulations. The facility currently operates under a PSD permit granted prior to initial construction.</p> <p>-Air quality for Bay County and vicinity is currently considered to be meeting the Ambient Air Quality Standards (AAQS) for all PSD pollutants (40 CFR 81.310 and FAC 6-204).</p> <p>-FDEP considers this a "minor modification" for the existing facility capacity based on 62-212.400(2)(a)2.c. Since there is no increase in capacity and emissions will be reduced, except for NO_x, this is considered a beneficial air pollution control project.</p> <p>-Since the facility site and vicinity are considered to be in attainment of the AAQS for all criteria pollutants, the non-attainment NSR requirements do not apply.</p> <p>-Any modification to the PSD and Title V Operating permits will require a review by EPA.</p> <p>-The facility is subject to these requirements; however, Subpart BBBB is more restrictive than Subpart E.</p> <p>-The facility's current Operating Permit has a more restrictive PM emission limit of 0.03 gr/dscf.</p> |

Table 2-2

Applicable Air Regulations and Implications

| Applicable Air Quality Regulation | | Requirements | Implication For Bay County RRF |
|-----------------------------------|--|--|---|
| 40 CFR 60, Subpart BBBB | Emission Guidelines for Existing Small Municipal Waste Combustors | <p>-This subpart applies to small existing MWC units that commenced construction on or before August 30, 1999. Small MWC units are defined as those units that have a design combustion capacity of 35 to 250 tpd of MSW. Emission guidelines are established for two subcategories. Class I applies to small MWC units at facilities with an aggregate plant capacity greater than 250 tpd of MSW. Class II applies to small MWC units at facilities with an aggregate plant capacity less than or equal to 250 tpd of MSW.</p> <p>- Continuous emissions and opacity monitoring requirements and annual stack test requirements are the same as 40 CFR 60 Subpart Eb.</p> <p>-Record keeping requirements include operator training and certification; stack test results; continuously monitored pollutants and parameters, and carbon feed rate. All records should be maintained for a period of at least five years.</p> | <p>-Since the Facility is capable of processing an aggregate capacity of 490 tpd of waste, the MWC units are "Class I" for the purposes of the Subpart BBBB guidelines. The proposed Facility improvements include the use of GCP, SDA/FF, ACI systems designed to meet the EPA EG. Table 5 presents the EG emission limits for Class I facilities.</p> |
| 40 CFR 61 | National Emission Standards for Hazardous Air Pollutants (NESHAP) | <p>-NESHAP for Beryllium is applicable to combustors which process beryllium -containing wastes. The beryllium emission limit is 10 grams (0.022 lbs) over a 24-hour period.</p> <p>-NESHAP for mercury is applicable to plants that process wastewater treatment plant sludges. The mercury emission limit is 3.2 kilograms (7.1 lbs) over a 24-hour period.</p> | <p>-The facility technically does not process "beryllium containing wastes", but trace amounts of beryllium may be in the MSW. The facility's current Operating Permit has a more restrictive beryllium emission limit of 1×10^{-5} lb/hr, which is equivalent to 0.11 grams per 24-hour period. This limit will be retained.</p> <p>-Since the facility does not accept sewage sludge wastes, the Facility is not subject to the mercury emission limit under this subpart.</p> |
| 40 CFR 63 Subpart B | Requirements for MACT Determinations for Major Sources in Accordance with Clean Air Act Sections 112 (g) and 112 (j) | <p>The Clean Air Act (CAA) Amendments of 1990 contain changes to Section 112 of the Act to control hazardous air pollutant (HAP) emissions from major sources of HAPs. A major source is one that has the potential to emit 10 tpy of a single HAP, or 25 tpy of any combination of HAPs. The following pollutants emitted by the facility are HAPs: cadmium, mercury, beryllium, hydrogen chloride, hydrogen fluoride and dioxin.</p> <p>- EPA promulgated rules at 40 CFR 63 Subpart B requiring case-by-case control technology determinations, in accordance with CAA Section 112(g)(2)(B), for constructed or reconstructed major sources of HAPs, unless an emission limitation established under CAA Section 112 will be met.</p> | <p>- The facility is an existing major source of HAPs. The existing facility has the potential to emit 540 tpy of hydrogen chloride (HCl). The potential future HCl emissions will also exceed the 10 tpy threshold. Since it is a major source of HAPs some of the MACT requirements apply.</p> <p>-Since the facility will be a modified, but not reconstructed major source of HAPs, CAA Section 112 (g) does not apply; therefore, a case-by-case MACTdetermination is not required. Instead, the facility will meet the source-specific MACT requirements established under the Emission Guidelines and NSPS for MWCs.</p> |
| 40 CFR 64 | Compliance Assurance Monitoring (CAM) | <p>-Applies to a pollutant-specific emissions unit at a major source that is required to have a Part 70 or 71 permit (i.e., Title V operating permit) and applies to units subject to emission limitations or standards for an applicable regulated air pollutant, uses a control device to achieve compliance with emission limitations and standards, and has the potential pre-control device emissions that are equal to or greater than 100 percent of the amount required for a source to be classified as a major source, in tons/yr.</p> | <p>-The current facility has a Title V operating permit and has potential pre-controlled emissions greater 100% of the amount required for a source to be classified a major source (NO_x, SO₂, CO, HCl) (See Table 2-3).</p> <p>- CAM plans are not required, however for Part 60 and 63 emissions limits proposed after November 15, 1990.</p> |
| 40 CFR 64 cont. | Compliance Assurance Monitoring | <p>- Monitoring will include the following: continuous emission or opacity monitoring systems; continuous process, capture system, or control device; emission estimation and calculation procedures; operating and maintenance procedures and visible emissions.</p> | <p>-Since the facility is subject to the monitoring requirements under 40 CFR 60, Subpart BBBB, the facility will fulfill the monitoring requirements.</p> |
| 62-210 FAC | Stationary Sources - General Requirements | <p>-Section 62-210.300 FAC, requires appropriate permits prior to modification "to any source which emits or can reasonably be expected to emit any air pollutant...unless exempted pursuant to Department rules or statutes."</p> | <p>-County will need to obtain a minor state air construction permit.</p> |
| 62-212 FAC | Stationary Sources - Preconstruction Review | <p>-This is the rule that FDEP uses to implement the requirements of the PSD program (See discussion under 40 CFR 52.21 above). These requirements include: 1) Technology Review; 2) Best Available Control Technology; 3) Ambient Impact Analysis; 4) Additional Impact Analyses (soil, vegetation and visibility); 5) Preconstruction Air Quality Monitoring Analysis; 6) Post Construction Monitoring, and 7) Permit Application Information.</p> | <p>- Since FDEP approved the project as a "minor modification" to the existing PSD permit, the facility will not be required to meet the preconstruction review requirements for a major modification.</p> |

Table 2-2

Applicable Air Regulations and Implications

| Applicable Air Quality Regulation | | Requirements | Implication For Bay County RRF |
|---|--|--|--|
| 62-213 FAC, as required under 40 CFR Part 70. | Operation Permits for Major Sources of Air Pollution | -Applies to sources that have the potential to emit regulated pollutants in major amounts. Major source thresholds are: 100 tpy for CO, NO _x , PM ₁₀ , SO ₂ and VOCs; 5 tpy for lead; 10 tpy for any hazardous air pollutant; 25 tpy for total hazardous air pollutants, and 100 tpy for any other regulated pollutant. | - FDEP modified the Title V permit to include the 40 CFR 60 Subpart BBBB emissions limits and monitoring requirements and submitted it to USEPA for approval on May 1, 2003. USEPA approved the modification in June, 2003. |
| 62-296 FAC | Stationary Sources - Emission Standards | <p>-The existing facility and the facility after the proposed improvements must meet the Florida General Pollutant Emission Standards in FAC 62-296.320(1), 62-296.320(2), 62-296.320(3), 62-296(4)(b), and 62-296.320(4)(c). The particulate and opacity emission limiting standards of FAC 62-296(4)(a) do not apply to any emission units at the facility because the MWC units are subject to PM standards at FAC 62-296.401, and the other emission units do not produce a finished product through a chemical or physical change.</p> <p>-Section 62-296.416 (Florida Mercury Rule) establishes standards for mercury emissions from all MWC facilities charging rates equal to or greater than 40 tpd. The emission standard of FAC 62-296.416(3)(a) states that all mercury emissions shall not exceed 70 ug/dscm corrected to 7 percent O₂, or 80 percent control shall be achieved, whichever occurs first.</p> | <p>-The Facility after the proposed improvements will need to meet the EG and NSPS for PM of 0.012 gr/dscf and 0.01 gr/dscf corrected to 7% O₂, respectively. The Facility will also comply with FAC 62-296.401(3)(a) requirement of 0.08 gr/dscf corrected to 50% excess air. Both the existing and modified Facility will also comply with FAC 62-296.401(3)(b) requirement of no objectionable odor.</p> <p>-The Florida Mercury Rule concentration standard of 70 ug/dscm is more stringent than Subpart BBBB of the federal regulations. However the removal requirement of 80% is less stringent than the 85% removal required in Subpart BBBB; therefore, a mix of both regulations would apply (i.e., 70 ug/dscm @7% O₂, or 85% removal, whichever is less stringent).</p> |
| 62-297 FAC | Stationary Source - Emissions Monitoring | -Emission monitoring requirements for incinerators are described in FAC 62-297.310. | -The proposed improvements to the facility will meet the more stringent monitoring requirements under Subpart BBBB. |

guidelines. These guidelines were developed under Sections 111(d) and 129 of the CAA. Under Section 129 of the CAA, the guidelines were also established to reflect Maximum Achievable Control Technology (MACT) and to specify emission levels for additional pollutants. Subpart BBBB applies to small MWC units that began construction before August 30, 1999. Florida adopted the Subpart BBBB regulations by reference in FAC 62-204.800(8)(e) on August 1, 2001.

Subpart BBBB requires states to develop regulations that would limit MWC emissions from existing MWCs to levels as stringent as the federal requirement. The Emission Guidelines issued by USEPA establish emission limits for MWC metals [particulate matter (PM), opacity, Cd, Pb, and Hg], MWC acid gases [SO₂, HCl], CO, NO_x, and MWC organics (dioxins/furans). The emission limits for "small" MWC units (units with a design combustion capacity of 35 tpd to 250 tpd of MSW) are established for two subcategories. Class I applies to small MWC located at facilities with an aggregate plant capacity greater than 250 tpd of MSW. Class II applies to small MSW units at facilities with an aggregate plant capacity less than or equal to 250 tpd of MSW. Since the Facility is permitted to process an aggregate capacity of 490 tpd, the MWC units at the Facility are considered "Class I" for the purposes of the Subpart BBBB guidelines. The Emission Guideline limits for Class I facilities are shown in Table 2-3 along with the Facility's existing permit limits.

Although the FDEP has adopted the Subpart BBBB regulations and emission limits, the state, under Section 62-296.416 of the FAC, establishes standards for mercury emissions from all MWC facilities with charging rates equal to or greater than 40 tpd. The emission standard under FAC 62-296.416(3)(a) states that all mercury emissions shall not exceed 70 ug/dscm corrected to 7 percent O₂, or 80 percent control shall be achieved, whichever occurs first (Florida Mercury Rule). The state standard of 70 ug/dscm is slightly more stringent than the 80 ug/dscm limit under Subpart BBBB of the federal regulations. However the removal requirement of 80 percent is slightly less stringent than the 85 percent removal required in Subpart BBBB; therefore, a mix of both regulations would apply to the Facility (i.e., 70 ug/dscm at 7 percent O₂, or 85 percent removal, whichever is less stringent).

2.2.1.1 Operator Certification and Training

The Subpart BBBB standards require full certification of all MWC shift supervisors and MWC chief facility operators by ASME or an equivalent state-approved certification program. The Emission Guidelines also require that at least one certified chief facility operator (either fully or provisionally certified) or certified shift supervisor (either fully or provisionally certified) be on duty at the MWC at all times during which the MWC is combusting waste. A provisionally certified control room operator is allowed to "stand in" during times when a fully certified chief facility operator or shift supervisor is off-site. All chief facility operators, shift supervisors, and control room operators must complete the USEPA or state-approved operator training course.

**Table 2-3
Existing and Proposed Emissions Limits**

| Pollutant | Emission Guidelines (EG) for Class I Existing Small MWC 40 CFR 60 Subpart BBBB¹ | Existing Facility Permit Limits^{1,2} |
|--------------------------------------|---|--|
| Particulate Matter (PM) | 27 mg/dscm [3-run avg.] | 13.5 lb/hr (137 mg/dscm @12% CO ₂) |
| Sulfur dioxide (SO ₂) | 31 ppm _{dv} or 75% reduction [24-hr geometric avg.] | 71.5 lb/hr (135 ppm _{dv}) |
| Nitrogen oxide (NO _x) | 170 ppm _{dv} [24-hr arithmetic avg.] | 53.9 lb/hr (185 ppm _{dv}) |
| Carbon monoxide (CO) | 250 ppm _{dv} [24-hr geometric mean] | 185.6 lb/hr (800 ppm _{dv}) |
| Lead (Pb) | 0.490 mg/dscm [3-run avg.] | 0.20 lb/hr (1.3 mg/dscm) |
| Mercury (Hg) | 0.070 mg/dscm, or 80% reduction ³ 0.080 mg/dscm, or 85% reduction [3-run avg.] | 0.18 lb/hr (2.4 mg/dscm) |
| Cadmium (Cd) | 0.040 mg/dscm [3-run avg.] | -- |
| Hydrogen Chloride (HCl) | 31 ppm _{dv} or 95% reduction | 123.3 lb/hr (531 ppm _{dv}) |
| Dioxins | 30 ng/dscm with FF [3, 4-hr avg.] | -- |
| Opacity | 10% [6-minute average] | 15% [6-minute average] |
| Fugitive ash | Visible emissions for no more than 5% of hourly observation period | -- |
| Beryllium (Be) | -- | 1.00E-05 lb/hr (0.079 ug/dscm) |
| Hydrogen Fluoride (HF) | -- | 0.30 lb/hr (2.4 mg/dscm) |
| Volatile organic compounds (VOCs) | -- | 14.2 lb/hr (112 ppm _{dv}) |

Note:

¹ Concentrations are corrected to 7%O₂

² Existing permit concentration limits were calculated based on a capacity of 245 tons per day and an air flow rate for both units at this load of 40,671 dscfm @7% O₂ (19.2 dscm/sec).

³The Florida Mercury Rule concentration standard of 0.070 mg/dscm @7% O₂ is more stringent than Subpart BBBB concentration standard of 0.080 mg/dscm @7% O₂. However the removal requirement of 80% is less stringent than the 85% removal required in Subpart BBBB; therefore, a mix of both regulations would apply (i.e., 0.070 mg/dscm @7% O₂, or 85% removal, whichever is less stringent).

dscm = dry standard cubic meter per minute

ppm_{dv} = parts per million by dry volume

mg = milligrams

ug = micrograms

The Subpart BBBB standards further require that each owner or operator of a MWC develop and maintain a site-specific operating manual and to review it with all employees associated with the operation of the MWC (including maintenance personnel, crane operators, and ash handlers). The operating manual and training must be updated annually. The operating manual must include 11 components that are specific to the particular facility. These include:

- A summary of applicable requirements in Subpart BBBB;
- A description of the basic combustion principles that apply to MWC units;
- Procedures for receiving, handling and feeding MSW;
- Procedures to be followed during periods of startup, shutdown, and malfunction of the MWC unit;
- Procedures for maintaining a proper level of combustion air supply;
- Procedures for operating the MWC unit in compliance with the requirements contained in Subpart BBBB;
- Procedures for responding to periodic upset or off-specification conditions;
- Procedures for minimizing carryover of particulate matter;
- Procedures for handling ash;
- Procedures for monitoring emissions from the municipal waste combustion unit, and
- Procedures for record keeping and reporting.

2.2.1.2 Compliance and Testing

The Subpart BBBB standards include testing and monitoring requirements for metal emissions (PM, opacity, Cd, Pb and Hg), acid gas emissions (SO₂ and HCl), organic emissions (dioxins/furans), operating parameters (CO, load level, and flue gas temperature), and NO_x. SO₂, NO_x and CO emissions must be determined using continuous emission monitors (CEMs). At a minimum, valid CEMs hourly averages are required to be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter. Opacity must be monitored using a continuous opacity monitor (COM) and must also be measured annually by EPA Reference Method 9. Fugitive ash emissions must also be tested annually by EPA Reference Method 22. Emissions of the other regulated pollutants must be determined by annual stack tests.

2.2.1.3 Reporting and Record Keeping Requirements

Record keeping requirements include operator training and certification; stack test results; continuously monitored pollutants and parameters (i.e., load level of each unit

and temperature of flue gas at the inlet of the particulate matter air pollution control device), and carbon feed rate. The record keeping requirements for the carbon feed rate includes:

- Average carbon feed rate in kilograms or pounds per hour during all stack tests for dioxins/furans and mercury emissions;
- For the operating parameter chosen to monitor carbon feed rate, such as the screw feeder speed, average operating level during all stack tests for dioxins/furans and mercury emissions;
- All eight-hour block average carbon feed rates in kilograms or pounds per hour calculated from the monitored operating parameter;
- Total carbon purchased and delivered to the facility for each calendar quarter, and
- Required quarterly usage of carbon for the facility.

Copies of the above records must be kept onsite for a minimum period of 5 years.

2.2.2 Additional Regulatory Requirements

2.2.2.1 Precautions to Prevent Emissions of Unconfined Particulate Matter

Rule 62-296.320(4)(c) of the FAC states that these unconfined particulate matter emissions must be identified and precautions that will be taken to prevent or control such emissions must be described.

The following requirements are identified in Section 2, Condition 7, of the Title V Permit:

- Paved and Unpaved Roads. Trucks delivering MSW, trucks removing ash, passenger vehicles, and other plant equipment use 0.112 miles of paved roads and 0.08 miles of unpaved roads at the Facility. To minimize emissions from the paved roadways, a road sweeper shall be utilized to clean the areas twice per month. The unpaved areas shall be used infrequently by vehicles traveling from the tipping floor to the rear of the Facility without exiting plant property.
- Residue Handling. The residual material (ash) remaining after the solid waste is combusted shall be conveyed to a totally enclosed ash storage building, where it shall be loaded into trucks and hauled to the landfill. The ash shall be handled wet in order to minimize emissions. All ash shall be combined inside the boiler building and sent to the quench tank where it shall be submerged in water. A drag conveyor shall lift the material from the quench tank up an incline to allow standing water to drain. The material shall be then discharged into a bunker inside the ash building for temporary storage. The ash shall be periodically

loaded into trucks or roll-off containers and hauled to the County's ash landfill. The trucks or roll-off containers shall be covered before the trucks exit the site.

- Fugitive Construction Dust Emissions. The APC Retrofit Project construction activities will include:
 - Site work – foundation excavation, grading, underground utility relocation, roadway relocation, paving and landscaping;
 - Construction of buildings and structures – constructing of electrical building, compressor building, new flue gas stacks and lime and carbon silo enclosure;
 - Piping – installing lime, carbon, compressed air, water and wastewater piping, and
 - Demolition – removal of the existing ESPs, ID fans and existing flue gas stack and miscellaneous electrical equipment, exclusive of foundations.

The National Ambient Air Quality Standards (NAAQS) for PM₁₀ are occasionally exceeded on and near very large construction sites (tens to hundreds of acres). However, construction dust impacts are expected to be minor for the APC Retrofit Project because:

- Construction and demolition activities will only occur for approximately one year, and
- The majority of the construction and demolition activity will only occur over one-half acre portion of the site.

Some of the measures that will be used to mitigate the impacts of fugitive dust include:

- Water or chemical dust suppressant spraying on exposed areas;
- Covering trucks hauling dust generating materials to and from the site;
- Washing wheels and underbodies of construction vehicles prior to departure from the site;
- Reducing vehicle flow over non-paved areas, and
- Routinely cleaning paved areas to lessen the amount of dust available to be re-suspended.

2.2.2.2 FAA Notice of Proposed Construction or Alteration

As discussed in Section 3, the scope of the APC Retrofit Project will include replacing the existing 125-foot tall two-flue concrete stack with two new single-flue steel stacks that will be 141 feet above the ground surface. A Notice of Proposed Construction or Alteration (FAA Form 7460-1) is required to be submitted to the Manager of the Air Traffic Division in the FAA Regional Office having jurisdiction over the Bay County area for a stack or other object on the Facility site that is taller 105.6 feet. This height threshold is calculated based on the regulations that govern the proximity of an object to a heliport. The Facility is located approximately one-half mile south-southeast from a public heliport. The regulations contained under 14 CFR 77 (Objects Affecting Navigable Air Space) require notification and review of any proposed objects with heights that would exceed an imaginary surface extending outward and upward at a slope of 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of a heliport. The 25 to 1 slope threshold translates to a height of approximately 105.6 feet at the location for the proposed new stacks. Based on this criterion, any new object on the Facility site that exceeded 105.6 feet would require filing of a notice with the FAA. The County intends to submit the FAA Form 7460-1 for the new stacks as part of the permitting process.

2.3 Compliance Schedule

The federal compliance date for the APC Retrofit Project is based on the requirements of the 40 CFR 60 Subpart BBBB, Section 60.1535, which requires that final compliance with the new regulations be achieved no later than the earlier of two dates:

- (1) December 6, 2005; or
- (2) Three years after the effective date of State Implementation Plan approval.

The FDEP submitted their proposed State Implementation Plan (SIP) to the USEPA Region 4 Office in December 2001. At the time this permit application was prepared, FDEP has not yet received final USEPA approval. However, FDEP expects the USEPA to eventually approve their SIP as proposed since it contains the same requirements as those in Subpart BBBB with the exception of the limit for mercury emissions, for which the State of Florida has a slightly more stringent standard. The FDEP's proposed SIP requires that state compliance be achieved by November 15, 2005. The federal compliance date is December 6, 2005. The APC Retrofit Project is being implemented with the goal of "completing onsite construction" of the retrofit in July 2005 and "achieving final compliance" in September 2005, well in advance of both the state and federal compliance dates. This allows all construction and operational testing to ensure that the Facility meets the final State of Florida compliance date of November 15, 2005.

The compliance plan presented below is based on the one included in the June 2003 revised Title V permit (contained in Appendix B):

- Notifications of Achievement of Increments of Progress. Notifications of the achievement of increments of progress to the Department's Northwest District must be postmarked no later than 10 days after the compliance date for the increment;
- Notifications of Non-Achievement of Increments of Progress. If an increment of progress is not achieved, the owner or operator must submit a notification to the Administrator postmarked within 10 business days after the specified date for achieving that increment of progress. This notification must inform the Administrator that an increment was not achieved. The owner or operator must include in the notification an explanation of why the increment of progress was not met and the plan for meeting the increment as expeditiously as possible. The owner or operator must continue to submit reports each subsequent month until the increment of progress is met.
- Compliance with the Increment of Progress for Submittal of a Control Plan. For the control plan's increment of progress, the owner or operator must complete two items as follows: (a) Submit the final control plan, including a description of the devices for air pollution control and process changes that will be used to comply with the emission limits and other requirements of 40 CFR 60 Subpart BBBB. (b) The owner or operator must maintain an outside copy of the final control plan.
- Compliance with the Increment of Progress for Awarding Contracts. The owner or operator must submit a signed copy of the contracts awarded to initiate onsite construction, initiate onsite installation of emission control equipment, and incorporate process changes. Submit the copy of the contracts with the notification that this increment of progress has been achieved. The owner or operator does not need to include documents incorporated by reference or the attachments to the contracts.
- Compliance with the Increment of Progress for Initiating Onsite Construction. The owner or operator must initiate onsite construction and installation of emission control equipment and initiate the process changes outlined in the final control plan.
- Compliance with the Increment of Progress for Completing Onsite Construction. The owner or operator must complete onsite construction and installation of emission control equipment and complete process changes outlined in the final control plan.
- Compliance with the Increment of Progress for Achieving Final Compliance. For the final compliance increment of progress, the owner or operator must complete two items: (a) Complete all process changes and complete retrofit construction as specified in the final control plan. (b) Connect the air pollution control equipment with the municipal waste combustion unit identified in the final control plan and

complete process changes to the municipal waste combustion unit so that if the affected municipal waste combustion unit is brought online, all necessary process changes and air pollution control equipment are operating as designed.

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Section
Three

Section 3

Stack Height Evaluation

3.1 Existing Flue Gas Stack

Flue gases from the combustion units are currently discharged through a 125-ft tall rectangular shaped stack. The stack is constructed of reinforced concrete modular sections, with two radial fire brick flues. The inside diameter of each flue is 55 inches. Bay County is proposing to replace this stack, as part of the APC Retrofit project, because the exterior concrete shell is in poor condition.

3.2 New Flue Gas Stacks

The APC Retrofit project will include the installation of two free standing steel stacks, one per train. The proposed height for the new stacks is 141 feet above the ground surface. The new flue gas stacks will be located approximately 30 feet to the west of the existing stack. This location will provide for a convenient connection of the new ID fan outlet ducts to each stack while the existing units continue to operate. One 60-inch diameter flue will be contained inside each stack. The locations for the proposed stacks are displayed in the preliminary plans included in Appendix A. The height of the proposed new stacks is taller than the existing 125-ft. stack, and would improve exhaust plume dispersion. A dispersion modeling analysis was performed for the proposed stack height. This analysis demonstrates that:

- the plume dispersion for the current stack height of 38 meters (125 ft.) is adequate for meeting the National Ambient Air Quality Standards (NAAQS);
- the optimum stack height for plume dispersion would be 69 meters (226 ft.); and
- the proposed stack height of 43 meters (141 ft.) would improve plume dispersion by preventing the plume from being trapped in the cavity region.

The modeling results are presented in Tables 3-1 and 3-2.

Table 3-1
Current Stack Height Pollutant-Specific Predicted Impacts

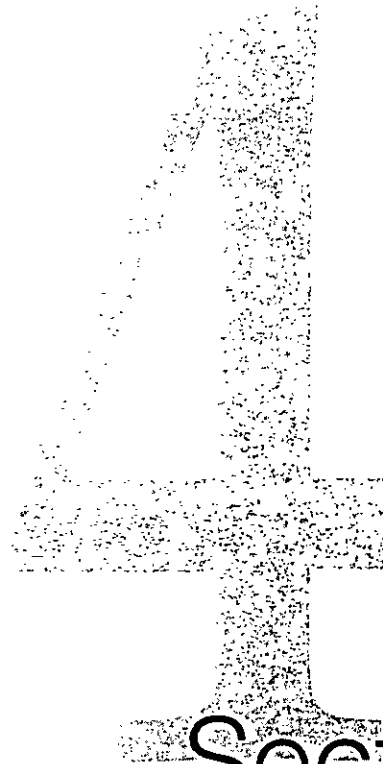
| Pollutant | Averaging Time | Maximum Concentration mg/m ³ | Monitored Background Level ¹ mg/m ³ | Total Concentration mg/m ³ | NAAQS mg/m ³ | Percent of NAAQS |
|------------------|----------------|---|---|---------------------------------------|-------------------------|------------------|
| SO ₂ | 3-hour | 165 | 520 | 685 | 1300 | 53% |
| | 24-hour | 73 | 195 | 268 | 365 | 74% |
| | Annual | 15 | 21 | 36 | 80 | 45% |
| NO ₂ | Annual | 41 | 35 | 76 | 100 | 76% |
| CO | 1-hour | 455 | 12000 | 12455 | 40000 | 31% |
| | 8-hour | 318 | 6500 | 6818 | 10000 | 68% |
| PM ₁₀ | 24-hour | 17 | 90 | 107 | 150 | 71% |
| | Annual | 3 | 37.5 | 41 | 50 | 82% |
| Pb | Quarter | 0.06 | 0.00 | 0.06 | 1.5 | 4% |

1) Worst case background level based on statewide monitoring data. Values for Bay County have not yet been determined.

**Table 3-2
Stack Direction-Specific Cavity Wake Analysis¹**

| Structure | Dominating Wind Vectors (degrees) | Worst Case Building Widths: | | SCREEN3 Model Results (along wind dimension): | | | | |
|-----------------|-----------------------------------|-----------------------------|-------------------|---|---|-------------------|-----------------------------------|--|
| | | Maximum Width (m) | Minimum Width (m) | Cavity Height (m) | Cavity Height Above Stack Height (yes/no) | Cavity Length (m) | Minimum Distance to Fenceline (m) | Cavity Extends Beyond Property Boundary (yes/no) |
| | | | | | | | | |
| Boiler Building | 10 - 110 | 53.6 | 34.3 | 42 | yes | 67 | 37 | yes |
| | 190 - 290 | 53.6 | 34.3 | 42 | yes | 67 | >67 | no |
| ESP | 140, 160, 320, 340 | 64 | 62.3 | 17.2 | no | | | |
| Scrubber | 120-130, 300-310 | 60.3 | 58.5 | 28 | no | | | |
| | 170-180, 350-360 | 62.3 | 61.3 | 28 | no | | | |
| Baghouse | 150, 330 | 23.3 | 23.3 | 18.5 | no | | | |

Note: ¹ Based on the current stack height of 38 meters (125 ft.).



Section
Four

Section 4

Permit Application Form

- Source Modification Construction Air Permit Application

APPLICATION SUMMARY REPORT

12/15/2003 11:28:15 AM

FACILITY: BAY COUNTY BOARD OF COUNTY COMMISSIONERS (#0050031)
APPLICATION: MONTENAY BAY (#220-1)

******* APPLICATION SECTION *******

**** APPLICATION IDENTIFICATION INFORMATION ****

Application Number: 220-1
Application Name: MONTENAY BAY
Purpose of Application: AIR CONSTRUCTION PERMIT.
Application Comment: AIR POLLUTION CONTROL RETROFIT PROJECT

Are you requesting a multi-unit or facility-wide emissions cap for one or more pollutants? NO

Does this facility currently hold a Title V air operation permit? YES

**** SCOPE OF APPLICATION ****

| UID | Description | Permit Type | Processing Fee |
|-----------------------|--------------------------------|-------------|----------------|
| 001 | MSW COMBUSTION UNIT #1 (NORTH) | AC1B | \$0.00 |
| 002 | MSW COMBUSTION UNIT #2 (SOUTH) | AC1B | \$0.00 |
| Total Processing Fee: | | | \$0.00 |

**** APPLICATION CONTACT INFORMATION ****

First Name: MARC
Last Name: WALLACE
Job Title: AIR QUALITY SCIENTIST
Name of Organization/Firm: CDM
Street Address: ONE CAMBRIDGE PLACE, 50 HAMPSHIRE ST.
Street Address 2:
City: CAMBRIDGE
State: MA
Zip: 02139 - 0000
Telephone: 617 - 452 - 6363
Fax: 617 - 452 - 8363
E-mail: WALLACEMC@CDM.COM

**** OWNER/AUTHORIZED REPRESENTATIVE INFORMATION ****

First Name: CLIFTON
Last Name: WINDHAM
Job Title: DIRECTOR
Name of Organization/Firm: UTILITIES SERVICES DEPARTMENT
Street Address: 3410 TRANSMITTER ROAD
Street Address 2:
City: PANAMA CITY
State: FL
Zip: 32404
Telephone: 850 - 872 - 4785
Fax: 850 - 872 - 4805
E-mail: TWINDHAM@CO.BAY.FL.US

**** RESPONSIBLE OFFICIAL INFORMATION ****

*** NO RESPONSIBLE OFFICIAL INFORMATION FOUND ***

**** PROFESSIONAL ENGINEER INFORMATION ****

First Name: ANTHONY
Last Name: LORE
Job Title: ENGINEER
Name of Organization/Firm: CAMP DRESSER AND MCKEE INC.
Registration Number: 60373
Street Address: 50 HAMPSHIRE ST.
Street Address 2:
City: CAMBRIDGE
State: MA
Zip: 02139
Telephone: 617 - 452 - 6379
Fax: 617 - 452 - 8379
E-mail: LOREAM@CDM.COM

**FACILITY: BAY COUNTY BOARD OF COUNTY COMMISSIONERS (#0050031)
APPLICATION: MONTENAY BAY (#220-1)**

******* FACILITY SECTION *******

**** FACILITY IDENTIFICATION INFORMATION ****

Owner/Company Name: BAY COUNTY BOARD OF COUNTY COMMISSIONERS
Site Name: MONTENAY BAY, LLC
Description of Location: 6510 BAY LINE DRIVE
Street Address: 6510 BAY LINE DRIVE
City: PANAMA CITY
County: BAY
ZIP: 32404
Relocatable: NO
Facility Status: A - ACTIVE
Comment: RESOURCE RECOVERY FACILITY; THE REQUIREMENTS OF 40 CFR 60, SUBPART BBBB, HAVE BEEN INCORPORATED INTO THE TITLE V PERMIT, BUT DO NOT GO INTO EFFECT UNTIL 12:01 A.M., NOVEMBER 16, 2005, PER THE SIP

**** FACILITY LOCATION AND TYPE ****

Facility UTM Coordinates: Zone: 16 East(km): 642.4 North(km): 3349.5
Facility Latitude: Degrees: 30 Minutes: 15 Seconds: 54
Facility Longitude: Degrees: 85 Minutes: 30 Seconds: 8
Facility SIC Codes: Primary: 4953 - ELECTRIC, GAS AND SANITARY SERVICES
SANITARY SERVICES
REFUSE SYSTEMS
Governmental Facility Code: 3 - COUNTY
Facility Major Group SIC: 49 - ELECTRIC, GAS AND SANITARY SERVICES

**** FACILITY CONTACT INFORMATION ****

First Name: CHALMOUS
Last Name: BEECHEM
Job Title: OPERATIONS MANAGER
Name of Organization/Firm: MONTENAY BAY, LLC
Street Address: 6510 BAY LINE DRIVE
Street Address 2:
City: PANAMA CITY
State: FL
Zip: 32404
Telephone: 850 - 785 - 7933
Fax: 850 - 784 - 1779
E-mail:

**** FACILITY REGULATORY CLASSIFICATIONS ****

Small Business Stationary Source: Not Applicable
Synthetic Non-Title V Source: No
Title V Source: Yes
Major Source of Air Pollutants Other than Hazardous Air Pollutants (HAPs): Yes
Synthetic Minor Source of Air Pollutants Other than Hazardous Air Pollutants (HAPs): No
Major Source of Hazardous Air Pollutants (HAPs): Yes
Synthetic Minor Source of HAPs: No
One or More Emission Units Subject to NSPS (40 CFR Part 60): No
One or More Emission Units Subject to Emission Guidelines (40 CFR Part 60): Yes
One or More Emission Units Subject to NESHAP (40 CFR Part 61 or Part 63): No
Title V Source by EPA Designation (40 CFR 70.3(a)(5)): No
Facility Regulatory Classifications Comment:

**** FACILITY POLLUTANT INFORMATION ****

| Code | Description | Class. | Comment |
|------|---|--------|---|
| CO | Carbon Monoxide | A | BASIS FOR EMISSION CAP: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES |
| FL | Fluorides - Total (elemental fluorine and fluoride compounds) | B | BASIS FOR EMISSION CAP: PSD-FL-129. |
| H021 | Beryllium Compounds | B | 1 X 10-5 LB/HR AND 4.4 X 10-5 TPY FACILITY CAP. BASIS FOR EMISSION CAP: PSD-FL-129. |
| H106 | Hydrogen chloride (Hydrochloric acid) | A | BASED ON 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES; 95% REDUCTION OF POTENTIAL HYDROGEN CHLORIDE EMISSIONS (147.7 LB/HR) |
| H114 | Mercury Compounds | B | BASED ON COMBINATION OF 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES AND FAC 62-296.416 (0.070 MG/DSCM @7% O2, OR 85% REMOVAL, WHICHEVER IS LESS STRINGENT) |
| NOX | Nitrogen Oxides | A | BASIS FOR EMISSION CAP: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES |
| PB | Lead - Total (elemental lead and lead compounds) | B | BASIS FOR EMISSION CAP: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES |
| PM | Particulate Matter - Total | B | BASIS FOR EMISSION CAP: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES |
| PM10 | Particulate Matter - PM10 | B | BASIS FOR EMISSION CAP: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES |
| SAM | Sulfuric Acid Mist | B | |
| SO2 | Sulfur Dioxide | A | BASIS FOR EMISSION CAP: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES |
| VOC | Volatile Organic Compounds | B | BASIS FOR EMISSION CAP: PSD-FL-129. |

**** FACILITY ADDITIONAL INFORMATION ****

| Description | Applicable? | Attachment? |
|--|-------------|-------------|
| AREA MAP SHOWING FACILITY LOCATION | Yes | Yes |
| FACILITY PLOT PLAN Previously submitted? NO Submittal Date: | No | Yes |
| PROCESS FLOW DIAGRAM(s) Previously submitted? NO Submittal Date: | No | Yes |
| PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER Previously submitted? NO Submittal Date: | No | Yes |
| LIST OF EXEMPT EMISSIONS UNITS (RULE 62-210.300(3)(a) or (b)1.,F.A.C.) | No | No |
| LIST OF INSIGNIFICANT ACTIVITIES | No | No |
| IDENTIFICATION OF APPLICABLE REQUIREMENTS | No | No |
| COMPLIANCE REPORT AND PLAN | Yes | Yes |
| LIST OF EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI Equipment/Activities On Site but Not Required to be Individually Listed? NO | No | No |
| VERIFICATION OF RISK MANAGEMENT PLAN SUBMISSION TO EPA | No | No |
| REQUESTED CHANGES TO CURRENT TITLE V AIR OPERATION PERMIT | No | No |
| DESCRIPTION OF PROPOSED CONSTRUCTION OR MODIFICATION | Yes | Yes |
| RULE APPLICABILITY ANALYSIS | Yes | Yes |
| LIST OF EXEMPT EMISSIONS UNITS (RULE 62-210.300(3)(a) or (b)1.,F.A.C.) | No | No |
| FUGITIVE EMISSIONS IDENTIFICATION (RULE 62-212.400(2),F.A.C.) | No | No |
| PRECONSTRUCTION AIR QUALITY MONITORING AND ANALYSIS (RULE 62-212.400(5),F.A.C.) | No | No |
| AMBIENT IMPACT ANALYSIS (RULE 62-212.400(5)(D),F.A.C.) | No | No |
| AIR QUALITY IMPACT SINCE 1977 (RULE 62-212.400(5)(h)5.,F.A.C.) | No | No |
| ADDITIONAL IMPACT ANALYSES (RULES 62-212.400(5)(e)1. and 62-212.500(4)(e),F.A.C.) | No | No |

| | | |
|--|----|----|
| ALTERNATIVE ANALYSIS REQUIREMENTS (RULE 62-212.500(4)(g),F.A.C.) | No | No |
| OTHER FACILITY INFORMATION | No | No |

**** FACILITY ATTACHMENTS ****

| Description | Electronic? | Attachment Description | Electronic File Name | Uploaded? |
|--|-------------|--|----------------------|-----------|
| AREA MAP SHOWING FACILITY LOCATION | No | CONTAINED IN SECTION 1 OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |
| COMPLIANCE REPORT AND PLAN | No | CONTAINED IN APPENDIX B OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |
| DESCRIPTION OF PROPOSED CONSTRUCTION OR MODIFICATION | No | CONTAINED IN SECTION 1 OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |
| FACILITY PLOT PLAN | No | CONTAINED IN APPENDIX A OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |
| PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER. | No | CONTAINED IN SECTION 2 OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |
| PROCESS FLOW DIAGRAM(s) | No | CONTAINED IN APPENDIX A OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |
| RULE APPLICABILITY ANALYSIS | No | CONTAINED IN SECTION 2 OF THE PERMIT SUBMITTAL PACKAGE. | N/A | N/A |

**FACILITY: BAY COUNTY BOARD OF COUNTY COMMISSIONERS (#0050031)
APPLICATION: MONTENAY BAY (#220-1)**

******* EMISSIONS UNIT SECTION *******

**** EU 001: DESCRIPTION AND DETAIL INFORMATION ****

Type of EU: THIS EMISSIONS UNIT INFORMATION SECTION ADDRESSES, AS A SINGLE EMISSIONS UNIT, A GROUP OF PROCESS OR PRODUCTION UNITS AND ACTIVITIES WHICH HAS AT LEAST ONE DEFINABLE EMISSION POINT (STACK OR VENT) BUT MAY ALSO PRODUCE FUGITIVE EMISSIONS.

Regulated/Unregulated: REGULATED

EU Description: MSW COMBUSTION UNIT #1 (NORTH)

EU Status: A - ACTIVE

Commence Construction Date:

Initial Startup Date: 5/1/1987

EU Major Group SIC: 49 - ELECTRIC, GAS AND SANITARY SERVICES

Package Unit Manufacturer: O'CONNOR COMBUSTOR

Generator Nameplate Rating: 15 MW

Incinerator Dwell Temp: 1800 Fahrenheit

Incinerator Dwell Time: 1 seconds

Incinerator Afterburner Temp:

Long-Term Reserve Shutdown Date:

EU Comment:

****EU 001: CONTROL EQUIPMENT/METHOD INFORMATION ****

| Control Equipment/Method Name | Description |
|---|---|
| ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%) | ELECTROSTATIC PRECIPITATOR (TO BE REMOVED) |
| FABRIC FILTER HIGH TEMPERATURE (T>250F) | FABRIC FILTER BAGHOUSE |
| STAGED COMBUSTION | Staged Combustion |
| SPRAY SCRUBBER | SPRAY DRY ABSORBER TYPE SCRUBBER |
| CARBON INJECTION | POWDERED CARBON INJECTION UPSTREAM OF SDA FOR ENHANCED MERCURY AND DIOXIN CONTROL |

****EU 001: OPERATING CAPACITY AND SCHEDULE ****

Maximum Heat Input Rate: 91.88 mmBtu/hr

Maximum Incineration Rate:

Maximum Incineration Rate: 245 tons/day

Maximum Process or Throughput Rate: 65333

Maximum Process or Throughput Rate Units: #/HR STEAM FLOW

Maximum Production Rate:

Maximum Process or Throughput Rate Units:

Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 weeks/year

Operating Capacity and Schedule Comment: 91.875 MMBTU/HR. MAX. CHARGING RATE OF A TOTAL OF 490 TPD FOR FACILITY. STEAM FLOW LIMIT 66667 LB/HR OVER ANY 4 HR BLOCK ARITHMETIC AVERAGING PERIOD/UNIT.

****EU 001: POINT (STACK/VENT) INFORMATION ****

Identification of Point on Plot Plan or Flow Diagram?

Emission Point Type Code: 1 - A SINGLE EMISSION POINT SERVING A SINGLE EMISSIONS UNIT

Discharge Type Code: V - A STACK WITH AN UNOBSTRUCTED OPENING DISCHARGING IN A VERTICAL, OR NEARLY VERTICAL DIRECTION

Stack Height: 141 feet

Exit Diameter: 5 feet

Exit Temperature: 405 Fahrenheit

Actual Volumetric Flow Rate: 55000 acfm

Water Vapor: 16.5 %
Maximum Dry Standard Flow Rate: 28066 dscfm @ 9.3 ^{0.25} = 23,394
Nonstack Emission Point Height:
Emission Point UTM Coordinates: Zone: 16 East(km): 642.4 North(km): 3349.5
Emission Point Latitude:
Emission Point Longitude:
Emission Point Comment:

****EU 001: SEGMENT (PROCESS/FUEL) INFORMATION ****

SCC Code: 10100602
Units: Million Cubic Feet Natural Gas Burned
Description 1: External Combustion Boilers
Description 2: Electric Generation
Description 3: Natural Gas
Description 4: Boilers < 100 Million Btu/hr except Tangential
Is this a Valid Segment? NO
Segment Description (Process/Fuel Type):
Maximum Hourly Rate:
Maximum Annual Rate:
Estimated Annual Activity Factor:
Maximum % Sulfur:
Maximum % Ash:
Million Btu per SCC Unit:
Segment Comment:

SCC Code: 10100902
Units: Tons Wood/Bark Burned
Description 1: External Combustion Boilers
Description 2: Electric Generation
Description 3: Wood/Bark Waste
Description 4: Wood/Bark Fired Boiler
Is this a Valid Segment? NO
Segment Description (Process/Fuel Type):
Maximum Hourly Rate: 4.6
Maximum Annual Rate:
Estimated Annual Activity Factor:
Maximum % Sulfur:
Maximum % Ash: 0.4
Million Btu per SCC Unit: 11
Segment Comment: WASTE WOOD AND BARK.

SCC Code: 10101201
Units: Tons Solid Waste Burned
Description 1: External Combustion Boilers
Description 2: Electric Generation
Description 3: Solid Waste
Description 4: Specify Waste Material in Comments
Is this a Valid Segment? YES
Segment Description (Process/Fuel Type):
Maximum Hourly Rate: 10.6
Maximum Annual Rate:
Estimated Annual Activity Factor:
Maximum % Sulfur: 0.16
Maximum % Ash: 28
Million Btu per SCC Unit: 9
Segment Comment: MUNICIPAL SOLID WASTE. TOTAL QUANTITY OF WASTE TIRES BURNED AT THE FACILITY SHALL NOT EXCEED 3% BY WT, OF THE FACILITY'S TOTAL FUEL.

****EU 001: POLLUTANT POTENTIAL/ESTIMATED EMISSIONS INFORMATION ****

Pollutant Code: CO
Pollutant Description: CARBON MONOXIDE
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: STAGED COMBUSTION
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 22.2 lb/hour 97.2 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 250
Emission Factor Units: PPMVD @ 7% O2
Emission Factor Reference: EMISSIONS GUIDELINES
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: FL
Pollutant Description: FLUORIDES - TOTAL (ELEMENTAL FLUORINE AND FLORIDE
COMPOUNDS)
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 0.15 lb/hour 0.657 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 0.15
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON PERMIT LIMIT IN PSD-FL-129

Pollutant Code: H021
Pollutant Description: BERYLLIUM COMPOUNDS
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? NO
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
Total % Efficiency of Control:
Potential Emissions: 0.000005 lb/hour 0.000022 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 0.000005
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON PERMIT LIMIT IN PSD-FL-129

Pollutant Code: H106
Pollutant Description: HYDROGEN CHLORIDE (HYDROCHLORIC ACID)
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: NS - POLLUTANT NOT EMISSIONS-LIMITED NOT SUBJECT TO
WORK PRACTICE
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 3.6 lb/hour 15.7 tons/year

Synthetically Limited? N
 Range of Estimated Fugitive Emissions:
 Emission Factor: 31
 Emission Factor Units: PPMVD @ 7% O2
 Emission Factor Reference: EMISSION GUIDELINES
 Calculation of Emissions:
 Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
 EMISSION GUIDELINES

 Pollutant Code: H114
 Pollutant Description: MERCURY COMPOUNDS
 Is this a Valid Pollutant? YES
 Include in the Facility Emissions Cap? YES
 Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
 Primary Control Device: SPRAY SCRUBBER
 Secondary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
 Total % Efficiency of Control:
 Potential Emissions: 0.027 lb/hour 0.1185 tons/year
 Synthetically Limited? N

Range of Estimated Fugitive Emissions:
 Emission Factor: 85
 Emission Factor Units: OTHER (SPECIFY IN COMMENT)
 Emission Factor Reference: EMISSION GUIDELINES
 Calculation of Emissions:
 Pollutant Comment: 85% EMISSIONS REMOVAL - BASED ON 40 CFR 60 SUBPART
 BBBB EMISSION GUIDELINES COMBINED WITH FAC 62-
 296.416

 Pollutant Code: NOX
 Pollutant Description: NITROGEN OXIDES
 Is this a Valid Pollutant? YES
 Include in the Facility Emissions Cap? YES
 Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
 Primary Control Device: STAGED COMBUSTION
 Secondary Control Device:
 Total % Efficiency of Control: 50
 Potential Emissions: 24.8 lb/hour 108.57 tons/year
 Synthetically Limited? N

Range of Estimated Fugitive Emissions:
 Emission Factor: 170
 Emission Factor Units: PPMVD @ 7% O2
 Emission Factor Reference: EMISSION GUIDELINES
 Calculation of Emissions:
 Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
 EMISSION GUIDELINES

 Pollutant Code: PB
 Pollutant Description: LEAD - TOTAL (ELEMENTAL LEAD AND LEAD COMPOUNDS)
 Is this a Valid Pollutant? YES
 Include in the Facility Emissions Cap? YES
 Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
 Primary Control Device: SPRAY SCRUBBER
 Secondary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
 Total % Efficiency of Control:
 Potential Emissions: 0.035 lb/hour 0.165 tons/year
 Synthetically Limited? N

Range of Estimated Fugitive Emissions:
 Emission Factor: 490
 Emission Factor Units: MICROGRAMS/DSCM @ 7% O2
 Emission Factor Reference: EMISSION GUIDELINES
 Calculation of Emissions:
 Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
 EMISSION GUIDELINES

Pollutant Code: PM
Pollutant Description: PARTICULATE MATTER - TOTAL
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 2.05 lb/hour 9.01 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 27000
Emission Factor Units: MICROGRAMS/DSCM @ 7% O2
Emission Factor Reference: EMISSION GUIDELINES
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: PM10
Pollutant Description: PARTICULATE MATTER - PM10
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 2.05 lb/hour 9.01 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 27000
Emission Factor Units: MICROGRAMS/DSCM @ 7% O2
Emission Factor Reference: EMISSION GUIDELINES
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: SAM
Pollutant Description: SULFURIC ACID MIST
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: NS - POLLUTANT NOT EMISSIONS-LIMITED NOT SUBJECT TO
WORK PRACTICE
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 1.5 lb/hour 6.57 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 1.5
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions:
Pollutant Comment: PROJECTED EMISSIONS FOR PSD AND INVENTORY
PURPOSES FOR THE FACILITY IS 3.0 LB/HR AND 13.1 TPY.

Pollutant Code: SO2
Pollutant Description: SULFUR DIOXIDE
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 8.95 lb/hour 39.2 tons/year

Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 75
Emission Factor Units: OTHER (SPECIFY IN COMMENT)
Emission Factor Reference: EMISSION GUIDELINES
Calculation of Emissions:
Pollutant Comment: 75 PERCENT REDUCTION - EMISSION FACTOR BASED ON 40
CFR 60 SUBPART BBBB EMISSION GUIDELINES

Pollutant Code: VOC
Pollutant Description: VOLATILE ORGANIC COMPOUNDS
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: STAGED COMBUSTION
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 7.1 lb/hour 31.1 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 14.2
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions: (7.1 LB/HR X 24 HR/DAY X 365 DAYS/YEAR = 31.098 TPY
Pollutant Comment: FACILITY EMISSION LIMIT BASED ON PERMIT PSD-FL-129

****EU 001: POLLUTANT ALLOWABLE EMISSIONS INFORMATION ****

Pollutant Code: CO
Pollutant Description: CARBON MONOXIDE
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 250
Allowable Emission Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Equivalent Allowable Emissions: 22.2 lb/hour 97.2 tons/year
Method of Compliance: CONTINUOUS EMISSION MONITOR
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 44.38 LB/HR
AND 194.4 TPY.

Pollutant Code: FL
Pollutant Description: FLUORIDES - TOTAL (ELEMENTAL FLUORINE AND FLORIDE
COMPOUNDS)
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 0.3
Allowable Emission Unit: POUNDS/HOUR
Equivalent Allowable Emissions: 0.15 lb/hour 0.655 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY
LIMIT OF 0.3 LB/HR AND 1.31 TPY.

Pollutant Code: H021
Pollutant Description: BERYLLIUM COMPOUNDS
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 0.00001
Allowable Emission Unit: POUNDS/HOUR
Equivalent Allowable Emissions: 0.000005 lb/hour 0.000022 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY
LIMIT OF 0.00001 LB/HR AND 0.000044 TPY.

Pollutant Code: H114
Pollutant Description: MERCURY COMPOUNDS
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 85
Allowable Emission Unit: PERCENT REDUCTION IN EMISSIONS
Equivalent Allowable Emissions: 0.027 lb/hour 0.1185 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION:40 CFR 60 SUBPART BBBB EMISSION GUIDELINES COMBINED WITH FLORIDA MERCURY RULE - FACILITY LIMIT OF 0.05 LB/HR AND 0.237 TPY.

Pollutant Code: NOX
Pollutant Description: NITROGEN OXIDES
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 170
Allowable Emission Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2
Equivalent Allowable Emissions: 24.8 lb/hour 108.57 tons/year
Method of Compliance: CONTINUOUS EMISSION MONITOR
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 49.6 LB/HR AND 217.14 TPY.

Pollutant Code: PB
Pollutant Description: LEAD - TOTAL (ELEMENTAL LEAD AND LEAD COMPOUNDS)
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 490
Allowable Emission Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Equivalent Allowable Emissions: 0.035 lb/hour 0.165 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 0.07 LB/HR AND 0.33 TPY.

Pollutant Code: PM
Pollutant Description: PARTICULATE MATTER - TOTAL
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 27000
Allowable Emission Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Equivalent Allowable Emissions: 2.055 lb/hour 9.01 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST; OPACITY CEM
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 4.11 LB/HR AND 18.02 TPY.

Pollutant Code: PM10
Pollutant Description: PARTICULATE MATTER - PM10
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 27000
Allowable Emission Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2
Equivalent Allowable Emissions: 2.055 lb/hour 9.01 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST; OPACITY CEM
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 4.11 LB/HR AND 18.02 TPY.

Pollutant Code: SO2
Pollutant Description: SULFUR DIOXIDE
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 75

Allowable Emission Unit: PERCENT REDUCTION IN EMISSIONS

Equivalent Allowable Emissions: 8.95 lb/hour 39.2 tons/year

Method of Compliance: CONTINUOUS EMISSION MONITOR

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 17.90 LB/HR
AND 78.4 TPY.

Pollutant Code: VOC

Pollutant Description: VOLATILE ORGANIC COMPOUNDS

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 14.2

Allowable Emission Unit: POUNDS/HOUR

Equivalent Allowable Emissions: 7.1 lb/hour 31.1 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY
LIMIT OF 14.2 LB/HR AND 62.2 TPY.

****EU 001: VISIBLE EMISSIONS INFORMATION ****

Visible Emissions Subtype: VE10

Basis for Allowable Opacity: RULE

Requested Allowable Opacity in Normal Conditions: 10

Requested Allowable Opacity in Exceptional Conditions:

Maximum Period of Excess Opacity Allowed:

Compliance Test Method(s):

Visible Emissions Comment: BASIS FOR OPACITY LIMIT: 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

****EU 001: CONTINUOUS MONITOR INFORMATION ****

Parameter Code: EM - EMISSION

Pollutant(s) Monitored: CO - Carbon Monoxide

CMS Requirement:

Monitor Manufacturer: WESTINGHOUSE/MAIHAK

Model Number: UNOR 6N

Serial Number: 794390

Installation Date: 6/1/1989

Performance Specification Test Date: 12/15/1995

Status: ACTIVE

Continuous Monitor Comment: AS SPECIFIED IN SPECIFIC CONDITION 22 OF PERMIT AO03-
165754. WILL BE REPLACED DURING PROPOSED RETROFIT.

Parameter Code: O2 - Oxygen

CMS Requirement:

Monitor Manufacturer: WESTINGHOUSE/ROSEMOU

Model Number: 3000

Serial Number: R-95009055

Installation Date: 3/1/1987

Performance Specification Test Date: 12/15/1995

Status: ACTIVE

Continuous Monitor Comment: SPECIFIED IN COND 22 OF PERMIT AO03-165754. NOTE:THE
ORIGINAL O2 PROBES WERE WESTINGHOUSE/HAGAN
MODEL 318(SN 8262).THE PROBES REPLACED THE ORIGINAL-
12/95 WILL BE REPLACED DURING PROPOSED RETROFIT.

Parameter Code: VE - Visible emissions (opacity)

CMS Requirement:

Monitor Manufacturer: LEAR-SIEGLER
Model Number: RM41
Serial Number: 15904446
Installation Date: 3/19/1987
Performance Specification Test Date: 12/4/1987
Status: ACTIVE
Continuous Monitor Comment: AS SPECIFIED IN SPECIFIC CONDITION 22 OF PERMIT AO03-165754. WILL BE REPLACED DURING PROPOSED RETROFIT.

**** EU 001: ADDITIONAL ITEMS ****

| Description | Applicable? | Attachment? |
|--|-------------|-------------|
| PROCESS FLOW DIAGRAM Previously submitted? NO Submittal Date: | No | No |
| FUEL ANALYSIS OR SPECIFICATION Previously submitted? NO Submittal Date: | No | No |
| DETAILED DESCRIPTION OF CONTROL EQUIPMENT Previously submitted? NO Submittal Date: | No | No |
| DESCRIPTION OF STACK SAMPLING FACILITIES | No | No |
| PROCEDURES FOR STARTUP AND SHUTDOWN Previously submitted? NO Submittal Date: | No | No |
| OPERATION AND MAINTENANCE PLAN Previously submitted? NO Submittal Date: | No | No |
| COMPLIANCE DEMONSTRATION REPORTS/RECORDS Previously submitted? NO Submittal Date: Previously Submitted Test Date(s)/Pollutants Tested: To Be submitted? NO Submittal Date: To Be Submitted Test Date(s)/Pollutants Tested: | No | No |
| OTHER INFORMATION REQUIRED BY RULE OR STATUTE | No | No |
| IDENTIFICATION OF APPLICABLE REQUIREMENTS | No | No |
| COMPLIANCE ASSURANCE MONITORING PLAN | No | No |
| ALTERNATIVE METHODS OF OPERATION | No | No |
| ACID RAIN PART (FORM NO. 62-210.900(1)(a)) Previously submitted? NO Submittal Date: | No | No |
| CONTROL TECHNOLOGY REVIEW AND ANALYSIS (RULES 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) | No | No |
| GOOD ENGINEERING PRACTICE STACK HEIGHT ANALYSIS (RULE 62-212.400(5)(h)6., F.A.C., and RULE 62-212.500(4)(f), F.A.C.) | No | No |
| ALTERNATIVE MODES OF OPERATION (EMISSIONS TRADING) | No | No |
| REPOWERING EXTENSION PLAN (FORM NO. 62-210.900(1)(a)1.) Previously submitted? NO Submittal Date: | No | No |
| NEW UNIT EXEMPTION (FORM NO. 62-210.900(1)(a)2.) Previously submitted? NO Submittal Date: | No | No |
| RETIRED UNIT EXEMPTION (FORM NO. 62-210.900(1)(a)3.) Previously submitted? NO Submittal Date: | No | No |
| PHASE II NOx COMPLIANCE PLAN (FORM NO. 62-210.900(1)(a)4.) Previously submitted? NO Submittal Date: | No | No |
| PHASE II NOx AVERAGING PLAN (FORM NO. 62-210.900(1)(a)5.) Previously submitted? NO Submittal Date: | No | No |
| CERTIFICATE OF REPRESENTATION (EPA FORM NO. 7610-1) | No | No |
| OTHER EMISSIONS UNIT INFORMATION | No | No |

*** No Emissions Unit Additional Attachments Found ***

**** EU 002: DESCRIPTION AND DETAIL INFORMATION ****

Type of EU: THIS EMISSIONS UNIT INFORMATION SECTION ADDRESSES, AS A SINGLE EMISSIONS UNIT, A GROUP OF PROCESS OR PRODUCTION UNITS AND ACTIVITIES WHICH HAS AT LEAST ONE DEFINABLE EMISSION POINT (STACK OR VENT) BUT MAY ALSO PRODUCE FUGITIVE EMISSIONS.

Regulated/Unregulated: REGULATED

EU Description: MSW COMBUSTION UNIT #2 (SOUTH)

EU Status: A - ACTIVE

Commence Construction Date:

Initial Startup Date: 5/1/1987

EU Major Group SIC: 49 - ELECTRIC, GAS AND SANITARY SERVICES

Package Unit Manufacturer: O'CONNOR COMBUSTOR

Generator Nameplate Rating: 15 MW

Incinerator Dwell Temp: 1800 Fahrenheit

Incinerator Dwell Time: 1 seconds

Incinerator Afterburner Temp:

Long-Term Reserve Shutdown Date:

EU Comment:

****EU 002: CONTROL EQUIPMENT/METHOD INFORMATION ****

| Control Equipment/Method Name | Description |
|---|---|
| ELECTROSTATIC PRECIPITATOR HIGH EFFICIENCY (95.0-99.9%) | ELECTROSTATIC PRECIPITATOR (TO BE REMOVED) |
| FABRIC FILTER HIGH TEMPERATURE (T>250F) | FABRIC FILTER BAGHOUSE |
| STAGED COMBUSTION | Staged Combustion |
| SPRAY SCRUBBER | SPRAY DRY ABSORBER TYPE SCRUBBER |
| CARBON INJECTION | POWDERED CARBON INJECTION UPSTREAM OF SDA FOR ENHANCED MERCURY AND DIOXIN CONTROL |

****EU 002: OPERATING CAPACITY AND SCHEDULE ****

Maximum Heat Input Rate: 91.88 mmBtu/hr
Maximum Incineration Rate:
Maximum Incineration Rate: 245 tons/day
Maximum Process or Throughput Rate: 65333
Maximum Process or Throughput Rate Units: #/HR STEAM FLOW
Maximum Production Rate:
Maximum Process or Throughput Rate Units:
Requested Maximum Operating Schedule: 24 hours/day 7 days/week 52 weeks/year 8760 weeks/year
Operating Capacity and Schedule Comment: 91.875 MMBTU/HR. MAX. CHARGING RATE OF A TOTAL OF 490 TPD FOR FACILITY AND HEAT INPUT 91.875 MMBTU/HR. STEAM FLOW LIMIT 66667 LB/HR OVER ANY 4 HR BLOCK ARITHMETIC AVERAGING PERIOD/UNIT.

****EU 002: POINT (STACK/VENT) INFORMATION ****

Identification of Point on Plot Plan or Flow Diagram?

Emission Point Type Code: 1 - A SINGLE EMISSION POINT SERVING A SINGLE EMISSIONS UNIT

Discharge Type Code: V - A STACK WITH AN UNOBSTRUCTED OPENING DISCHARGING IN A VERTICAL, OR NEARLY VERTICAL DIRECTION

Stack Height: 141 feet

Exit Diameter: 5 feet

Exit Temperature: 405 Fahrenheit

Actual Volumetric Flow Rate: 55000 acfm

Water Vapor: 16.5 %

Maximum Dry Standard Flow Rate: 28066 dscfm

Nonstack Emission Point Height:

Emission Point UTM Coordinates: Zone: 16 East(km): 642.4 North(km): 3349.5

Emission Point Latitude:
Emission Point Longitude:
Emission Point Comment:

****EU 002: SEGMENT (PROCESS/FUEL) INFORMATION ****

SCC Code: 10100602
Units: Million Cubic Feet Natural Gas Burned
Description 1: External Combustion Boilers
Description 2: Electric Generation
Description 3: Natural Gas
Description 4: Boilers < 100 Million Btu/hr except Tangential
Is this a Valid Segment? NO
Segment Description (Process/Fuel Type):
Maximum Hourly Rate:
Maximum Annual Rate:
Estimated Annual Activity Factor:
Maximum % Sulfur:
Maximum % Ash:
Million Btu per SCC Unit:
Segment Comment:

SCC Code: 10100902
Units: Tons Wood/Bark Burned
Description 1: External Combustion Boilers
Description 2: Electric Generation
Description 3: Wood/Bark Waste
Description 4: Wood/Bark Fired Boiler
Is this a Valid Segment? NO
Segment Description (Process/Fuel Type):
Maximum Hourly Rate: 4.6
Maximum Annual Rate:
Estimated Annual Activity Factor:
Maximum % Sulfur:
Maximum % Ash: 0.4
Million Btu per SCC Unit: 11
Segment Comment: WASTE WOOD AND BARK.

SCC Code: 10101201
Units: Tons Solid Waste Burned
Description 1: External Combustion Boilers
Description 2: Electric Generation
Description 3: Solid Waste
Description 4: Specify Waste Material in Comments
Is this a Valid Segment? YES
Segment Description (Process/Fuel Type):
Maximum Hourly Rate: 10.6
Maximum Annual Rate:
Estimated Annual Activity Factor:
Maximum % Sulfur: 0.16
Maximum % Ash: 28
Million Btu per SCC Unit: 9
Segment Comment: MUNICIPAL SOLID WASTE. TOTAL QUANTITY OF WASTE TIRES BURNED AT THE FACILITY SHALL NOT EXCEED 3% BY WT, OF THE FACILITY'S TOTAL FUEL.

****EU 002: POLLUTANT POTENTIAL/ESTIMATED EMISSIONS INFORMATION ****

Pollutant Code: CO
Pollutant Description: CARBON MONOXIDE
Is this a Valid Pollutant? YES

Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: STAGED COMBUSTION
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 22.2 lb/hour 97.2 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 250
Emission Factor Units: PPMVD @ 7% O2
Emission Factor Reference: EMISSIONS GUIDELINES
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: FL
Pollutant Description: FLUORIDES - TOTAL (ELEMENTAL FLUORINE AND FLORIDE
COMPOUNDS)
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 0.15 lb/hour 0.657 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 0.15
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON PERMIT LIMIT IN PSD-FL-129

Pollutant Code: H021
Pollutant Description: BERYLLIUM COMPOUNDS
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? NO
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
Total % Efficiency of Control:
Potential Emissions: 0.000005 lb/hour 0.000022 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 0.000005
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON PERMIT LIMIT IN PSD-FL-129

Pollutant Code: H106
Pollutant Description: HYDROGEN CHLORIDE (HYDROCHLORIC ACID)
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: NS - POLLUTANT NOT EMISSIONS-LIMITED NOT SUBJECT TO
WORK PRACTICE
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 3.6 lb/hour 15.7 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 31
Emission Factor Units: PPMVD @ 7% O2

Emission Factor Reference: EMISSION GUIDELINES

Calculation of Emissions:

Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: H114

Pollutant Description: MERCURY COMPOUNDS

Is this a Valid Pollutant? YES

Include in the Facility Emissions Cap? YES

Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT

Primary Control Device: SPRAY SCRUBBER

Secondary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)

Total % Efficiency of Control:

Potential Emissions: 0.027 lb/hour 0.1185 tons/year

Synthetically Limited? N

Range of Estimated Fugitive Emissions:

Emission Factor: 85

Emission Factor Units: OTHER (SPECIFY IN COMMENT)

Emission Factor Reference: EMISSION GUIDELINES

Calculation of Emissions:

Pollutant Comment: 85% EMISSIONS REMOVAL - BASED ON 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES COMBINED WITH FAC 62-
296.416

Pollutant Code: NOX

Pollutant Description: NITROGEN OXIDES

Is this a Valid Pollutant? YES

Include in the Facility Emissions Cap? YES

Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT

Primary Control Device: STAGED COMBUSTION

Secondary Control Device:

Total % Efficiency of Control: 50

Potential Emissions: 24.8 lb/hour 108.57 tons/year

Synthetically Limited? N

Range of Estimated Fugitive Emissions:

Emission Factor: 170

Emission Factor Units: PPMVD @ 7% O2

Emission Factor Reference: EMISSION GUIDELINES

Calculation of Emissions:

Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: PB

Pollutant Description: LEAD - TOTAL (ELEMENTAL LEAD AND LEAD COMPOUNDS)

Is this a Valid Pollutant? YES

Include in the Facility Emissions Cap? YES

Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT

Primary Control Device: SPRAY SCRUBBER

Secondary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)

Total % Efficiency of Control:

Potential Emissions: 0.035 lb/hour 0.165 tons/year

Synthetically Limited? N

Range of Estimated Fugitive Emissions:

Emission Factor: 490

Emission Factor Units: MICROGRAMS/DSCM @ 7% O2

Emission Factor Reference: EMISSION GUIDELINES

Calculation of Emissions:

Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: PM

Pollutant Description: PARTICULATE MATTER - TOTAL

Is this a Valid Pollutant? YES

Include in the Facility Emissions Cap? YES

Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 2.05 lb/hour 9.01 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 27000
Emission Factor Units: MICROGRAMS/DSCM @ 7% O2
Emission Factor Reference: EMISSION GUIDELINES
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: PM10
Pollutant Description: PARTICULATE MATTER - PM10
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: FABRIC FILTER HIGH TEMPERATURE (T>250F)
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 2.05 lb/hour 9.01 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 27000
Emission Factor Units: MICROGRAMS/DSCM @ 7% O2
Emission Factor Reference: EMISSION GUIDELINES
Calculation of Emissions:
Pollutant Comment: EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

Pollutant Code: SAM
Pollutant Description: SULFURIC ACID MIST
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: NS - POLLUTANT NOT EMISSIONS-LIMITED NOT SUBJECT TO
WORK PRACTICE
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 1.5 lb/hour 6.57 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 1.5
Emission Factor Units: LB/HR
Emission Factor Reference: PERMIT LIMIT
Calculation of Emissions:
Pollutant Comment: PROJECTED EMISSIONS FOR PSD AND INVENTORY
PURPOSES FOR THE FACILITY IS 3.0 LB/HR AND 13.1 TPY.

Pollutant Code: SO2
Pollutant Description: SULFUR DIOXIDE
Is this a Valid Pollutant? YES
Include in the Facility Emissions Cap? YES
Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT
Primary Control Device: SPRAY SCRUBBER
Secondary Control Device:
Total % Efficiency of Control:
Potential Emissions: 8.95 lb/hour 39.2 tons/year
Synthetically Limited? N
Range of Estimated Fugitive Emissions:
Emission Factor: 75
Emission Factor Units: OTHER (SPECIFY IN COMMENT)

Emission Factor Reference: EMISSION GUIDELINES

Calculation of Emissions:

Pollutant Comment: 75 PERCENT REDUCTION - EMISSION FACTOR BASED ON 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES

Pollutant Code: VOC

Pollutant Description: VOLATILE ORGANIC COMPOUNDS

Is this a Valid Pollutant? YES

Include in the Facility Emissions Cap? YES

Pollutant Regulatory Code: EL - EMISSION-LIMITED POLLUTANT

Primary Control Device: STAGED COMBUSTION

Secondary Control Device:

Total % Efficiency of Control:

Potential Emissions: 7.1 lb/hour 31.1 tons/year

Synthetically Limited? N

Range of Estimated Fugitive Emissions:

Emission Factor: 14.2

Emission Factor Units: LB/HR

Emission Factor Reference: PERMIT LIMIT

Calculation of Emissions: (7.1 LB/HR X 24 HR/DAY X 365 DAYS/YEAR = 31.098 TPY

Pollutant Comment: FACILITY EMISSION LIMIT BASED ON PERMIT PSD-FL-129

****EU 002: POLLUTANT ALLOWABLE EMISSIONS INFORMATION ****

Pollutant Code: CO

Pollutant Description: CARBON MONOXIDE

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 250

Allowable Emission Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2

Equivalent Allowable Emissions: 22.2 lb/hour 97.2 tons/year

Method of Compliance: CONTINUOUS EMISSION MONITOR

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 44.38 LB/HR AND 194.4 TPY.

Pollutant Code: FL

Pollutant Description: FLUORIDES - TOTAL (ELEMENTAL FLUORINE AND FLORIDE COMPOUNDS)

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 0.3

Allowable Emission Unit: POUNDS/HOUR

Equivalent Allowable Emissions: 0.15 lb/hour 0.655 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY LIMIT OF 0.3 LB/HR AND 1.31 TPY.

Pollutant Code: H021

Pollutant Description: BERYLLIUM COMPOUNDS

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 0.00001

Allowable Emission Unit: POUNDS/HOUR

Equivalent Allowable Emissions: 0.000005 lb/hour 0.000022 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY LIMIT OF 0.00001 LB/HR AND 0.000044 TPY.

Pollutant Code: H114

Pollutant Description: MERCURY COMPOUNDS

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 85

Allowable Emission Unit: PERCENT REDUCTION IN EMISSIONS

Equivalent Allowable Emissions: 0.027 lb/hour 0.1185 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 0.05 LB/HR
AND 0.237 TPY.

Pollutant Code: NOX

Pollutant Description: NITROGEN OXIDES

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 170

Allowable Emission Unit: PARTS PER MILLION DRY GAS VOLUME @ 7% O2

Equivalent Allowable Emissions: 24.8 lb/hour 108.57 tons/year

Method of Compliance: CONTINUOUS EMISSION MONITOR

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 49.6 LB/HR
AND 217.14 TPY.

Pollutant Code: PB

Pollutant Description: LEAD - TOTAL (ELEMENTAL LEAD AND LEAD COMPOUNDS)

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 490

Allowable Emission Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2

Equivalent Allowable Emissions: 0.035 lb/hour 0.165 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 0.07 LB/HR
AND 0.33 TPY.

Pollutant Code: PM

Pollutant Description: PARTICULATE MATTER - TOTAL

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 27000

Allowable Emission Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2

Equivalent Allowable Emissions: 2.055 lb/hour 9.01 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST; OPACITY CEM

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 4.11 LB/HR
AND 18.02 TPY.

Pollutant Code: PM10

Pollutant Description: PARTICULATE MATTER - PM10

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 27000

Allowable Emission Unit: MICROGRAMS PER DRY STANDARD CUBIC METER @ 7% O2

Equivalent Allowable Emissions: 2.055 lb/hour 9.01 tons/year

Method of Compliance: ANNUAL COMPLIANCE TEST; OPACITY CEM

Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: 40 CFR 60 SUBPART
BBBB EMISSION GUIDELINES - FACILITY LIMIT OF 4.11 LB/HR
AND 18.02 TPY.

Pollutant Code: SO2

Pollutant Description: SULFUR DIOXIDE

Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS

Future Effective Date of Allowable Emissions:

Allowable Emissions: 75

Allowable Emission Unit: PERCENT REDUCTION IN EMISSIONS

Equivalent Allowable Emissions: 8.95 lb/hour 39.2 tons/year

Method of Compliance: CONTINUOUS EMISSION MONITOR
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY
LIMIT OF 17.90 LB/HR AND 78.4 TPY.

Pollutant Code: VOC
Pollutant Description: VOLATILE ORGANIC COMPOUNDS
Basis for Allowable Emissions Code: OTHER - REQUESTED BY APPLICANT FOR OTHER REASONS
Future Effective Date of Allowable Emissions:
Allowable Emissions: 14.2
Allowable Emission Unit: POUNDS/HOUR
Equivalent Allowable Emissions: 7.1 lb/hour 31.1 tons/year
Method of Compliance: ANNUAL COMPLIANCE TEST
Comment/Description of Operating Method: BASIS FOR ALLOWABLE EMISSION: PSD-FL-129. FACILITY
LIMIT OF 14.2 LB/HR AND 62.2 TPY.

****EU 002: VISIBLE EMISSIONS INFORMATION ****

Visible Emissions Subtype: VE10
Basis for Allowable Opacity: RULE
Requested Allowable Opacity in Normal Conditions: 10
Requested Allowable Opacity in Exceptional Conditions:
Maximum Period of Excess Opacity Allowed:
Compliance Test Method(s):
Visible Emissions Comment: BASIS FOR OPACITY LIMIT: 40 CFR 60 SUBPART BBBB
EMISSION GUIDELINES

****EU 002: CONTINUOUS MONITOR INFORMATION ****

Parameter Code: EM - EMISSION
Pollutant(s) Monitored: CO - Carbon Monoxide
CMS Requirement:
Monitor Manufacturer: LAND 9000
Model Number: AT237B
Serial Number: 8709932
Installation Date: 12/1/1994
Performance Specification Test Date: 12/14/1995
Status: ACTIVE
Continuous Monitor Comment: AS SPECIFIED IN SPECIFIC CONDITION 22 OF PERMIT AO03-
165755. WILL BE REPLACED DURING PROPOSED RETROFIT.

Parameter Code: O2 - Oxygen
CMS Requirement:
Monitor Manufacturer: WESTINGHOUSE/ROSEMOU
Model Number: 3000
Serial Number: R-95008672
Installation Date: 11/15/1995
Performance Specification Test Date: 12/14/1995
Status: ACTIVE
Continuous Monitor Comment: SPECIFIED IN COND 22 OF PERMIT AO03-165754. NOTE:THE
ORIGINAL O2 PROBES WERE WESTINGHOUSE/HAGAN
MODEL 318(SN 8262).THE PROBES REPLACED THE ORIGINAL-
12/95 WILL BE REPLACED DURING PROPOSED RETROFIT.

Parameter Code: VE - Visible emissions (opacity)
CMS Requirement:
Monitor Manufacturer: LEAR-SIEGLER
Model Number: RM41
Serial Number: 15904448
Installation Date: 3/19/1987
Performance Specification Test Date: 11/1/1987

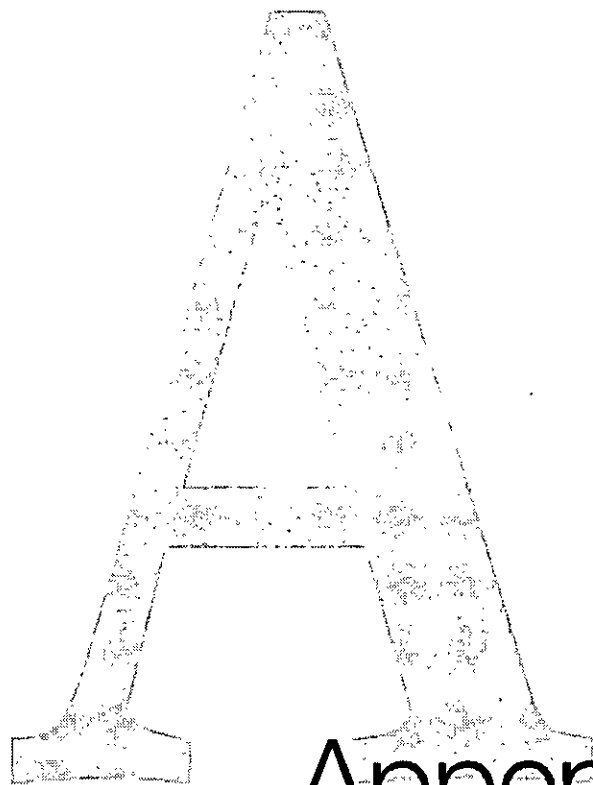
Status: ACTIVE
Continuous Monitor Comment: AS SPECIFIED IN SPECIFIC CONDITION 22 OF PERMIT AO03-165755. WILL BE REPLACED DURING PROPOSED RETROFIT.

**** EU 002: ADDITIONAL ITEMS ****

| Description | Applicable? | Attachment? |
|--|-------------|-------------|
| PROCESS FLOW DIAGRAM <small>Previously submitted? NO Submittal Date:</small> | No | No |
| FUEL ANALYSIS OR SPECIFICATION <small>Previously submitted? NO Submittal Date:</small> | No | No |
| DETAILED DESCRIPTION OF CONTROL EQUIPMENT <small>Previously submitted? NO. Submittal Date:</small> | No | No |
| DESCRIPTION OF STACK SAMPLING FACILITIES | No | No |
| PROCEDURES FOR STARTUP AND SHUTDOWN <small>Previously submitted? NO Submittal Date:</small> | No | No |
| OPERATION AND MAINTENANCE PLAN <small>Previously submitted? NO Submittal Date:</small> | No | No |
| COMPLIANCE DEMONSTRATION REPORTS/RECORDS <small>Previously submitted? NO Submittal Date: Previously Submitted Test Date(s)/Pollutants Tested: To Be submitted? NO Submittal Date: To Be Submitted Test Date(s)/Pollutants Tested:</small> | No | No |
| OTHER INFORMATION REQUIRED BY RULE OR STATUTE | No | No |
| IDENTIFICATION OF APPLICABLE REQUIREMENTS | No | No |
| COMPLIANCE ASSURANCE MONITORING PLAN | No | No |
| ALTERNATIVE METHODS OF OPERATION | No | No |
| ACID RAIN PART (FORM NO. 62-210.900(1)(a)) <small>Previously submitted? NO Submittal Date:</small> | No | No |
| CONTROL TECHNOLOGY REVIEW AND ANALYSIS (RULES 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)) | No | No |
| GOOD ENGINEERING PRACTICE STACK HEIGHT ANALYSIS (RULE 62-212.400(5)(h)6., F.A.C., and RULE 62-212.500(4)(f), F.A.C.) | No | No |
| ALTERNATIVE MODES OF OPERATION (EMISSIONS TRADING) | No | No |
| REPOWERING EXTENSION PLAN (FORM NO. 62-210.900(1)(a)1.) <small>Previously submitted? NO Submittal Date:</small> | No | No |
| NEW UNIT EXEMPTION (FORM NO. 62-210.900(1)(a)2.) <small>Previously submitted? NO Submittal Date:</small> | No | No |
| RETIRED UNIT EXEMPTION (FORM NO. 62-210.900(1)(a)3.) <small>Previously submitted? NO Submittal Date:</small> | No | No |
| PHASE II NOx COMPLIANCE PLAN (FORM NO. 62-210.900(1)(a)4.) <small>Previously submitted? NO Submittal Date:</small> | No | No |
| PHASE II NOx AVERAGING PLAN (FORM NO. 62-210.900(1)(a)5.) <small>Previously submitted? NO Submittal Date:</small> | No | No |
| CERTIFICATE OF REPRESENTATION (EPA FORM NO. 7610-1) | No | No |
| OTHER EMISSIONS UNIT INFORMATION | No | No |

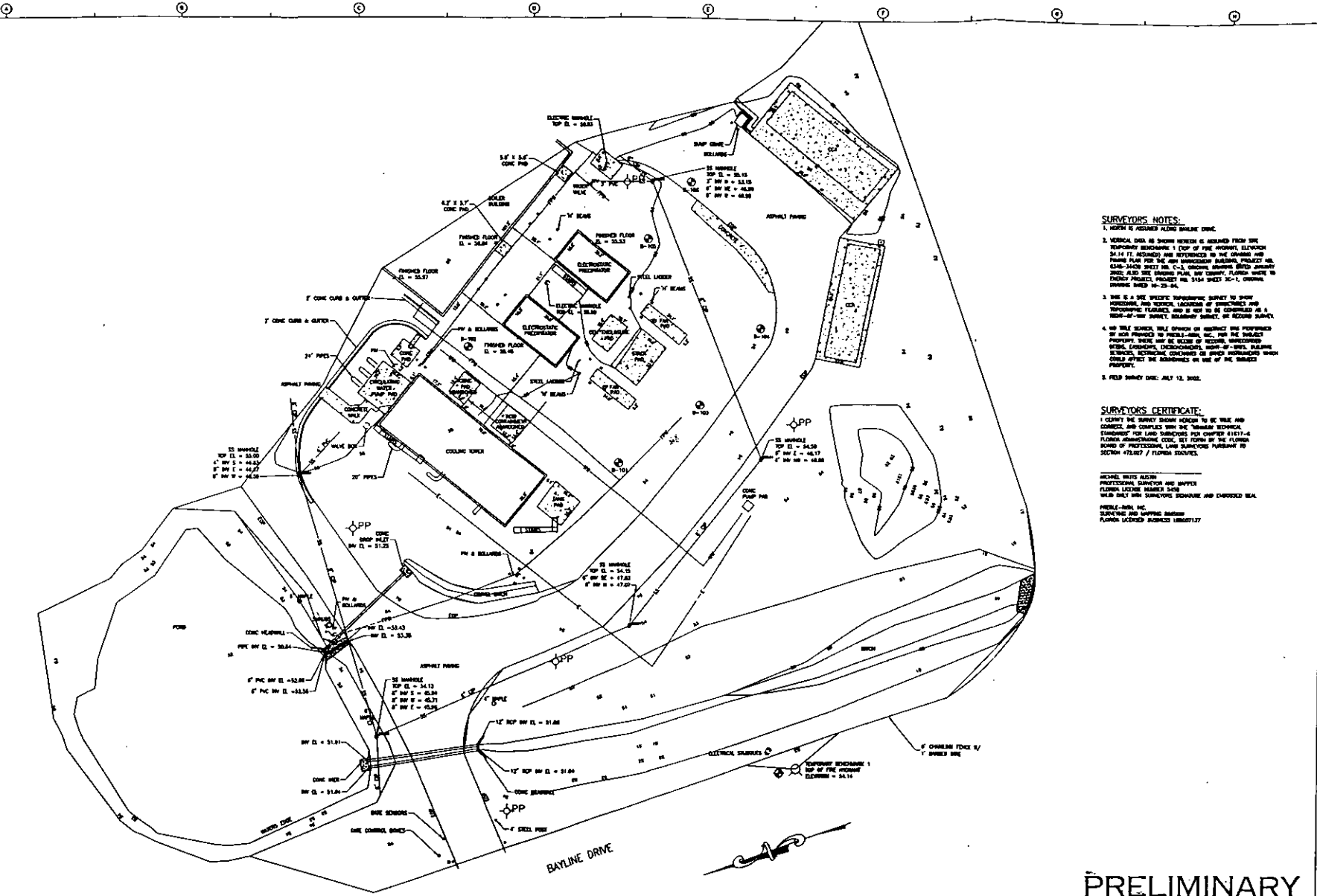
*** No Emissions Unit Additional Attachments Found ***

*** End of Application Summary Report ***



Appendix
A

Appendix A
Plans and Diagrams



SURVEYOR'S NOTES:

- NORTH IS ASSUMED ALONG MAINLINE DRIVE.
- VERTICAL DATA AS SHOWN HEREIN IS DERIVED FROM ONE TEMPORARY BENCHMARK 1 (TOP OF THE WASTEWATER TANK) 34.14 FT. ACCORDING AND REFERENCED TO THE ORIGINAL AND PLAINING PLAN FOR THE AIR POLLUTION CONTROL PROJECT NO. 6348-1400 SHEET NO. C-3, ORIGINAL DRAWING DATE: JANUARY 1988; AND THE GRADED PLAN, BY CDM, FLORIDA STATE UNIVERSITY PROJECT, PROJECT NO. 3344 SHEET NO. 1, ORIGINAL DRAWING DATE: 10-25-84.
- THIS IS A ONE-SURVEYOR SURVEY TO SHOW HORIZONTAL AND VERTICAL LOCATIONS OF STRUCTURES AND TEMPORARY BENCHMARKS AND IS NOT TO BE CONSIDERED AS A RECONSTRUCTION PROJECT, ENGINEERING DRAWING, OR RECORD DRAWING.
- NO FIELD CHECKS, FIELD OPERATIONS OR ADJUSTMENTS PERFORMED BY THIS SURVEYOR SHALL BE NECESSARY FOR THE PROJECT. CERTAIN SURVEYING TECHNIQUES, SUCH AS TOTAL STATION SURVEYING, ELECTRONIC DISTANCE MEASUREMENT, WHICH COULD AFFECT THE ACCURACY OR USE OF THIS SURVEY PROJECT.
- FIELD SURVEY DATE: JULY 12, 2002.

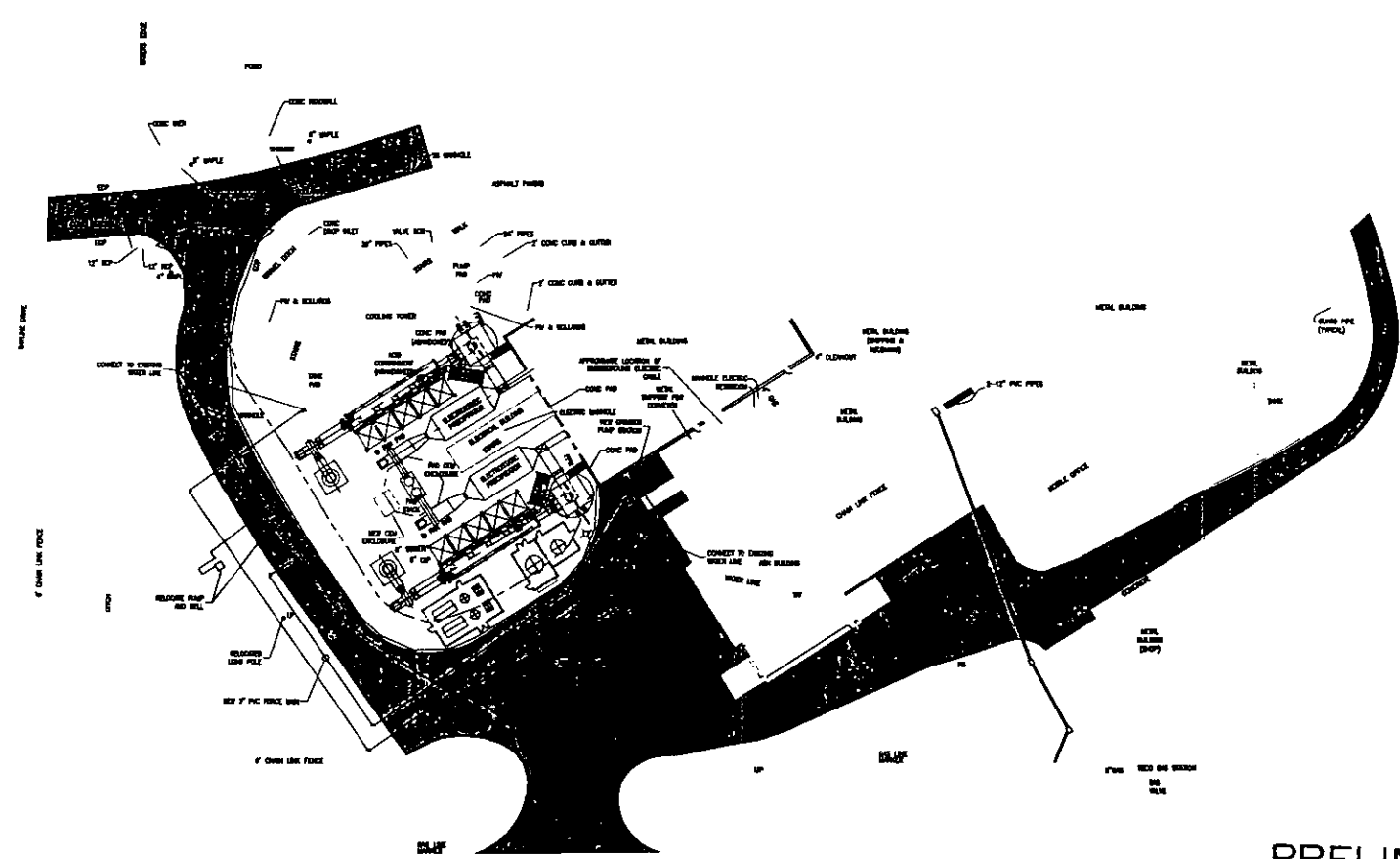
SURVEYOR'S CERTIFICATE:

I, MICHAEL WALTER AUGER, PROFESSIONAL SURVEYOR AND MAPPER, FLORIDA LICENSE NUMBER 3430, BEING DULY SWORN, DO HEREBY CERTIFY THAT I AM THE SURVEYOR OF THIS PROJECT AND THAT THE SURVEYING AND MAPPING INFORMATION HEREIN WAS OBTAINED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A MEMBER OF THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS, BARBERSHOP SECTION 472017 / FLORIDA SURVEYOR.

MICHAEL WALTER AUGER
 PROFESSIONAL SURVEYOR AND MAPPER
 FLORIDA LICENSE NUMBER 3430
 5818 BELT ROAD, SUITE 300, GREENWOOD, FLORIDA 32051
 MICHAEL-WALTER, INC.
 SURVEYING AND MAPPING SERVICES
 FLORIDA LICENSE NUMBER 41805172

PRELIMINARY

| | | | | | | | | | |
|----------|------|----|------|------|---------|---|--|--|--|
| REV. 3 | DATE | BY | CHKD | DESC | | DESIGNED BY: <u>OTYORNO, P.</u> DRAWN BY: <u>STANLEY, P.</u> CHECKED BY: <u>CDC/MLB, R.</u> APPROVED BY: <u>STANLEY, P.</u> DATE: <u>DEC 2002</u> | | BAY COUNTY RESOURCE RECOVERY FACILITY BAY COUNTY, FLORIDA AIR POLLUTION CONTROL RETROFIT PROJECT | PROJECT NO. 3478-4346 FILE NAME: C1P2 |
| REV. 2 | DATE | BY | CHKD | DESC | | | | | |
| REV. 1 | DATE | BY | CHKD | DESC | | | | | |
| REV. NO. | DATE | BY | CHKD | DESC | REMARKS | | | | SHEET NO. C-1 |



PRELIMINARY

| | | | |
|-----|------|----|-------|
| NO. | DATE | BY | CHKD. |
| | | | |
| | | | |
| | | | |

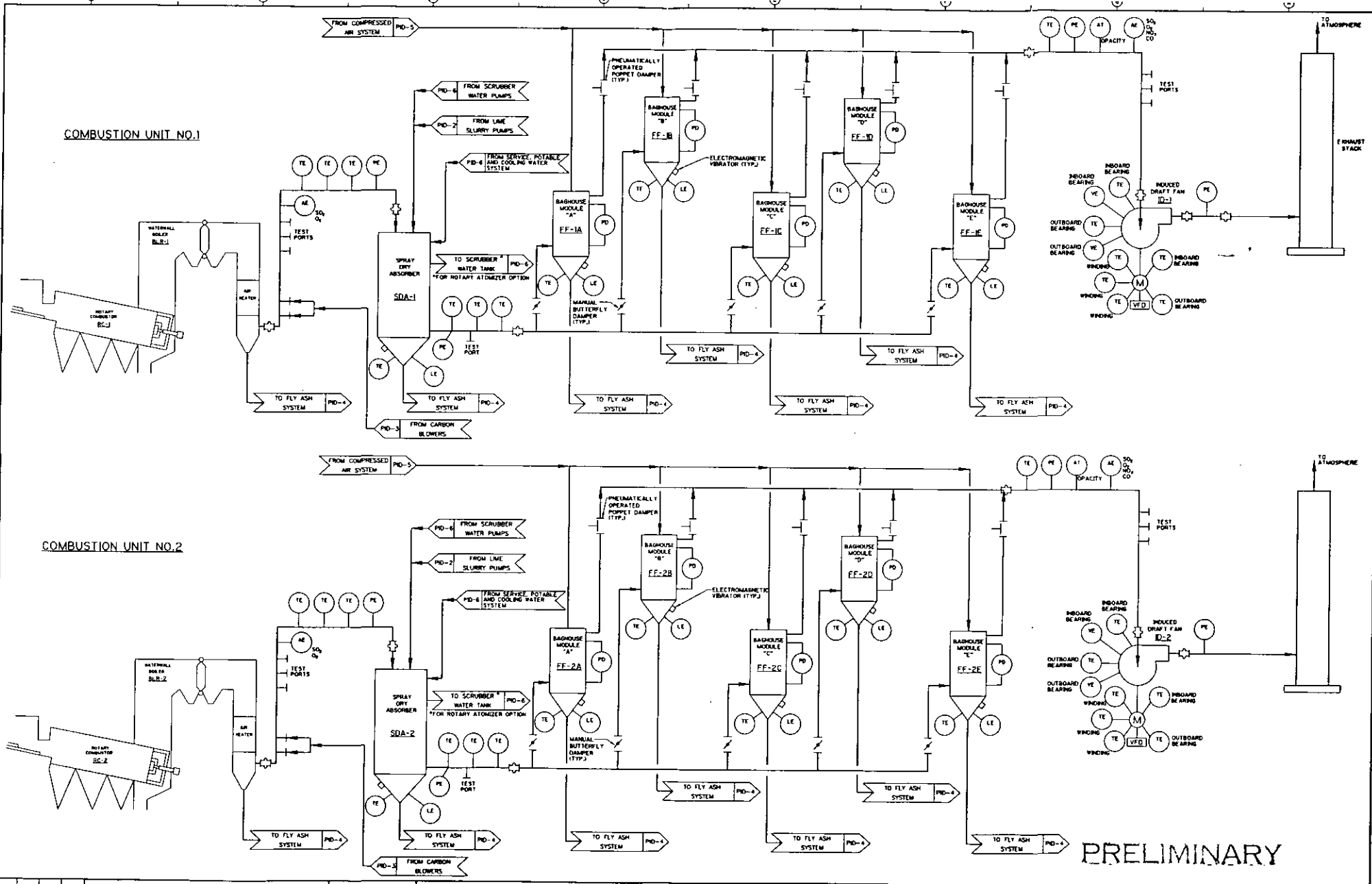
ENGINEER: P.C.
 DRAWN BY: P. A. C.
 CHECKED BY: P. A. C.
 APPROVED BY: P. A. C.
 DATE:

PROJECT NO. _____
 FILE NAME: _____
 SHEET NO. _____
 TOTAL SHEETS _____
 PROJECT TITLE: _____

PROPOSED SITE PLAN

PROJECT NO. _____
 FILE NAME: _____
 SHEET NO. C-2
 TOTAL SHEETS _____

BAY COUNTY - RESOURCE RECOVERY FACILITY
 Project by ZIMMERO, Inc. (EPC/SH&E) Date: 11/21/03 3:11:30 AM
 Filename: P:\BAYCOUNTY\BAYCOUNTY.DWG



PRELIMINARY

| | |
|-----------------|------------|
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| DRAWN BY: | C. THELAND |
| CHECKED BY: | |
| CROSS CHECK BY: | |

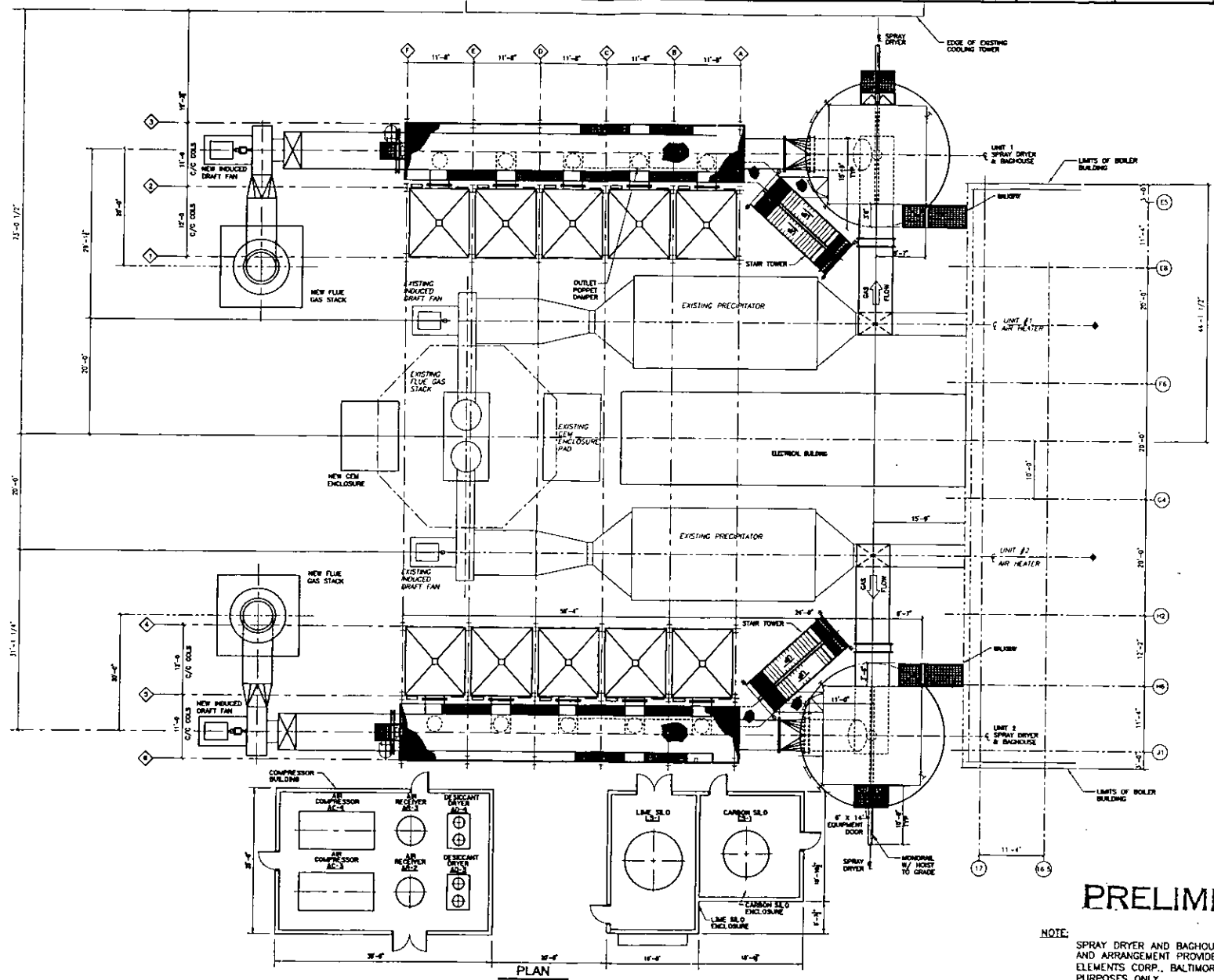
CDM Consulting & Design
 CH2M HILL
 HOK

BAY COUNTY RESOURCE RECOVERY FACILITY
 BAY COUNTY, FLORIDA
 AIR POLLUTION CONTROL RETROFIT PROJECT

PROCESS AND INSTRUMENTATION DIAGRAM
 FLUE GAS SYSTEM

PROJECT NO. 05787-03-00
 SHEET NO. 010-4

BAY COUNTY RESOURCE RECOVERY FACILITY
 Processed by TME/JOE Thom 11/21/03 7:18:32 AM
 Project: B:\3184\3184\MAC\UPM\0303.DWG Date: 11/21/03



PLAN
1/8" = 1'-0"

PRELIMINARY

NOTE:
 SPRAY DRYER AND BAGHOUSE EQUIPMENT DETAIL AND ARRANGEMENT PROVIDED BY ENVIRONMENTAL ELEMENTS CORP., BALTIMORE, MD. FOR ILLUSTRATION PURPOSES ONLY

| | |
|--------------------------|-------------------------|
| DESIGNED BY: [Signature] | CHECKED BY: [Signature] |
| DRAWN BY: [Signature] | DATE: 11/21/03 |
| PROJECT NO.: | SHEET NO.: |

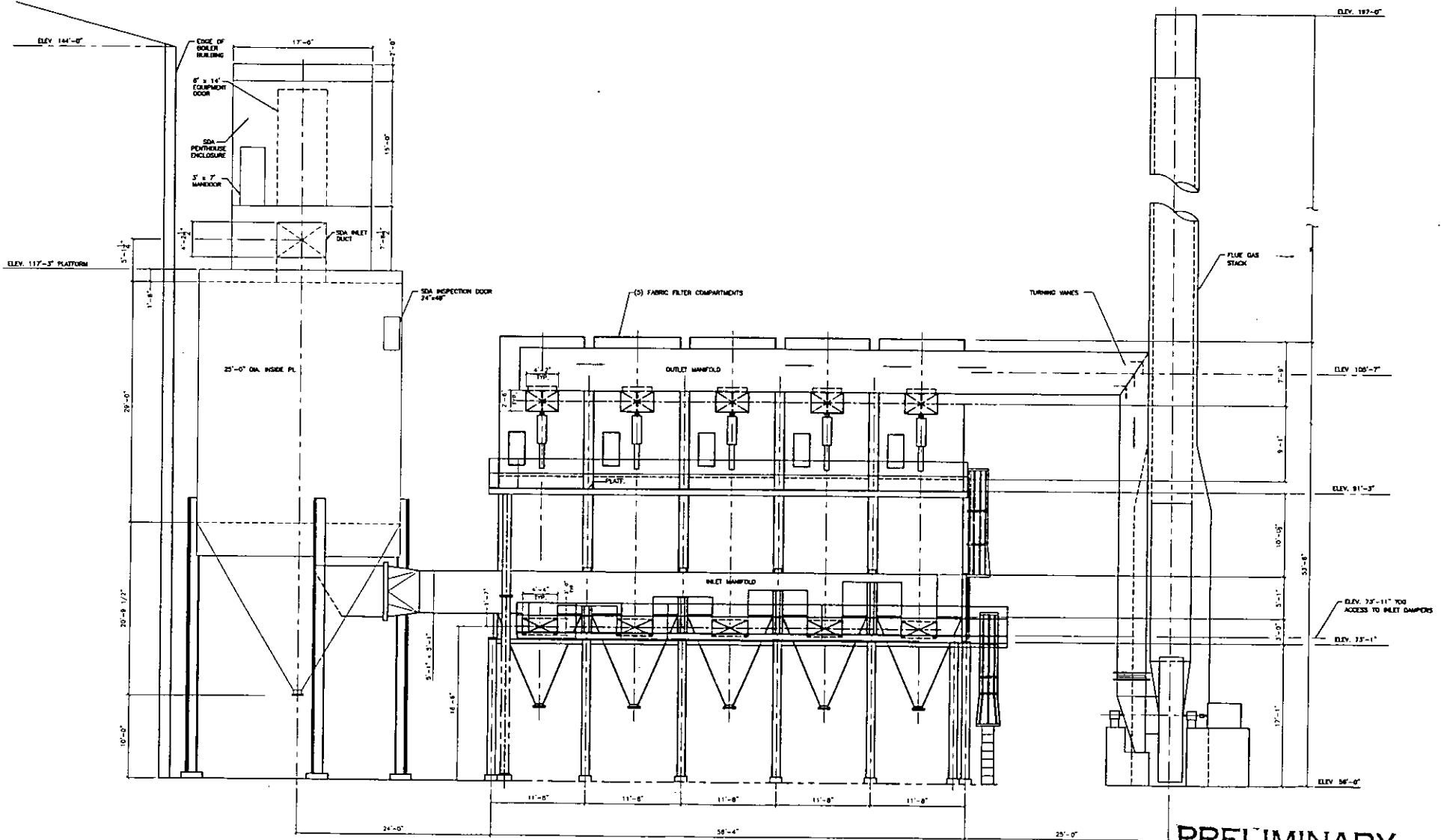


BAY COUNTY RESOURCE RECOVERY FACILITY
 BAY COUNTY, FLORIDA
 AIR POLLUTION CONTROL RETROFIT PROJECT

PROCESS GENERAL ARRANGEMENT PLAN

PROJECT NO. 0303-0340
 P.E. NAME: [Name]
 SHEET NO. 4

PROJECT: BAY COUNTY RESOURCE RECOVERY FACILITY
 SHEET: 3/16" - 1'-0"
 DATE: 11/21/02 10:33 AM
 DRAWN BY: C. F. [unreadable]
 CHECKED BY: T. [unreadable]

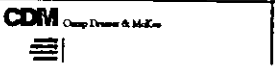


ELEVATION - LOOKING SOUTH
3/16" = 1'-0"

PRELIMINARY

- NOTES:
- EQUIPMENT DETAIL AND ARRANGEMENT PROVIDED BY ENVIRONMENTAL ELEMENTS CORP., BALTIMORE, MD. FOR ILLUSTRATION PURPOSES ONLY
 - ACCESS STAIRWAYS AND FLY ASH HANDLING SYSTEM NOT SHOWN

| | |
|-----------------|--------------------|
| DESIGNED BY: | T. [unreadable] |
| DRAWN BY: | C. F. [unreadable] |
| CHECKED BY: | T. [unreadable] |
| CROSS CHECK BY: | T. [unreadable] |

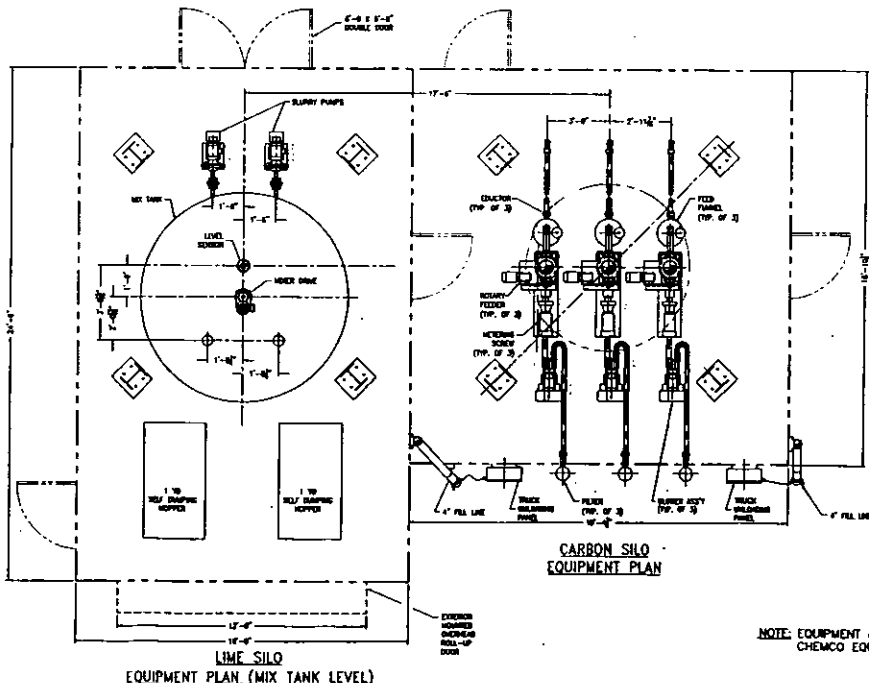
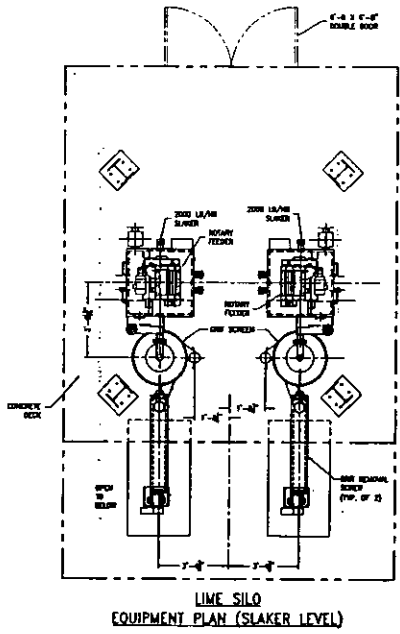
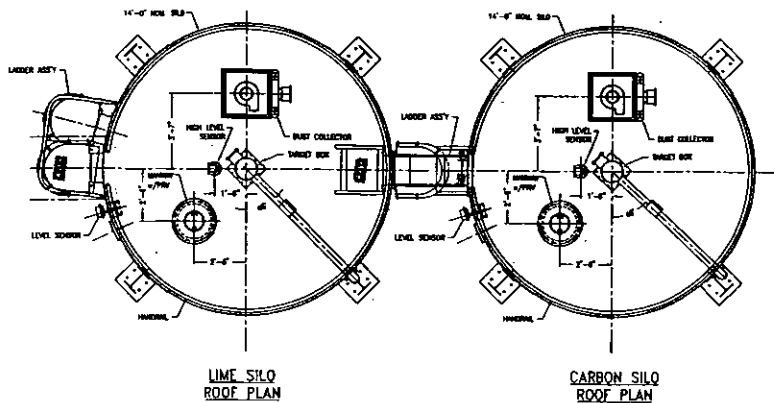


BAY COUNTY RESOURCE RECOVERY FACILITY
 BAY COUNTY, FLORIDA
 AIR POLLUTION CONTROL RETROFIT PROJECT

PROCESS GENERAL ARRANGEMENT ELEVATION
 SPRAY DRY ABSORBER AND FABRIC FILTERED PACKAGE

PROJECT NO. 00782-0348
 FILE NAME: 00782022.DWG
 SHEET NO.
 8.2

BAY COUNTY RESOURCE RECOVERY FACILITY
 PROJECT NO. 98743-040
 SHEET NO. M-3
 DATE: 7/23/92
 DRAWN BY: J. L. [unreadable]
 CHECKED BY: [unreadable]



NOTE: EQUIPMENT DETAIL AND ARRANGEMENT PROVIDED BY CHEMCO EQUIPMENT CO. MONROEGALE, PA.

PRELIMINARY Scale: 3/8" = 1'-0"

| NO. | DATE | BY | CHK | REMARKS |
|-----|------|----|-----|---------|
| | | | | |
| | | | | |
| | | | | |

CDM Camp Dresser & McKee

DESIGNED BY: J. L. [unreadable]
 DRAWN BY: J. L. [unreadable]
 CHECKED BY: [unreadable]
 DATE: JUL 2002

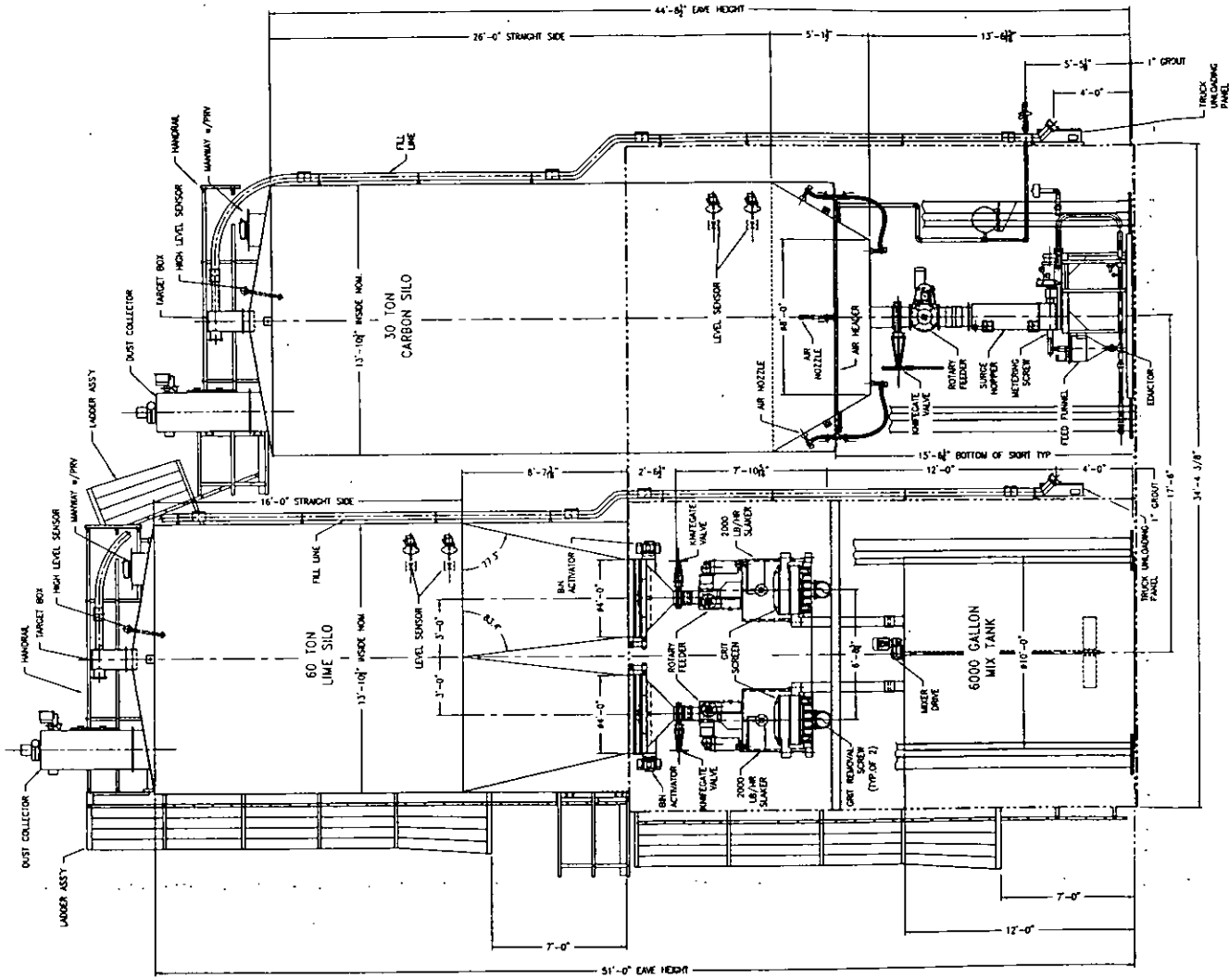
BAY COUNTY RESOURCE RECOVERY FACILITY
 BAY COUNTY, FLORIDA
 AIR POLLUTION CONTROL RETROFIT PROJECT

PROCESS GENERAL ARRANGEMENT PLANS
 LIME AND CARBON STORAGE & FEED SYSTEMS

| |
|--------------------------|
| PROJECT NO. 98743-040 |
| FILE NAME: 98743-040.dwg |
| SHEET NO. M-3 |

[BAY COUNTY - RESOURCE RECOVERY FACILITY]
 Project No. 2003-0300
 Date: 7/24/02 1:43:56 PM

Drawn by: [UNK]
 Checked by: [UNK]
 Date: 7/24/02



ELEVATION VIEW
 NOTE: THIS VIEW IS FOR ELEVATION ONLY.
 FOR CORRECT ORIENTATION, SEE
 PLAN VIEWS.

NOTE: EQUIPMENT DETAIL AND ARRANGEMENT PROVIDED BY
 CHEMCO EQUIPMENT CO. MONONGAHELA, PA.

PRELIMINARY Scale: 3/8" = 1'-0"

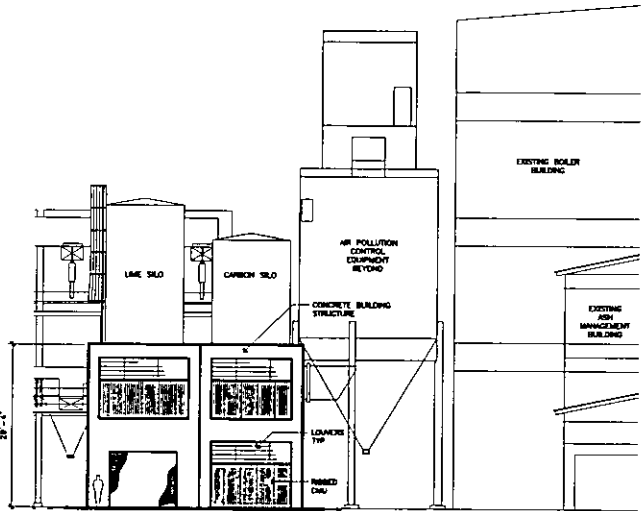
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|-----|------|----|------|---------|
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CDM
 CONSULTING ENGINEERS & ARCHITECTS

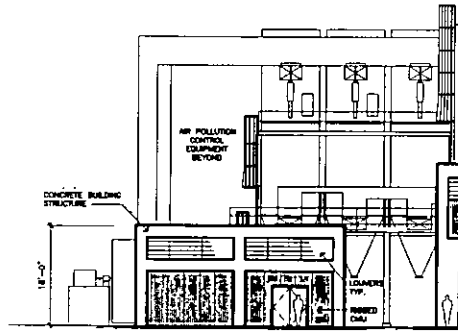
BAY COUNTY RESOURCE RECOVERY FACILITY
 BAY COUNTY, FLORIDA
 AIR POLLUTION CONTROL RETROFIT PROJECT

PROCESS GENERAL ARRANGEMENT ELEVATIONS
 LIME AND CARBON STORAGE AND FEED SYSTEMS

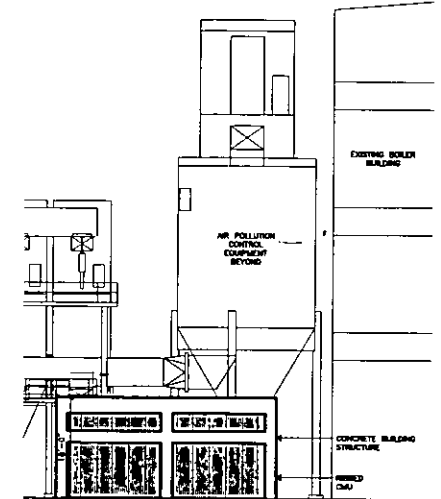
PROJECT NO. 2003-0300
 SHEET NO. M-4



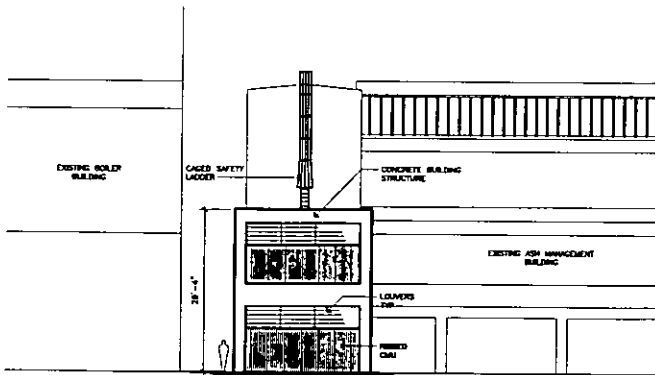
SOUTH ELEVATION
3/16" = 1'-0"



SOUTH ELEVATION
3/16" = 1'-0"

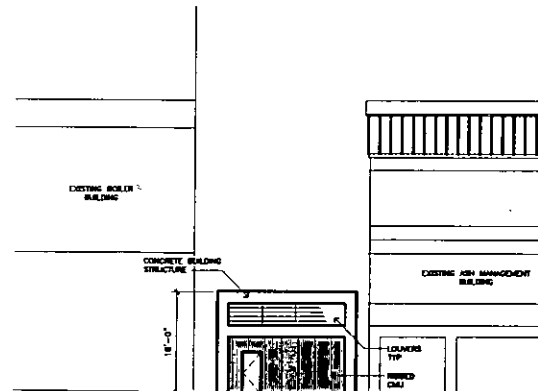


SOUTH ELEVATION
3/16" = 1'-0"



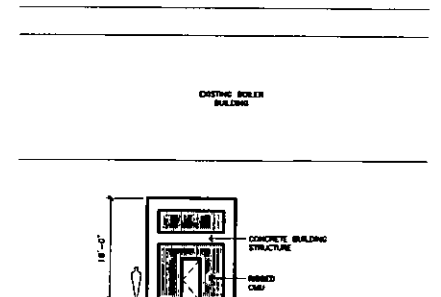
WEST ELEVATION
3/16" = 1'-0"

LIME / CARBON SILO ENCLOSURE



WEST ELEVATION
3/16" = 1'-0"

COMPRESSOR BUILDING



WEST ELEVATION
3/16" = 1'-0"

ELECTRICAL BUILDING
PRELIMINARY

DESIGNED BY: MALFORD
DRAWN BY: MALFORD
CHECKED BY: J. J. JACOBI
CREATED BY: J. J. JACOBI

CDM Group, Division & McKee, Inc.
2781 Mallard Center Parkway, Suite 300
Tallahassee, Florida 32311
Tel: (904) 888-2562 Fax: (904) 875-1161

BAY COUNTY RESOURCE RECOVERY FACILITY
BAY COUNTY, FLORIDA
AIR POLLUTION CONTROL RETROFIT PROJECT

ELECTRICAL BUILDING, COMPRESSOR BUILDING,
AND LIME/CARBON SILO ENCLOSURE
EXTERIOR ELEVATIONS

PROJECT NO. 8348-20763
FILE NAME: APRIL 20-2009
SHEET NO.
A 4



Appendix
B

Appendix B
Title V Permit

Bay County Energy Systems, Inc.
Bay Resource Management Center
Facility ID No.: 0050031
Bay County

Title V Air Operation Permit Revision
FINAL Permit No.: 0050031-008-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:

Department of Environmental Protection
Northwest District
160 Government Center
Pensacola, Florida 32501-5794
Telephone: 850/595-8364
Fax: 850/595-8096

**Title V Air Operation Permit Revision
FINAL Permit No.: 0050031-008-AV**

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|--|--------------------|
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| III. Emissions Units and Conditions | |
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| B. Municipal Waste Combustion Units (on 11/16/05) | 30 - 71 |

Permittee:

Bay County Energy Systems, Inc.
6510 Bay Line Drive
Panama City, Florida 32404

FINAL Permit No.: 0050031-008-AV

Facility ID No.: 0050031

SIC Nos.: 49; 4953

Project: Title V Air Operation Permit Revision

This permit revision is an opening-for-cause permitting action to install the applicable requirements of 40 CFR 60, Subpart BBB, Emission Guidelines: Small Municipal Waste Combustion Units, adopted and incorporated by reference in Rule 62-204.800(9)(e)1., F.A.C. This facility is located at 6510 Bay Line Drive, Bay County, Bay Industrial Park -- approximately 2 miles North of the intersection of U.S. 231 and County Road 2301; UTM Coordinates: Zone 16, 642.40 km East and 3349.50 km North; Latitude: 30° 15' 54" North, and Longitude: 85° 30' 8" West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to 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 I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-4, TITLE V CONDITIONS (version dated 02/12/2002)
Appendix SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
Tables 2, 3, 5, 6, 7 and 8, 40 CFR 60. Subpart BBBB
Mr. Winston A. Smith's letter dated 09/30/1999

Initial Effective Date: August 1, 2000

Revision Effective Date: June 25, 2003

Renewal Application Due Date: February 1, 2005

Expiration Date: July 31, 2005

Joseph Kahn, P.E., Acting Director
Division of Air Resource Management

JK/sms/rbm

Section I. Facility Information.

Subsection A. Facility Description.

The Bay Resource Management Center began commercial operation on May 1, 1987. It converts a maximum of 490 tons per day of non-recycled solid waste into saleable energy. The facility includes two municipal waste combustors (MWCs) that are both coupled to a common generator with a nameplate rating of 15 MW of electricity.

Based on the initial Title V permit application received June 10, 1996, this facility is a major source of hazardous air pollutants (HAPs).

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

| E.U. ID No. | Brief Description |
|-------------|---|
| -001 | Municipal Waste Combustion Unit No. 1 (North) |
| -002 | Municipal Waste Combustion Unit No. 2 (South) |

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:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes

These documents are on file with permitting authority:
Winston A. Smith's letter dated September 30, 1999, and received October 4, 1999.
Initial Title V Permit (0050031-002-AV) issued/effective August 1, 2000.
Title V Permit Revision (0050031-007-AV) issued/effective September 29, 2001.
Scott M. Sheplak's letter dated October 8, 2002, requesting information.
C. Travis Windham's letter received December 11, 2002.
Mary Beth Curle's e-mail received April 2, 2003.

Section II. Facility-wide Conditions.

The following Conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-4, 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).
 - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434
- and,
- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]
5. 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.]
6. 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.

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

[Rule 62-296.320(1)(a), F.A.C.]

7. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS):

The following requirements are "not federally enforceable":

- a. Paved and Unpaved Roads. Trucks delivering MSW, trucks removing ash, passenger vehicles, and other plant equipment use only paved roads at the facility. To minimize emissions from the paved roadways, a road sweeper shall be utilized to clean the areas twice per month.
- b. Residue Handling. The residual material (ash) remaining after the solid waste is combusted shall be loaded via conveyor into trucks and hauled to the landfill. The ash shall be handled wet in order to minimize emissions. All ash shall be combined inside the boiler building and sent to the quench tank where it shall be submerged in water. A drag conveyor shall lift the material from the quench tank up an incline to allow standing water to drain. The material shall be then discharged into an Ash Building and then loaded into a truck or roll-off container. The trucks or roll-off containers shall be covered before they exit the site.

[Rule 62-296.320(4)(c)2., F.A.C.; and, 0050031-002-AV]

8. 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.]

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

Department of Environmental Protection
Northwest District
160 Government Center
Pensacola, Florida 32501-5794
Telephone: 850/595-8364
Fax: 850/595-8096

10. 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 & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163 or 404/562-9164

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

| E.U. ID No. | Brief Description |
|--------------------|---|
| -001 | Municipal Waste Combustion Unit No. 1 (North) |
| -002 | Municipal Waste Combustion Unit No. 2 (South) |

These two Municipal Waste Combustor (MWC) emissions units are identical in configuration. The manufacturer is O'Connor Combustor. The electric generator nameplate rating is 15 MW. Particulate matter emissions are controlled by an electrostatic precipitator at each MWC. Sulfur dioxide emissions are controlled by the low sulfur content of fuels. Stack height is 125 feet. The emissions units' initial startup date was May 1, 1987.

{Permitting Note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7)5., F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD)(Permit No. PSD-FL-129); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination.}

The following conditions apply to the emissions unit(s) listed above:

General.

A.0. The following Specific Conditions are in effect until midnight of November 15, 2005.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.1585(a)]

A.1. 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.]

A.2. 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]

Essential Potential to Emit (PTE) Parameters

A.3.1. Capacity.

(a) The maximum charging rate of each of the two MWC's shall not exceed 245 tons of municipal solid waste (MSW) per day (a total of 490 tons per day for the facility). The maximum heat input rate shall not exceed 91.875 MMBtu per hour, assuming a heating value of 4,500 Btu per pound. Steam flow rate shall not exceed an average of 65,333 lbs/hr over any 24-hour rolling average period for each unit. Steam flow shall not exceed an average of 66,667 lbs/hr over any 4-hour block arithmetic averaging period for each unit. A seven-day average, as of 8 a.m., Monday, shall be maintained as a weekly record. To determine compliance with the maximum charging capacity, the steam flow meter shall be calibrated,

maintained, and operated to measure steam flow in pounds per hour on a continuous basis, and record the output of the monitor. The normal operating range of the of the MWCs shall be 80% to 100% of the design rated capacity.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-129]

A.3.2.0. Operational Requirements.

A.3.2.1. Compliance Plan.

After the physical modifications are completed, the maximum charging rate of each municipal waste combustor shall be 245 tons of municipal solid waste per day (a total of 490 tons per day for the facility); 91.875 MMBtu heat input per hour, assuming a heating value of 4500 Btu per pound; and a steam production rate of 65,333 lbs/hr.

A.3.2.2. [Reserved.]

A.3.2.3. The owner or operator shall install, calibrate, maintain, and operate a steam flow meter, measure steam flow in pounds per hour on a continuous basis, and record the output of the monitor.

A.3.2.4. Steam flow shall be calculated in 24-hour rolling averaging periods, calculated from six consecutive 4-hour block arithmetic averaging periods for each unit.

A.3.2.5. Steam flow shall not exceed an average of 65,333 lbs/hr over any 24-hour rolling average period for each unit (provided the demonstrated full load steam flow rate/maximum demonstrated MWC unit load is less than or equal to 65,333 lbs/hr; otherwise, the full load steam flow rate determined from the demonstration test will be used).

A.3.2.6. Steam flow shall not exceed an average of 66,667 lbs/hr over any 4-hour block arithmetic averaging period for each unit.

A.3.2.7. The monitoring data must be maintained for periodic inspections by the Department and U.S. EPA, Region 4.

A.3.2.8. Any 24-hour average steam flow in excess of 65,333 lbs/hr for each unit (or the full load steam flow rate determined from the demonstration test) must be reported within seven calendar days to the Department and the U.S. EPA, Region 4.

A.3.2.9. Any 4-hour block arithmetic average steam flow rate in excess of 66,667 lbs/hr for each unit must be reported within seven calendar days to the Department and U.S. EPA, Region 4.

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

A.4. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition A.39.
[Rule 62-297.310(2), F.A.C.]

A.5.0.0. Methods of Operation.

A.5.1.0. Fuels.

A.5.1.1. The only fuels allowed to be burned in the MWCs are municipal solid waste and wood waste, with natural gas as an auxiliary fuel. Other wastes shall not be burned without written prior approval from the Department. The wood waste utilization rate shall not exceed 160 tons per day for the facility. Wood waste shall be used when sufficient MSW is not available to maintain a steady heat rate.
[PSD-FL-129, and 0050031-006-AC]

A.5.1.2. The primary fuel for the facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), Florida Statutes (1995).
[Rule 62-4.070(3), F.A.C.]

A.5.1.3. Unauthorized Fuel. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in Specific Conditions A.5.1.6., A.5.1.7., and A.5.1.8., below. However, the facility

(a) shall not burn:

- (1) those materials that are prohibited by state or federal law;
- (2) those materials that are prohibited by this permit;
- (3) lead acid batteries;
- (4) hazardous waste;
- (5) nuclear waste;
- (6) radioactive waste;
- (7) sewage sludge;
- (8) explosives;
- (9) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.

(b) and shall not knowingly burn:

- (1) untreated biomedical waste;
- (2) segregated loads of biological waste.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

A.5.1.4. The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

- (a) well mixed with MSW on the tipping floor; or
- (b) alternately charged with MSW in the hopper.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

A.5.1.5. The facility operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation, below (Specific Conditions A.5.1.7. and A.5.1.8.). For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual observation.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

A.5.1.6. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:

- (a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
- (b) Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;
- (c) Wood pallets, clean wood, and land clearing debris;
- (d) Packaging materials and containers;
- (e) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
- (f) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

A.5.1.7. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

A.5.1.8. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average.

- (a) Construction and demolition debris.
- (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
- (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
- (e) Waste materials that:
 - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
 - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
- (f) Waste materials that contain oil from:
 - (i) the routine cleanup of industrial or commercial establishments and machinery; or
 - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.

- (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
- (h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

A.5.2.0. Auxiliary Fuel Burners (one burner in each Combustion Boiler Unit). This burner device (one burner in each combustor/boiler unit) shall be used at startup during the introduction of MSW fuel until design furnace gas temperature is achieved. The burner shall be fueled only with natural gas. If the annual capacity value for natural gas is greater than 10%, as determined by 40 CFR 60.43b(e), the facility shall be subject to 40 CFR 60.44b, Standards for Nitrogen Oxides.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-129 and 0050031-006-AC]

A.5.3.0. Operating Temperature. The furnace mean temperature at the fully mixed zones of the combustors shall not be less than 1,800° F. This corresponds to a minimum flue gas temperature of 673° F, as determined from a March 7, 1991 testing and modeling report.

[Rules 62-4.070(3), 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-129]

A.6. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-129]

Emission Limitations and Standards

A.7. Visible Emissions. The emission limit for opacity exhibited by the gases discharged to the atmosphere is 15 percent (6-minute average).

[PSD-FL-129]

A.8. Particulate Matter. The emission limit for particulate matter (PM) contained in the gases discharged to the atmosphere is 0.03 gr/dscf, corrected to 12 percent carbon dioxide.

[40 CFR 60.52; and, PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.9. PM and PM₁₀. Flue gas emissions for PM and PM₁₀ shall not exceed the following:

| Permit | Facility | Facility |
|--------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 6.8 | 13.5 | 59.1 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.10. Sulfur Dioxide. Flue gas emissions for sulfur dioxide shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 35.8 | 71.5 | 313.2 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.11. Nitrogen Oxides. Flue gas emissions for nitrogen oxides shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 26.9 | 53.9 | 236.1 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.12. Carbon Monoxide. Flue gas emissions for carbon monoxide shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 92.8 | 185.6 | 812.9 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.13. Volatile Organic Compounds (VOCs). Flue gas emissions for VOCs shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 7.1 | 14.2 | 62.2 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.14. Lead. Flue gas emissions for lead shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 0.10 | 0.20 | 0.876 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.15. Mercury. Flue gas emissions for mercury shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 0.18 | 0.36 | 1.58 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.16. Fluoride. Flue gas emissions for fluoride shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 0.15 | 0.30 | 1.31 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.17. Beryllium. Flue gas emissions for beryllium shall not exceed the following:

| Per unit | Facility | Facility |
|--------------------|--------------------|----------------------|
| lbs/hr | lbs/hr | Tons per year |
| 5×10^{-6} | 1×10^{-5} | 4.4×10^{-5} |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.18. Hydrogen Chloride. Projected emissions for PSD and inventory purposes are the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 61.7 | 123.3 | 540.0 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

A.19. Sulfuric Acid Mist. Projected emissions for PSD and inventory purposes are the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 1.5 | 3.0 | 13.1 |

[PSD-FL-129]

{Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}

Excess Emissions

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

A.20. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
[40 CFR 60.11(c)]

A.21. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A.22. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.23. 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

A.24. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator 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)]

A.25. Tests shall be conducted in accordance with EPA Methods 1, 2, 3, and 4.
[PSD-FL-129]

A.26. Annual emissions tests for visible emissions, particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, lead, mercury, and beryllium are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that each emissions unit is capable of compliance at the permitted maximum operating rate. Results shall be submitted to the Department within 45 days of testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
[PSD-FL-129]

A.27. Visible Emissions. Compliance with the standards for opacity shall be determined by testing on an *annual basis* using EPA Method 9. See Specific Condition **A.45**.
[PSD-FL-129]

A.28. Particulate Matter. Compliance with the standards for particulate matter shall be determined by testing on an *annual basis* using EPA Method 5. The minimum sampling volume shall be 30 dry standard cubic feet.
[PSD-FL-129; and, 40 CFR 60.54(b)(2)]

A.29. Sulfur Dioxide. Compliance with the standards for sulfur dioxide shall be determined by testing on an *annual basis* using EPA Method 6, 6C, or 8.
[PSD-FL-129]

A.30. Nitrogen Oxides. Compliance with the standards for nitrogen oxides shall be determined by testing on an *annual basis* using EPA Method 7, 7A, 7C, 7D, or 7E.
[PSD-FL-129]

A.31. For fluoride emissions, the permittee is required to show continuing compliance with the standards of the Department. Periodic testing may be required if Department inspections show a need for such tests. The test results must provide reasonable assurance that each emissions unit is capable of compliance at the permitted maximum operating rate.
[PSD-FL-129]

A.32. Carbon Monoxide. EPA Method 10 shall be used to determine compliance on an annual basis.
[PSD-FL-129]

A.33. Volatile Organic Compounds. EPA Method 25 or 25A shall be used to determine compliance on an annual basis.
[PSD-FL-129]

A.34. Lead. Compliance with the standards for lead shall be determined by testing using EPA Method 12 or EPA Method 29 on an annual basis.
[PSD-FL-129; and, Rule 62-297.401, F.A.C.]

A.35. Mercury. Compliance with the standards for mercury shall be determined by testing using EPA Method 101A or EPA Method 29 on an annual basis.
[PSD-FL-129; and, Rule 62-297.401, F.A.C.]

A.36. Fluorides. EPA Method 13A or 13B shall be used to ensure compliance on a once per five-year basis for permit renewal.
[PSD-FL-129; and, Rule 62-297.401, F.A.C.]

A.37. Beryllium. EPA Method 104 shall be used to ensure compliance on an annual basis.
[PSD-FL-129; 40 CFR 61, Appendix B; and, Rule 62-297.401, F.A.C.]

A.38. 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, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.39. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; 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.]

A.40. 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.]

A.41. 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:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the

period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

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.

{Permitting Note: Specific Condition A.28. specifies a minimum sample volume of 30 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, attached as part of this permit.

(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.]

A.42. 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, attached to this permit.

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

A.43. 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. 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 and/or solid 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; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

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.

9. The owner or operator shall notify the Department, 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]

Compliance With Standards and Maintenance Requirements

A.44. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

[40 CFR 60.11(a)]

A.45. 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 Administrator, or as provided in 40 CFR 60.11(e)(5). See Specific Condition A.27.

[40 CFR 60.11(b)]

A.46. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the

performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.
[40 CFR 60.11(e)(5)]

Monitoring Requirements

A.47. Devices shall be maintained to continuously monitor and record steam production, furnace exit gas temperature (FEGT) and flue gas temperature at the exit of the control equipment. An FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.
[PSD-FL-129]

A.48. The furnace heat load shall be maintained between 80% and 100% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved.
[PSD-FL-129]

Continuous Emissions Monitoring

A.49.0. Continuous emissions monitors (CEMs) for opacity, oxygen, and carbon monoxide shall be calibrated, maintained, and operated for each unit. This shall be in accordance with 40 CFR 60, Subpart A, Section 60.13.

A.49.1. In the event of a replacement of a major component of a CEM, a performance specification test, in accordance with 40 CFR 60, Appendix B, shall be conducted within 60 days of such replacement.

A.49.2. CEMs data shall be recorded during periods of startup, shutdown, and malfunction, but shall be excluded from emissions averaging calculations for carbon monoxide and opacity.

A.49.3. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

A.49.4. The procedures under 40 CFR 60.13 shall be followed for evaluation and operation of all CEMs.

A.49.5. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMs data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

A.49.6. Carbon monoxide emissions, corrected to 7% oxygen, shall be recorded. A wet oxygen monitor may be used for carbon monoxide emission correction. A wet oxygen reading shall be corrected to a dry basis using a moisture correction determined annually using EPA Method 4. A carbon monoxide value of 400 ppmvd shall indicate good combustion.

A.49.7. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Specific Conditions A.47. and A.48., which exceeds the applicable emission limits in Specific Conditions A.7. through A.17.

A.49.8. Quality Assurance Procedures of 40 CFR 60 Appendix F applicable to these CEMs shall be adhered to. These shall include, but not be limited to:

- a. Calibration Drift Assessment – The permittee shall keep all required records, and make them available for Department inspection. The permittee shall report as soon as possible by telephone any instances of Out-of-Control Periods due to calibration drift criteria.
- b. Data Accuracy Assessment -- The permittee shall keep all required records, and make them available for Department inspection. The permittee shall report as soon as possible by telephone any instances of Out-of-Control Periods due to excessive inaccuracy.
- c. Reporting Requirements – The permittee shall submit a Data Assessment Report for each quarterly audit on each CEM.

[PSD-FL-129]

A.50. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

A.51. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.

[40 CFR 60.13(c)(1)]

A.52. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases

shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

A.53. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

A.54. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

A.55. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

[40 CFR 60.13(g)]

A.56. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng/J of

pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).
[40 CFR 60.13(h)]

A.57. 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.]

Recordkeeping and Reporting Requirements

A.58. All reporting required by 40 CFR 60.7, 60.13, and 60.53 shall be adhered to.
[AO03-165754 and AO03-165755, Specific Condition No. 24]

A.59. The owner or operator of the facility shall submit excess emissions reports for every calendar quarter within 30 days after the quarter. If there are no excess emissions during a quarter, the report will so state.
[PSD-FL-129]

A.60. Any change in the method of operation, fuels, equipment, or operating hours shall be submitted for approval to the Department's Northwest District Office.
[PSD-FL-129]

A.61. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
[40 CFR 60.7(a)(4)]

A.62. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.
[40 CFR 60.7(b)]

A.63. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. 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)(1), (2), (3), and (4)]

A.64. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 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 Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 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.

[40 CFR 60.7(d)(1) and (2)]

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

A.65. (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 this part 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
- (iii) The Administrator 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 Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator 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 Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator 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 owner or operator 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 owner or operator may again request approval from the Administrator 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)(1)]

A.66. Any owner or operator subject to the provisions of 40 CFR 60 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); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

A.67. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. 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.68. The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Facility for a period of five years.

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

A.69. 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 on the results of each such test.

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

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department 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.

[Rule 62-297.310(8), F.A.C.]

A.70. Monitoring of Operations.

The owner or operator of any incinerator subject to the provisions of 40 CFR 60.53 shall record the daily charging rates and hours of operation.
[40 CFR 60.53]

A.71. Additional Daily Recordkeeping Requirements.

The owner or operator of the facility shall maintain daily records of: (a) the total tons of waste charged to each municipal waste combustor, as determined by compliance with Specific Conditions A.3.2.3. through A.3.2.9., (b) the charging rates of wood waste, as determined by compliance with Specific Condition A.5.1.1., (c) the charging rates of waste tires, as determined by compliance with Specific Condition A.5.1.7., (d) the charging rates of non-MSW material, as determined by compliance with Specific Condition A.5.1.8., and (e) the natural gas quantities utilized during startup and shutdown of operations.
[Rule 62-213.440(1), F.A.C.]

Periodic Monitoring

A.72. The existing COMs will be used for purposes of periodic monitoring of PM emissions. If the opacity standard is exceeded, a PM performance test may be required. The stack test shall comply with all of the testing and reporting requirements contained in the preceding specific conditions, and where practicable, shall be performed while operating at conditions representative of opacity levels which triggered the test.
[Rule 62-213.440(1)(b)1.b., F.A.C.]

Compliance Plan: Increments of Progress

A.73. Increments of Progress. The following 111(d) SIP Compliance Plan: Increments of Progress shall be implemented:

| | |
|------------------------------|------------|
| Submit Final Control Plan | 09/30/2001 |
| Award Contracts | 05/01/2004 |
| Begin Onsite Construction | 06/01/2004 |
| Complete Onsite Construction | 07/15/2005 |
| Achieve Final Compliance | 11/15/2005 |

A.74. Notifications of Achievement of Increments of Progress. Notifications of the achievement of increments of progress to the Department's Northwest District must be postmarked no later than 10 days after the compliance date for the increment.
[40 CFR 60.1600]

A.75. Notifications of Non-Achievement of Increments of Progress. If an increment of progress is not achieved, the owner or operator must submit a notification to the Administrator postmarked within 10 business days after the specified date contained in Specific Condition A.73. for achieving that increment of progress. This notification must inform the Administrator that an increment was not achieved. The owner or operator must include in the notification an explanation of why the increment of progress was not met and the plan for meeting the increment as expeditiously as possible. The owner or operator must continue to submit reports each subsequent month until the increment of progress is met.
[40 CFR 60.1605]

A.76. Compliance with the Increment of Progress for Submittal of a Control Plan. For the control plan's increment of progress, the owner or operator must complete two items as follows:

(a) Submit the final control plan, including a description of the devices for air pollution control and process changes that will be used to comply with the emission limits and other requirements of 40 CFR 60, Subpart BBBB.

(b) The owner or operator must maintain an onsite copy of the final control plan.
[40 CFR 60.1610]

A.77. Compliance with the Increment of Progress for Awarding Contracts. The owner or operator must submit a signed copy of the contracts awarded to initiate onsite construction, initiate onsite installation of emission control equipment, and incorporate process changes. Submit the copy of the contracts with the notification that this increment of progress has been achieved. The owner or operator does not need to include documents incorporated by reference or the attachments to the contracts.

[40 CFR 60.1615]

A.78. Compliance with the Increment of Progress for Initiating Onsite Construction. The owner or operator must initiate onsite construction and installation of emission control equipment and initiate the process changes outlined in the final control plan.

[40 CFR 60.1620]

A.79. Compliance with the Increment of Progress for Completing Onsite Construction. The owner or operator must complete onsite construction and installation of emission control equipment and complete process changes outlined in the final control plan.

[40 CFR 60.1625]

A.80. Compliance with the Increment of Progress for Achieving Final Compliance. For the final compliance increment of progress, the owner or operator must complete two items:

(a) Complete all process changes and complete retrofit construction as specified in the final control plan.

(b) Connect the air pollution control equipment with the municipal waste combustion unit identified in the final control plan and complete process changes to the municipal waste combustion unit so that if the affected municipal waste combustion unit is brought online, all necessary process changes and air pollution control equipment are operating as designed.

[40 CFR 60.1630]

Training

A.81. Required Training. The owner or operator shall comply with the two types of required training:

(a) Training of operators of municipal waste combustion units using the EPA or a State-approved training course.

(b) Training of plant personnel using a plant-specific training course.

[40 CFR 60.1645]

A.82. Operator Training Course. The operator training course shall be completed by the following person(s) and by the stated timeframe(s):

- (a) Three types of employees must complete the EPA or State-approved operator training course:
 - (1) Chief facility operators.
 - (2) Shift supervisors.
 - (3) Control room operators.
- (b) These employees must complete the operator training course by the later of two dates:
 - (1) One year after the effective date of the State plan approval.
 - (2) Reserved.
 - (3) The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit.
- (c) The requirement in paragraph (a), above, does not apply to chief facility operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before the effective date of State plan approval.
- (d) The owner or operator may request that the EPA Administrator waive the requirement in paragraph (a), above, for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the effective date of State plan approval.

[40 CFR 60.1650]

A.83. Plant-specific Training Course. All employees with responsibilities that affect how a municipal waste combustion unit operates must complete the plant-specific training course. The owner or operator must include at least six types of employees:

- (a) Chief facility operators.
- (b) Shift supervisors.
- (c) Control room operators.
- (d) Ash handlers.
- (e) Maintenance personnel.
- (f) Crane or load handlers.

[40 CFR 60.1655]

A.84. Plant-specific Training Requirements. For plant-specific training, the owner or operator must do four things:

- (a) For training at a particular plant, develop a specific operating manual for that plant by the later of two dates:
 - (1) Six months after the municipal waste combustion unit(s) starts up.
 - (2) One year after the effective date of State plan approval.
- (b) Establish a program to review the plant-specific operating manual with people whose responsibilities affect the operation of the municipal waste combustion unit(s). Complete the initial review by the later of three dates:
 - (1) One year after the effective date of State plan approval.
 - (2) Six months after the municipal waste combustion unit(s) starts up.
 - (3) The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit(s).
- (c) Update the manual annually.
- (d) Review the manual with staff annually.

[40 CFR 60.1660]

A.85. Plant-specific Operating Manual Information Requirements. The owner or operator must include eleven (11) items in the operating manual for the plant:

- (a) A summary of all applicable standards in 40 CFR 60, Subpart BBBB.
 - (b) A description of the basic combustion principles that apply to municipal waste combustion units.
 - (c) Procedures for receiving, handling, and feeding municipal solid waste.
 - (d) Procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustion unit(s).
 - (e) Procedures for maintaining a proper level of combustion air supply.
 - (f) Procedures for operating the municipal waste combustion unit(s) within the standards contained in 40 CFR 60, Subpart BBBB.
 - (g) Procedures for responding to periodic upset or off-specification conditions.
 - (h) Procedures for minimizing carryover of particulate matter.
 - (i) Procedures for handling ash.
 - (j) Procedures for monitoring emissions from the municipal waste combustion unit(s).
 - (k) Procedures for recordkeeping and reporting.
- [40 CFR 60.1665]

A.86. Plant-specific Operating Manual Location. The owner or operator must keep the operating manual in an easily accessible location at the plant. It must be available for review or inspection by all employees who must review it and by the Administrator.

[40 CFR 60.1670]

A.87. Operator Certification: Chief Facility Operator and Shift Supervisor.

- (a) Each chief facility operator and shift supervisor must obtain and keep a current provisional operator certification from the American Society of Mechanical Engineers (QRO-1-1994 (incorporated by reference in 40 CFR 60.17, Subpart A)) or a current provisional operator certification from your State certification program.
- (b) Each chief facility operator and shift supervisor must obtain a provisional certification by the later of two dates:
 - (1) 12 months after the effective date of State plan approval.
 - (2) Reserved.
 - (3) Six months after they transfer to the municipal waste combustion unit(s) or 6 months after they are hired to work at the municipal waste combustion unit(s).
- (c) Each chief facility operator and shift supervisor must take one of three actions:
 - (1) Obtain a full certification from the American Society of Mechanical Engineers or a State certification program in your State.
 - (2) Schedule a full certification exam with the American Society of Mechanical Engineers (QRO-1-1994 (incorporated by reference in 40 CFR 60.17, Subpart A)).
 - (3) Schedule a full certification exam with your State certification program.
- (d) The chief facility operator and shift supervisor must obtain the full certification or be scheduled to take the certification exam by the later of the following dates:
 - (1) 12 months after the effective date of State plan approval.
 - (2) Reserved.
 - (3) Six months after they transfer to the municipal waste combustion unit(s) or 6 months after they are hired to work at the municipal waste combustion unit(s).

[40 CFR 60.1675]

Subsection B. This section addresses the following emissions units.

| E.U. ID No. | Brief Description |
|-------------|---|
| -001 | Municipal Waste Combustion Unit No. 1 (North) |
| -002 | Municipal Waste Combustion Unit No. 2 (South) |

These two Municipal Waste Combustor (MWC) emissions units are mass burn rotary waterwall technology and identical in configuration. The manufacturer is O'Connor Combustor. The electric generator nameplate rating is 15 MW. Particulate matter emissions are controlled by a baghouse system. Mercury and dioxins/furans are controlled by carbon injection and removal by the baghouse system. Sulfur dioxide emissions are controlled by the low sulfur content of fuels. Stack height is 125 feet. The emissions units' initial startup date was May 1, 1987.

{Permitting Note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart BBBB, Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or before August 30, 1999, adopted and incorporated by reference in Rule 62-204.800(9)(e), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD)(Permit No. PSD-FL-129); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination.}

The following conditions apply to the emissions unit(s) listed above:

General

B.0. The following Specific Conditions are in effect beginning at 12:01 a.m. of November 16, 2005. [Rule 62-204.800, F.A.C.; and, 40 CFR 60.1585(a)]

B.1. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(8), F.A.C., the Emission Guidelines for Existing Sources adopted by reference in Rule 62-204.800(9)(a), F.A.C., and the National Emissions Standards for Hazardous Air Pollutants adopted by reference in Rule 62-204.800(10), F.A.C., shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance, an Emission Guideline, or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, Emission Guideline, or National Emission Standard, shall apply. [Rules 62-204.800(8)(c), (9)(a)1. & (e), and (10)(c), F.A.C.]

B.2. Definitions. For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in any provision of 40 CFR 60 that is delegated to the Depart by the U.S. EPA, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; and, Rule 62-204.800(9)(a)2., F.A.C.]

B.3. Definitions. The applicability of Rule 62-204.800(8)(e), F.A.C., shall be the same as set forth in 40 CFR 60, Subpart BBBB. [Rule 62-204.800(9)(e)1., F.A.C.]

B.4. 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]

B.5. Each combustor is subject to the requirements of 40 CFR 60, Subpart E, except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.
[Rule 62-4.070(3), F.A.C.]

Essential Potential to Emit (PTE) Parameters

B.6.1. Capacity/Charging Rate. The maximum charging rate of each of the two MWC's shall not exceed 245 tons of municipal solid waste (MSW) per day (a total of 490 tons per day for the facility). The maximum heat input rate shall not exceed 91.875 MMBtu per hour, assuming a heating value of 4,500 Btu per pound. Steam flow rate shall not exceed an average of 65,333 lbs/hr over any 24-hour rolling average period for each unit. Steam flow shall not exceed an average of 66,667 lbs/hr over any 4-hour block arithmetic averaging period for each unit. A seven-day average, as of 8 a.m., Monday, shall be maintained as a weekly record. To determine compliance with the maximum charging capacity, the steam flow meter shall be calibrated, maintained, and operated to measure steam flow in pounds per hour on a continuous basis, and record the output of the monitor. The normal operating range of the of the MWCs shall be 80% to 100% of the design rated capacity.

{Permitting Note. A derated unit should not exceed a threshold applicability level. According to information in the Bay County proposal, the steam output level corresponding to 250 tons per day is equivalent to a steam flow of 66,667 lb/hr for each unit. Therefore, EPA maintains the position that, consistent with prior EPA determinations for derate actions, if this MWC unit exceeds 66,667 lb/hr over any 4-hour block averaging period (demonstration period or operational), the unit would no longer be considered a derated unit. }

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; 40 CFR 60.1690(a); 40 CFR 60.1940; Mr. Winston A. Smith's letter dated September 30, 1999; and, PSD-FL-129 Amendment]

B.6.2.0. Operational Requirements.

B.6.2.1. Charging Rate. See Specific Condition B.6.1.

B.6.2.2. Load. The owner or operator must not operate any municipal waste combustion unit at loads greater than 110 percent of the maximum demonstrated load of the municipal waste combustion unit (4-hour block average), but shall not exceed 245 tons/day MSW. The four-hour block average or 4-hour block average means the average of all hourly emission concentrations or parameter levels when the municipal waste combustion unit operates and combusts municipal solid waste measured over any of six 4-hour periods:

- (1) 12:00 midnight to 4 a.m.
- (2) 4 a.m. to 8 a.m.
- (3) 8 a.m. to 12:00 noon.
- (4) 12:00 noon to 4 p.m.
- (5) 4 p.m. to 8 p.m.
- (6) 8 p.m. to 12:00 midnight.

{ **Permitting Note:** The maximum "tons/day" charging rate limitation for each MSW combustion unit and for the total facility can only be changed by written authorization from the U.S. EPA, Region 4 office. }

[40 CFR 60.1690(a)]

B.6.2.3. Operating Temperature.

(a) The furnace mean temperature at the fully mixed zones of the combustors shall not be less than 1,800° F. This corresponds to a minimum flue gas temperature of 673° F, as determined from a March 7, 1991 testing and modeling report.

[Rules 62-4.070(3), 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-129]

(b) The owner or operator must not operate any municipal waste combustion unit so that the temperature at the inlet of the particulate matter control device exceeds 17° C above the maximum demonstrated temperature of the particulate matter control device (4-hour block average). The four-hour block average or 4-hour block average means the average of all hourly emission concentrations or parameter levels when the municipal waste combustion unit operates and combusts municipal solid waste measured over any of six 4-hour periods:

- (1) 12:00 midnight to 4 a.m.
- (2) 4 a.m. to 8 a.m.
- (3) 8 a.m. to 12:00 noon.
- (4) 12:00 noon to 4 p.m.
- (5) 4 p.m. to 8 p.m.
- (6) 8 p.m. to 12:00 midnight.

[40 CFR 60.1690(b)]

B.6.2.4. If any municipal waste combustion unit uses activated carbon to control dioxin/furan or mercury emissions, the owner or operator must maintain an 8-hour block average carbon feed rate at or above the highest average level established during the most recent dioxin/furan or mercury test.

[40 CFR 60.1690(c)]

B.6.2.5. If any municipal waste combustion unit uses activated carbon to control dioxin/furan or mercury emissions, the owner or operator must evaluate total carbon usage for each calendar quarter. The total amount of carbon purchased and delivered to any municipal waste combustion plant must be at or above the required quarterly usage of carbon. At the owner's or operator's option, the owner or operator may choose to evaluate required quarterly carbon usage on a municipal waste combustion unit basis for each

individual municipal waste combustion unit at the plant. The owner or operator must calculate the required quarterly usage of carbon using the appropriate equation in 40 CFR 60.1935 (see Specific Condition B.111.).

[40 CFR 60.1690(d); and, 40 CFR 60.1935]

B.6.2.6. Any municipal waste combustion unit is exempt from limits on load level, temperature at the inlet of the particulate matter control device, and carbon feed rate during any of five situations:

- (1) During the annual tests for dioxins/furans.
- (2) During the annual mercury tests (for carbon feed rate requirements only).
- (3) During the 2 weeks preceding the annual tests for dioxins/furans.
- (4) During the 2 weeks preceding the annual mercury tests (for carbon feed rate requirements only).
- (5) Whenever the Administrator or delegated State authority permits the owner or operator to do any of five activities:
 - (i) Evaluate system performance.
 - (ii) Test new technology or control technologies.
 - (iii) Perform diagnostic testing.
 - (iv) Perform other activities to improve the performance of the municipal waste combustion unit(s).
 - (v) Perform other activities to advance the state of the art for emission controls for the municipal waste combustion unit(s).

[40 CFR 60.1690(e)]

B.6.2.7. The owner or operator shall install, calibrate, maintain, and operate a steam flow meter, measure steam flow in pounds per hour on a continuous basis, and record the output of the monitor.

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

B.6.2.8. Steam flow shall be calculated in 24-hour rolling averaging periods, calculated from six consecutive 4-hour block arithmetic averaging periods for each unit.

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

B.6.2.9. Steam flow shall not exceed an average of 65,333 lbs/hr over any 24-hour rolling average period for each unit (provided the demonstrated full load steam flow rate/maximum demonstrated MWC unit load is less than or equal to 65,333 lbs/hr; otherwise, the full load steam flow rate determined from the demonstration test will be used).

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

B.6.2.10. Steam flow shall not exceed an average of 66,667 lbs/hr over any 4-hour block arithmetic averaging period for each unit.

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

B.7. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition B.53.

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

B.8.0.0. Methods of Operation.

B.8.1.0. Fuels.

B.8.1.1. The only fuels allowed to be burned in the MWCs are municipal solid waste and wood waste, with natural gas as an auxiliary fuel, except those fuels authorized under Specific Conditions B.8.1.2 and B.8.1.4. thru B.8.1.8. Other wastes shall not be burned without written prior approval from the Department. The wood waste utilization rate shall not exceed 160 tons per day for the facility. Wood waste shall be used when sufficient MSW is not available to maintain a steady heat rate.
[PSD-FL-129; and, 0050031-006-AC]

B.8.1.2. The primary fuel for the facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.1940 or Section 403.706(5), Florida Statutes (1995).
[Rule 62-4.070(3), F.A.C.]

B.8.1.3. Unauthorized Fuel. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in Specific Conditions **B.8.1.6.**, **B.8.1.7.**, and **B.8.1.8.**, below. However, the facility

(a) shall not burn:

- (1) those materials that are prohibited by state or federal law;
- (2) those materials that are prohibited by this permit;
- (3) lead acid batteries;
- (4) hazardous waste;
- (5) nuclear waste;
- (6) radioactive waste;
- (7) sewage sludge;
- (8) explosives;
- (9) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.

(b) and shall not knowingly burn:

- (1) untreated biomedical waste;
- (2) segregated loads of biological waste.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

B.8.1.4. The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

- (a) well mixed with MSW on the tipping floor; or
- (c) alternately charged with MSW in the hopper.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

B.8.1.5. The facility operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation, below (Specific Conditions **B.8.1.7.** and **B.8.1.8.**). For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual observation.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

B.8.1.6. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:

- (a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
- (b) Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;
- (c) Wood pallets, clean wood, and land clearing debris;
- (d) Packaging materials and containers;
- (e) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
- (g) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

B.8.1.7. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

B.8.1.8. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30-day average.

- (a) Construction and demolition debris.
- (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
- (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
- (e) Waste materials that:
 - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
 - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
- (f) Waste materials that contain oil from:
 - (i) the routine cleanup of industrial or commercial establishments and machinery; or
 - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.

- (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
- (i) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

[Rules 62-4.070(3), 62-213.410, and 62-213.440, F.A.C.]

B.8.2.0. Auxiliary Fuel Burners (one burner in each Combustion Boiler Unit). This burner device (one burner in each combustor/boiler unit) shall be used at startup during the introduction of MSW fuel until design furnace gas temperature is achieved. The burner shall be fueled only with natural gas. If the annual capacity value for natural gas is greater than 10%, as determined by 40 CFR 60.43b(e), the facility shall be subject to 40 CFR 60.44b, Standards for Nitrogen Oxides.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-129 and 0050031-006-AC]

B.9. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-129]

Operator Training and Certification

B.10.1. Required Training. The owner or operator shall comply with the two types of required training:

- (a) Training of operators of municipal waste combustion units using the EPA or a State-approved training course.
- (b) Training of plant personnel using a plant-specific training course.

[40 CFR 60.1645]

B.10.2. Operator Training Course. The operator training course shall be completed by the following person(s) and by the stated timeframe(s):

- (a) Three types of employees must complete the EPA or State-approved operator training course:
 - (1) Chief facility operators.
 - (2) Shift supervisors.
 - (3) Control room operators.
- (b) These employees must complete the operator training course by the later of two dates:
 - (1) One year after the effective date of the State plan approval.
 - (2) Reserved.
 - (3) The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit.
- (c) The requirement in paragraph (a), above, does not apply to chief facility operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before the effective date of State plan approval.
- (d) The owner or operator may request that the EPA Administrator waive the requirement in paragraph (a), above, for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the effective date of State plan approval.

[40 CFR 60.1650]

B.10.3. Plant-specific Training Course. All employees with responsibilities that affect how a municipal waste combustion unit operates must complete the plant-specific training course. The owner or operator must include at least six types of employees:

- (a) Chief facility operators.
- (b) Shift supervisors.
- (c) Control room operators.
- (d) Ash handlers.
- (e) Maintenance personnel.
- (f) Crane or load handlers.

[40 CFR 60.1655]

B.10.4. Plant-specific Training Requirements. For plant-specific training, the owner or operator must do four things:

- (a) For training at a particular plant, develop a specific operating manual for that plant by the later of two dates:
 - (1) Six months after the municipal waste combustion unit(s) starts up.
 - (2) One year after the effective date of State plan approval.
- (b) Establish a program to review the plant-specific operating manual with people whose responsibilities affect the operation of the municipal waste combustion unit(s). Complete the initial review by the later of three dates:
 - (1) One year after the effective date of State plan approval.
 - (2) Six months after the municipal waste combustion unit(s) starts up.
 - (3) The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit(s).
- (c) Update the manual annually.
- (d) Review the manual with staff annually.

[40 CFR 60.1660]

B.10.5. Plant-specific Operating Manual Information Requirements. The owner or operator must include eleven (11) items in the operating manual for the plant:

- (a) A summary of all applicable standards in 40 CFR 60, Subpart BBBBB.
- (b) A description of the basic combustion principles that apply to municipal waste combustion units.
- (c) Procedures for receiving, handling, and feeding municipal solid waste.
- (d) Procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustion unit(s).
- (e) Procedures for maintaining a proper level of combustion air supply.
- (f) Procedures for operating the municipal waste combustion unit(s) within the standards contained in 40 CFR 60, Subpart BBBBB.
- (g) Procedures for responding to periodic upset or off-specification conditions.
- (h) Procedures for minimizing carryover of particulate matter.
- (i) Procedures for handling ash.
- (j) Procedures for monitoring emissions from the municipal waste combustion unit(s).
- (k) Procedures for recordkeeping and reporting.

[40 CFR 60.1665]

B.10.6. Plant-specific Operating Manual Location. The owner or operator must keep the operating manual in an easily accessible location at the plant. It must be available for review or inspection by all employees who must review it and by the Administrator.

[40 CFR 60.1670]

B.10.7. Operator Certification: Chief Facility Operator and Shift Supervisor.

- (a) Each chief facility operator and shift supervisor must obtain and keep a current provisional operator certification from the American Society of Mechanical Engineers (QRO-1-1994 (incorporated by reference in 40 CFR 60.17, Subpart A)) or a current provisional operator certification from your State certification program.
- (b) Each chief facility operator and shift supervisor must obtain a provisional certification by the later of two dates:
- (1) 12 months after the effective date of State plan approval.
 - (2) Reserved.
 - (3) Six months after they transfer to the municipal waste combustion unit(s) or 6 months after they are hired to work at the municipal waste combustion unit(s).
- (c) Each chief facility operator and shift supervisor must take one of three actions:
- (1) Obtain a full certification from the American Society of Mechanical Engineers or a State certification program in your State.
 - (2) Schedule a full certification exam with the American Society of Mechanical Engineers (QRO-1-1994 (incorporated by reference in 40 CFR 60.17, Subpart A)).
 - (3) Schedule a full certification exam with your State certification program.
- (d) The chief facility operator and shift supervisor must obtain the full certification or be scheduled to take the certification exam by the later of the following dates:
- (1) 12 months after the effective date of State plan approval.
 - (2) Reserved.
 - (3) Six months after they transfer to the municipal waste combustion unit(s) or 6 months after they are hired to work at the municipal waste combustion unit(s).

[40 CFR 60.1675]

B.10.8. Operation of the Municipal Waste Combustion Unit(s). After the required date for full or provisional certification, operation of the municipal waste combustion unit(s) must not occur unless one of four employees is on duty:

- (a) A fully certified chief facility operator.
- (b) A provisionally certified chief facility operator who is scheduled to take the full certification exam.
- (c) A fully certified shift supervisor.
- (d) A provisionally certified shift supervisor who is scheduled to take the full certification exam.

[40 CFR 60.1680]

B.10.9. Operation of the Municipal Waste Combustion Unit(s) when All the Certified Operators must be Temporarily Offsite. If the certified chief facility operator and certified shift supervisor both must leave the municipal waste combustion unit(s), a provisionally certified control room operator at the municipal waste combustion unit(s) may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor is away, the owner or operator must meet one of three criteria:

- (a) When the certified chief facility operator and certified shift supervisor are both offsite for less than 8 hours and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, the Administrator.
- (b) When the certified chief facility operator and certified shift supervisor are offsite for more than 8 hours, but less than 2 weeks, and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, the Administrator. However, the owner or operator must record the periods when the certified chief facility operator and certified shift

supervisor are offsite and include this information in the annual report as specified under 40 CFR 60.1885(l). (See Specific Condition B.101.)

(c) When the certified chief facility operator and certified shift supervisor are offsite for more than 2 weeks and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, the Administrator. However, the owner or operator must take two actions:

- (1) Notify the Administrator in writing. In the notice, state what caused the absence and what the permittee or owner is doing to ensure that a certified chief facility operator or certified shift supervisor is onsite.
- (2) Submit a status report and corrective action summary to the Administrator every 4 weeks following the initial notification. If the Administrator notifies the permittee or owner that the status report or corrective action summary is disapproved, the municipal waste combustion unit(s) may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the Administrator withdraws the disapproval, municipal waste combustion unit operation may continue.

[40 CFR 60.1685]

Emission Limitations and Standards

B.11. Emission Limits.

(a) The owner or operator must meet the applicable emission limits specified in the following tables of 40 CFR 60, Subpart BBBB:

- (1) Tables 2 and 3.
- (4) For carbon monoxide emission limits: see Table 5.

(b) If the municipal waste combustion unit(s) began construction, reconstruction, or modification after June 26, 1987, then the owner or operator must comply with the dioxin/furan and mercury emission limits specified in Table 2 as applicable by the later of the following two dates:

- (1) One year after the effective date of State plan approval.
- (2) One year after the issuance of a revised construction or operating permit, if a permit modification is required. Final compliance with the dioxins/furans limits must be achieved no later than November 15, 2005, even if the date 1 year after the issuance of a revised construction or operation permit is later than November 15, 2005.

[Rule 62-204.800, F.A.C.; 40 CFR 60.1705(a) & (b); and, 40 CFR 60.1585(a)]

(c) Emission Limits for Existing Municipal Waste Combustion Units. Tables 2, 3, and 5, 40 CFR 60, Subpart BBBB, are incorporated by reference and made a part of this Subsection B., Section III., of the Title V Permit.

[Rules 62-4.070(3), 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 60, Subpart BBBB]

{Permitting Note: Unless otherwise specified, the averaging time(s) for Specific Conditions B.12. - B.24. are based on the specified averaging time of the applicable test method. }

B.12. Particulate Matter (PM). The maximum emission limit for PM contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. Compliance is determined by a stack test.

[40 CFR 60.1700(b)(5); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.13. Visible Emissions. The maximum emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (thirty 6-minute averages). Compliance is determined by a stack test. [40 CFR 60.1700(b)(4); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.14. Fugitive Ash Visible Emissions. Visible emissions for no more than 5 percent of an hourly observation period (i.e., 3 minutes per 1-hour period) is allowed (three 1-hr observation periods). Compliance is determined by a visible emissions test. [40 CFR 60.1700(d)(2); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.15. Cadmium (Cd). The maximum emission limit for Cd contained in the gases discharged to the atmosphere is 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. Compliance is determined by a stack test. [40 CFR 60.1700(b)(1); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.16. Lead (Pb). The maximum emission limit for Pb contained in the gases discharged to the atmosphere is 0.490 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. Compliance is determined by a stack test. [40 CFR 60.1700(b)(2); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.17. Nitrogen Oxides (NO_x). The maximum emission limit for NO_x contained in the gases discharged to the atmosphere is 170 ppmvd, corrected to 7 percent oxygen, 24-hour daily block arithmetic average concentration. Compliance is determined for Class I units by continuous emission monitoring systems. [40 CFR 60.1700(c)(2); 40 CFR 60.1705(a)(1); and, Table 3, 40 CFR 60, Subpart BBBB: Class I type]

B.18. Carbon Monoxide (CO). The maximum emission limit for CO contained in the gases discharged to the atmosphere is 250 ppmvd, corrected to 7 percent oxygen, 24-hour block average, geometric mean. Compliance is determined by continuous emission monitoring systems. [40 CFR 60.1700(d)(1); 40 CFR 60.1705(a)(4); and, Table 5, 40 CFR 60, Subpart BBBB: Class I type]

B.19. Dioxins/Furans (D/F)(total mass basis). The maximum emission limit for D/F contained in the gases discharged to the atmosphere is 30 nanograms per dry standard cubic meter, corrected to 7 percent oxygen. Compliance is determined by a stack test. [40 CFR 60.1700(a); 40 CFR 60.1705(b); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.20. Sulfur Dioxide (SO₂). The maximum emission limit for SO₂ contained in the gases discharged to the atmosphere is either 31 ppmvd, corrected to 7 percent oxygen, 24-hour daily block geometric average concentration, or 75 percent reduction of potential SO₂ emissions. Compliance is determined by continuous emission monitoring systems. [40 CFR 60.1700(c)(3); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.21. Hydrogen Chloride (HCl). The maximum emission limit for HCl contained in the gases discharged to the atmosphere is either 31 ppmvd, corrected to 7 percent oxygen, or 95 percent reduction of potential HCl emissions. Compliance is determined by a stack test. [40 CFR 60.1700(c)(1); 40 CFR 60.1705(a)(1); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.22.0. Mercury (Hg). The maximum emission limit for Hg contained in the gases discharged to the atmosphere is:

- (1) 70 micrograms per dry standard cubic meter, corrected to 7 percent oxygen; or,
- (2) 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.
- (3) Compliance is determined by a stack test.

[Rule 62-296.416(3)(a)1., F.A.C.; 40 CFR 60.1700(b)(3); 40 CFR 60.1705(b); and, Table 2, 40 CFR 60, Subpart BBBB: Class I type]

B.22.1 Facilities with sulfur dioxide and hydrogen chloride control equipment in place or under construction as of July 1, 1993, and which choose to control mercury emissions through the use of mercury control equipment, shall comply with the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., by July 1, 1995. All other facilities choosing to control mercury emissions through the use of mercury control equipment shall comply with the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., by the date that the facility is required to demonstrate compliance with sulfur dioxide and hydrogen chloride emission limits, which limits are established at Rule 62-204.800(8)(b), F.A.C.

[Rule 62-296.416(3)(a)2., F.A.C.]

B.22.2. Facilities subject to the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., shall demonstrate individual emissions unit compliance by the compliance date specified in Rule 62-296.416(3)(a)2., F.A.C., and annually thereafter.

[Rule 62-296.416(3)(a)3., F.A.C.]

B.22.3 Mercury Emissions Inventory. For emissions inventory purposes, all waste-to-energy facilities with charging rates of 40 tons or more per day shall perform annual individual emissions unit mercury emissions tests and report the results to the Department. This testing shall begin during calendar year 1993 and end upon initiation of mercury testing pursuant to Rule 62-296.416(3)(a) or (b), F.A.C.

[Rule 62-296.416(3)(c), F.A.C.]

B.23. Fluorides. Flue gas emissions for fluorides shall not exceed the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 0.15 | 0.30 | 1.31 |

[PSD-FL-129]

B.24. Beryllium. Flue gas emissions for beryllium shall not exceed the following:

| Per unit | Facility | Facility |
|--------------------|--------------------|----------------------|
| lbs/hr | lbs/hr | Tons per year |
| 5×10^{-6} | 1×10^{-5} | 4.4×10^{-5} |

[PSD-FL-129]

B.25. Sulfuric Acid Mist. Projected emissions for PSD and inventory purposes are the following:

| Per unit | Facility | Facility |
|----------|----------|---------------|
| lbs/hr | lbs/hr | Tons per year |
| 1.5 | 3.0 | 13.1 |

[PSD-FL-129]

Excess Emissions

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

B.26. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

[40 CFR 60.11(c)]

B.27. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

B.28. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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. The Department authorizes three hours in any 24-hour period for each emissions unit.

[Rule 62-210.700(1), F.A.C.; and, applicant request]

B.29. 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.]

B.30. Startup, Shutdown, and Malfunction. The provisions for startup, shutdown, and malfunction are provided as follows:

(a) The operating requirements of 40 CFR 60, Subpart BBBB, apply at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction.

(b) Each startup, shutdown, or malfunction must not last for longer than 3 hours.

[40 CFR 60.1695(a) & (b)]

B.31. Emission Limits During Periods of Startup, Shutdown, and Malfunction.

(a) The emission limits of 40 CFR 60, Subpart BBBB, apply at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction.

(b) Each startup, shutdown, or malfunction must not last for longer than 3 hours.

(c) A maximum of 3 hours of test data can be dismissed from compliance calculations during periods of startup, shutdown, or malfunction.

(d) During startup, shutdown, or malfunction periods longer than 3 hours, emissions data cannot be discarded from compliance calculations and all provisions under 40 CFR 60.11(d) apply. (See Specific Condition B.27.)

[40 CFR 60.1710(a), (b), (c) & (d)]

B.32. Malfunction.

a. A malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 60.2, Definitions]

b. A malfunction means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-210.200, F.A.C., Definitions]

Monitoring of Operations

B.33. 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.]

B.34. Devices shall be maintained to continuously monitor and record steam production, furnace exit gas temperature (FEGT) and flue gas temperature at the exit of the control equipment. An FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.

[PSD-FL-129]

B.35. The furnace heat load shall be maintained between 80% and 100% of the design rated capacity during normal operations. The lower limit may be extended provided compliance with the carbon monoxide emissions limit and the FEGT within this permit at the extended turndown rate are achieved.

[PSD-FL-129]

Test Methods and Procedures

B.36. Requirements for Stack Tests. Tables 6, 7 and 8, 40 CFR 60, Subpart BBBBB, are incorporated by reference and made a part of this Subsection B., Section III., of the Title V Permit.

[40 CFR 60, Subpart BBBBB; and, 40 CFR 60, Appendix A]

B.37. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator 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)]

B.38.0. Stack Testing.

(a) The owner or operator must conduct:

- (1) **Initial** and **annual** stack tests to measure the emission levels of dioxins/furans, cadmium, lead, mercury, particulate matter, opacity and hydrogen chloride.
- (2) **Initial** and **annual** visible emissions tests to measure the opacity of fugitive ash.

[40 CFR 60.1775]

(b) The owner or operator must conduct an **annual** emissions stack test for beryllium is required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that each emissions unit is capable of compliance at the permitted maximum operating rate. Results shall be submitted to the Department within 45 days of testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.

[PSD-FL-129]

B.38.1. Stack Test Data. The owner or operator must use results of stack tests for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash to demonstrate compliance with the applicable emission limits in Tables 2 and 3, 40 CFR 60, Subpart BBBB. To demonstrate compliance for carbon monoxide, nitrogen oxides, and sulfur dioxide, see 40 CFR 60.1725. See Specific Condition **B.62.1**.

[40 CFR 60.1780]

B.38.2. Stack Testing Schedule. The owner or operator must:

- (a) Conduct **initial** stack tests for the pollutants listed in 40 CFR 60.1775 by 180 days after the final compliance date. See Specific Condition **B.38.0**.
- (b) Conduct **annual** stack tests for these pollutants after the **initial** stack test. Conduct each **annual** stack test **during each federal fiscal year (October 1 - September 30) and within 13 months after the previous stack test.** See Specific Conditions **B.38.4.(b)(1) and B.57.(a)4.**

[40 CFR 60.1785(a) & (b); and, Rule 62-297.310(7)(a)4., F.A.C.]

B.38.3. Test Methods. The owner or operator must:

- (a) Follow Table 8, 40 CFR 60, Subpart BBBB, to establish the sampling location and to determine pollutant concentrations, number of traverse points, individual test methods, and other specific testing requirements for the different pollutants.
- (b) Make sure that stack tests for all these pollutants consist of at least three test runs, as specified in 40 CFR 60.8 (Performance Tests), Subpart A, 40 CFR 60. Use the average of the pollutant emission concentrations from the three test runs to determine compliance with the applicable emission limits in Tables 2 and 3, 40 CFR 60, Subpart BBBB.
- (c) Obtain an oxygen (or carbon dioxide) measurement at the same time as your pollutant measurements to determine diluent gas levels, as specified in 40 CFR 60.1720. See Specific Condition **B.62.0**.

(d) Use the equations in 40 CFR 60.1935(a) (see Specific Condition **B.111.**) to calculate emission levels at 7 percent oxygen (or an equivalent carbon dioxide basis), the percent reduction in potential hydrogen chloride emissions, and the reduction efficiency for mercury emissions. See the individual test methods in Table 6, 40 CFR 60, Subpart BBBB, for other required equations.
[40 CFR 60.1790(a), (b), (c) & (d)]

B.38.4. Stack Testing Frequency Exception for Dioxins/Furans.

(a) Reserved.

(b) The owner or operator can test less often if a municipal waste combustion plant meets two conditions. First, there are multiple municipal waste combustion units onsite that are subject to 40 CFR 60, Subpart BBBB. Second, all those municipal waste combustion units have demonstrated levels of dioxin/furan emissions less than or equal to 15 nanograms per dry standard cubic meter (total mass), for 2 consecutive years. In this case, the owner or operator may choose to conduct annual stack tests on only one municipal waste combustion unit per year at the plant. This provision only applies to stack testing for dioxins/furans emissions.

(1) The owner or operator must conduct the stack test **during each federal fiscal year (October 1 - September 30)** and **no more than 13 months following a stack test** on any municipal waste combustion unit subject to 40 CFR 60, Subpart BBBB, at your plant. Each year, test a different municipal waste combustion unit subject to 40 CFR 60, Subpart BBBB, and test all municipal waste combustion units subject to 40 CFR 60, Subpart BBBB, in a sequence that you determine. Once the owner or operator determines a testing sequence, it must not be changed without approval by the Administrator. See Specific Conditions **B.38.2.(b)** and **B.57.(a)4.**

(2) If each annual stack test shows levels of dioxin/furan emissions less than or equal to 15 nanograms per dry standard cubic meter (total mass), the owner or operator may continue stack tests on only one municipal waste combustion unit subject to 40 CFR 60, Subpart BBBB, per year.

(3) If any annual stack test indicates levels of dioxin/furan emissions greater than 15 nanograms per dry standard cubic meter (total mass), the owner or operator must conduct subsequent annual stack tests on all municipal waste combustion units subject to 40 CFR 60, Subpart BBBB, at the plant. The owner or operator may return to testing one municipal waste combustion unit subject to 40 CFR 60, Subpart BBBB, per year, if the owner or operator can demonstrate dioxin/furan emission levels less than 15 nanograms per dry standard cubic meter (total mass) for all municipal waste combustion units at the plant subject to 40 CFR 60, Subpart BBBB, for 2 consecutive years.

[40 CFR 60.1795(b)(1), (2) & (3); and, Rule 62-297.310(7)(a)4., F.A.C.]

B.38.5. Deviation from the Annual Stack Testing Schedule.

The owner or operator may not deviate from the annual [during each federal fiscal year (October 1 - September 30)] testing schedules specified in 40 CFR 60.1785(b) and 60.1795(b)(1) unless the owner or operator applies to the Administrator and the Department for an alternative schedule, and the Administrator and the Department approves the request for alternate scheduling prior to the date on which the owner or operator would otherwise have been required to conduct the next stack test. See Specific Conditions **B.38.2.** and **B.38.4.**, respectively.

[40 CFR 60.1800; and, Rule 62-297.310(7)(a)4., F.A.C.]

B.39. Particulate Matter. Compliance with the particulate matter emissions standard must be determined by stack testing using EPA Method 1 to determine the sampling location, EPA Method 5 or 29 to measure pollutant concentration, and EPA Method 3 or 3A to measure oxygen (or carbon dioxide). The minimum sampling volume must be 1.0 cubic meters. The probe and filter holder heating systems in the sample train must be set to provide a gas temperature no greater than $160 \pm 14^\circ\text{C}$. The minimum sampling time is 1 hour. See Specific Condition **B.12**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.40. Visible Emissions. Compliance with the opacity standard for visible emissions must be determined by stack testing using EPA Method 9. In addition, EPA Method 9 must be used to determine the sampling location and to measure pollutant concentration. The observation period shall be 3 hours (thirty 6-minute averages). See Specific Condition **B.13**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.41. Fugitive Ash Visible Emissions. Compliance with the opacity standard for visible emissions must be determined using EPA Method 22. The three 1-hour observation period must include periods when the facility transfers fugitive ash from the municipal waste combustion unit being evaluated to the area where the fugitive ash is stored or loaded into containers or trucks. See Specific Condition **B.14**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.42. Cadmium. Compliance with the cadmium standard must be determined by stack testing using EPA Method 1 to determine the sampling location and EPA Method 29 to measure pollutant concentration, while simultaneously measuring oxygen (or carbon dioxide) using EPA Method 3 or 3A. Compliance testing must be performed while the municipal waste combustion unit being evaluated is operating at full load. See Specific Condition **B.15**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.43. Lead. Compliance with the lead standard must be determined by stack testing using EPA Method 1 to determine the sampling location and EPA Method 29 to measure pollutant concentration, while simultaneously measuring oxygen (or carbon dioxide) using EPA Method 3 or 3A. Compliance testing must be performed while the municipal waste combustion unit being evaluated is operating at full load. See Specific Condition **B.16**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.44. Nitrogen Oxides. Compliance with the nitrogen oxides standard must be determined by use of CEMS. Stack tests are not required except for Appendix F quality assurance requirements. If stack testing is required to validate pollutant concentration levels, then nitrogen oxides emissions must be determined using EPA Method 7, 7A, 7C, 7D or 7E; and, EPA Method 3 or 3A must be used to measure oxygen (or carbon dioxide). If stack testing is required to meet CEMS minimum data collection requirements, then nitrogen oxides emissions must be determined using EPA Method 19; and, EPA Method 3A or 3B must be used to measure oxygen (or carbon dioxide). See Specific Condition **B.17**.

[Tables 6, 7 and 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.45. Carbon Monoxide. Compliance with the carbon monoxide standard must be determined by use of CEMS. Stack tests are not required except for Appendix F quality assurance requirements. If stack testing is required to validate pollutant concentration levels, then carbon monoxide emissions must be determined using EPA Method 10, 10A or 10B, and EPA Method 3 or 3A must be used to measure oxygen (or carbon dioxide). If stack testing is required to meet CEMS minimum data collection

requirements, then carbon monoxide emissions must be determined using EPA Method 10, with an alternative interference trap; and, EPA Method 3A or 3B must be used to measure oxygen (or carbon dioxide). See Specific Condition **B.18**.

[Tables 6, 7 and 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.46. Dioxins/Furans. Compliance with the dioxins/furans standard must be determined by stack testing using EPA Method 1 to determine the sampling location and EPA Method 23 to measure pollutant concentration, while simultaneously measuring oxygen (or carbon dioxide) using EPA Method 3 or 3A. The minimum sampling time must be 4 hours per test run while the municipal waste combustion unit being evaluated is operating at full load. See Specific Condition **B.19**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.47. Sulfur Dioxide. Compliance with the sulfur dioxide standard must be determined by use of CEMS. Stack tests are not required except for Appendix F quality assurance requirements. If stack testing is required to validate pollutant concentration levels, then sulfur dioxide emissions must be determined using EPA Method 6 or 6C, and EPA Method 3 or 3A must be used to measure oxygen (or carbon dioxide). If stack testing is required to meet CEMS minimum data collection requirements, then sulfur dioxide emissions must be determined using EPA Method 19; and, EPA Method 3A or 3B must be used to measure oxygen (or carbon dioxide). See Specific Condition **B.20**.

[Tables 6, 7 and 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.48. Hydrogen Chloride. Compliance with the hydrogen chloride standard must be determined by stack testing using EPA Method 1 to determine the sampling location and EPA Method 26 or 26A to measure pollutant concentration, while simultaneously measuring oxygen (or carbon dioxide) using EPA Method 3A or 3B. Test runs must be at least 1 hour long while the municipal waste combustion unit being evaluated is operating at full load. See Specific Condition **B.21**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.49. Mercury. Compliance with the mercury standard must be determined by stack testing using EPA Method 1 to determine the sampling location and EPA Method 29 to measure pollutant concentration, while simultaneously measuring oxygen (or carbon dioxide) using EPA Method 3 or 3A. Compliance testing must be performed while the municipal waste combustion unit being evaluated is operating at full load. See Specific Condition **B.22**.

[Table 8, 40 CFR 60, Subpart BBBB; and, 40 CFR 60, Appendix A]

B.50. Fluorides.

(a) For fluoride emissions, the permittee is required to show continuing compliance with the standards of the Department. Periodic testing may be required if Department inspections show a need for such tests. The test results must provide reasonable assurance that each emissions unit is capable of compliance at the permitted maximum operating rate.

(b) EPA Method 13A or 13B shall be used to ensure compliance on a **once per five-year basis** for permit renewal. See Specific Condition **B.23**.

[PSD-FL-129; and, 40 CFR 60, Appendix A]

B.51. Beryllium.

(a) An **annual** emissions test for beryllium is required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that each emissions unit is capable of compliance at the permitted maximum operating rate.

(b) EPA Method 104 or EPA Method 29 shall be used to ensure compliance on an **annual** basis. See Specific Condition **B.24**.

[PSD-FL-129; 40 CFR 61, Appendix B; and, Rule 62-297.401, F.A.C.]

B.52. 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, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

B.53. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; 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.]

B.54. 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.55. 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:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the

period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

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, attached as part of this permit.

(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.; and, 40 CFR 60, Appendix A]

B.56. 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, attached to this permit.

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

B.57. 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. 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 and/or solid 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: (see Specific Conditions **B.38.2.(b)** and **B.38.4.(b)(1)**)

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; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

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.

9. The owner or operator shall notify the Department, 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]

Compliance With Standards and Maintenance Requirements

B.58. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
[40 CFR 60.11(a)]

B.59. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A, 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). See Specific Condition **B.60**.
[40 CFR 60.11(b); and, 40 CFR 60, Appendix A]

B.60. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for

compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.
[40 CFR 60.11(e)(5); and, 40 CFR 60, Appendix A]

Continuous Emissions Monitoring

B.61.0. The owner or operator must install a continuous opacity monitoring system (COMS) and continuous emission monitoring systems (CEMSs) to continuously monitor the emissions of nitrogen oxides, sulfur dioxide, carbon monoxide, and oxygen or carbon dioxide. The continuous emission monitoring systems shall operate correctly and obtain the minimum amount of monitoring data.
[40 CFR 60.1715(a), (b), (c) & (d)]

B.61.1. In the event of a replacement of a major component of a CEMS, a performance specification test, in accordance with 40 CFR 60, Appendix B, shall be conducted within 60 days of such replacement.
[PSD-FL-129; and, 40 CFR 60, Appendix B]

B.62.0. CEMS.

(a) The owner or operator must install, calibrate, maintain, and operate CEMS for oxygen (or carbon dioxide), sulfur dioxide, carbon monoxide and nitrogen oxides. Install the CEMS for sulfur dioxide, nitrogen oxides, and oxygen (or carbon dioxide) at the outlet of the air pollution control device.

(b) The owner or operator must install, evaluate, and operate each CEMS according to the "Monitoring Requirements" in 40 CFR 60.13. See Specific Conditions **B.65.** thru **B.71.**

(c) The owner or operator must monitor the oxygen (or carbon dioxide) concentration at each location where sulfur dioxide and carbon monoxide are monitored. Additionally, the owner or operator must also monitor the oxygen (or carbon dioxide) concentration at the location where nitrogen oxides is monitored.

(d) The owner or operator may choose to monitor carbon dioxide instead of oxygen as a diluent gas. If the owner or operator chooses to monitor carbon dioxide, then an oxygen monitor is not required and the owner or operator must follow the requirements in 40 CFR 60.1745. See Specific Condition **B.62.5.**

(e) If the owner or operator chooses to demonstrate compliance by monitoring the percent reduction of sulfur dioxide, the owner or operator must also install a continuous emission monitoring system for sulfur dioxide and oxygen (or carbon dioxide) at the inlet of the air pollution control device.

(f) If the owner or operator prefers to use an alternative sulfur dioxide monitoring method, such as parametric monitoring, or cannot monitor emissions at the inlet of the air pollution control device to determine percent reduction, the owner or operator can apply to the Administrator for approval to use an alternative monitoring method under 40 CFR 60.13.

[40 CFR 60.1720(a), (b), (c), (d), (e) & (f)]

B.62.1. The owner or operator must use data from the CEMSs for sulfur dioxide, nitrogen oxides, and carbon monoxide to demonstrate continuous compliance with the applicable emission limits specified in Tables 2, 3, and 5, 40 CFR 60, Subpart BBBB. To demonstrate compliance for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash, see 40 CFR 60.1780. See Specific Condition **B.38.1.**

[40 CFR 60.1725]

B.62.2. To assure that the CEMSs are operating correctly, the owner or operator must:

- (a) Conduct initial, daily, quarterly, and annual evaluations of the CEMSs that measure oxygen (or carbon dioxide), sulfur dioxide, nitrogen oxides and carbon monoxide.
- (b) Complete the initial evaluation of the CEMSs within 180 days after the final compliance date.
- (c) For initial and annual evaluations, collect data concurrently (or within 30 to 60 minutes) using the oxygen (or carbon dioxide) CEMS, the sulfur dioxide, nitrogen oxides, or carbon monoxide CEMSs, as appropriate, and the appropriate test methods specified in Table 6, 40 CFR 60, Subpart BBBB. The owner or operator must collect these data during each initial and annual evaluation of the CEMSs following the applicable performance specifications in Appendix B, 40 CFR 60. Table 7, 40 CFR 60, Subpart BBBB, shows the performance specifications that apply to each CEMS.
- (d) Follow the quality assurance procedures in Procedure 1, Appendix F, 40 CFR 60, for each CEMS. These procedures include daily calibration drift and quarterly accuracy determinations.
40 CFR 60.1730(a), (b), (c) & (d)]

B.62.3. Exemption from any Appendix B or Appendix F, 40 CFR 60 Requirements to Evaluate CEMSs. The accuracy tests for the sulfur dioxide CEMS require the owner or operator to also evaluate the oxygen (or carbon dioxide) CEMS. Therefore, the oxygen (or carbon dioxide) CEMS is exempt from two requirements:

- (a) Section 2.3 of Performance Specification 3, Appendix B, 40 CFR 60 (relative accuracy requirement).
- (b) Section 5.1.1 of Appendix F, 40 CFR 60 (relative accuracy test audit).
[40 CFR 60.1735]

B.62.4. Schedule for Evaluating CEMSs. The owner or operator must:

- (a) Conduct annual evaluations of the CEMSs no more than 12 months after the previous evaluation was conducted.
- (b) Evaluate the CEMSs daily and quarterly as specified in Appendix F, 40 CFR 60.
[40 CFR 60.1740(a) & (b)]

B.62.5. Monitoring of Carbon Dioxide Instead of Oxygen. The owner or operator must establish the relationship between oxygen and carbon dioxide during the initial evaluation of the CEMS. The owner or operator may reestablish the relationship during annual evaluations. To establish the relationship, the owner or operator must use three procedures:

- (a) Use EPA Reference Method 3 or 3A to determine oxygen concentration at the location of the carbon dioxide monitor.
- (b) Conduct at least three test runs for oxygen. Make sure each test run represents a 1-hour average and that sampling continues for at least 30 minutes in each hour.
- (c) Use the fuel-factor equation in EPA Reference Method 3B to determine the relationship between oxygen and carbon dioxide.
[40 CFR 60.1745(a), (b) & (c); and, 40 CFR 60, Appendix A]

B.62.6. Minimum Collection of Monitoring (CEMS) Data.

- (a) The owner or operator must, where CEMSs are required, obtain 1-hour arithmetic averages. Make sure the averages for sulfur dioxide, nitrogen oxides, and carbon monoxide are in parts per million by dry volume at 7 percent oxygen (or the equivalent carbon dioxide level). The owner or operator must use the 1-hour averages of oxygen (or carbon dioxide) data from the CEMS to determine the actual oxygen (or carbon dioxide) level and to calculate emissions at 7 percent oxygen (or the equivalent carbon dioxide level).
- (b) The owner or operator must obtain at least two data points per hour in order to calculate a valid 1-hour arithmetic average. Section 40 CFR 60.13(e)(2), Subpart A, 40 CFR 60, requires the CEMSs to

complete at least one cycle of operation (sampling, analyzing, and data recording) for each 15-minute period.

(c) The owner or operator must obtain valid 1-hour averages for 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter. An operating day is any day a MSW combustion unit combusts any municipal solid waste or refuse-derived fuel.

(d) If the owner or operator does not obtain the minimum data required in 40 CFR 60.1750(a) through (c), the owner or operator is in violation of this data collection requirement regardless of the emission level monitored, and the owner or operator must notify the Administrator according to 40 CFR 60.1885(e).

(e) If the owner or operator does not obtain the minimum data required in 40 CFR 60.1750(a) through (c), the owner or operator must still use all valid data from the CEMSs in calculating emission concentrations and percent reductions in accordance with 40 CFR 60.1755. See Specific Condition **B.62.7**.

[40 CFR 60.1750(a), (b), (c), (d) & (e)]

B.62.7. Conversion of the 1-hour Arithmetic Averages into Appropriate Averaging Times and Units.

The owner or operator must:

(a) Use the equation in 40 CFR 60.1935(a) to calculate emissions at 7 percent oxygen.

(b) Use EPA Reference Method 19, section 4.3, to calculate the daily geometric average concentrations of sulfur dioxide emissions. If the owner or operator is monitoring the percent reduction of sulfur dioxide, use EPA Reference Method 19, section 5.4, to determine the daily geometric average percent reduction of potential sulfur dioxide emissions.

(c) Use EPA Reference Method 19, section 4.1, to calculate the daily arithmetic average for concentrations of nitrogen oxides.

(d) Use EPA Reference Method 19, section 4.1, to calculate the 4-hour or 24-hour daily block averages (as applicable) for concentrations of carbon monoxide.

[40 CFR 60.1755(a), (b), (c) & (d); and, 40 CFR 60, Appendix A]

B.62.8. CEMS Temporarily Unavailable to Meet the Data Collection Requirements. The owner or operator must use Table 8, 40 CFR 60, Subpart BBBB, to determine the alternate methods for collecting data when these CEMSs malfunction or when repairs, calibration checks, or zero and span checks keep the owner or operator from collecting the minimum amount of data.

[40 CFR 60.1770]

B.63. COMS.

The owner or operator must:

(a) Install, calibrate, maintain, and operate a COMS.

(b) Install, evaluate, and operate each COMS according to 40 CFR 60.13, Subpart A, 40 CFR 60.

(c) Complete an initial evaluation of the COMS according to Performance Specification 1, Appendix B, 40 CFR 60. Complete this evaluation by 180 days after the final compliance date.

(d) Complete each annual evaluation of the COMS during each federal fiscal year (October 1 - September 30).

(e) Use tests conducted according to EPA Reference Method 9, as specified in 40 CFR 60.1790, to determine compliance with the applicable emission limit for opacity in Table 2, 40 CFR 60, Subpart BBBB. The data obtained from the COMS are not used to determine compliance with the limit on opacity emissions.

[40 CFR 60.1760; Rule 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 60, Appendix A]

B.64. Additional Requirements for the Operation of the CEMSs and COMS.

The owner or operator must use the required span values and applicable performance specifications in Table 8, 40 CFR 60, Subpart BBBB.
[40 CFR 60.1765]

B.65. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for CMSs under Appendix B, 40 CFR 60, and, if the CMS is used to demonstrate compliance with emission limits on a continuous basis, Appendix F, 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F, 40 CFR 60, is applicable December 4, 1987.

[40 CFR 60.13(a)]

B.66. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), the owner or operator shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, 40 CFR 60, before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days, thereafter, in accordance with the applicable performance specification in Appendix B, 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

[40 CFR 60.13(c)(1)]

B.67. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

B.68. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

B.69. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B, 40 CFR 60, shall be used.

[40 CFR 60.13(f)]

B.70. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

[40 CFR 60.13(g)]

B.71. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

Other Monitoring Requirements

B.72. Additional Continuous Monitoring Requirements. The owner or operator must continuously monitor three operating parameters:

- (a) Load level of each municipal waste combustion unit.
- (b) Temperature of flue gases at the inlet of the particulate matter air pollution control device.
- (c) Carbon feed rate if activated carbon is used to control dioxin/furan or mercury emissions.
[40 CFR 60.1805]

B.73. Monitoring the Load of the Municipal Waste Combustion Unit(s).

- (a) If the municipal waste combustion unit(s) generates steam, the owner or operator must install, calibrate, maintain, and operate a steam flowmeter or a feed water flowmeter and meet five requirements:
 - (1) Continuously measure and record the measurements of steam (or feed water) in kilograms per hour (or pounds per hour).
 - (2) Calculate the steam (or feed water) flow in 4-hour block averages.
 - (3) Calculate the steam (or feed water) flow rate using the method in "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991)", section 4 (incorporated by reference in 40 CFR 60.17, Subpart A, 40 CFR 60).
 - (4) Design, construct, install, calibrate, and use nozzles or orifices for flow rate measurements, using the recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters", 6th Edition (1971), chapter 4 (incorporated by reference in 40 CFR 60.17, Subpart A, 40 CFR 60).
 - (5) Before each dioxin/furan stack test, or at least once a year, calibrate all signal conversion elements associated with steam (or feed water) flow measurements according to the manufacturer instructions.
- (b) If the municipal waste combustion unit(s) does not generate steam, the owner or operator must determine, to the satisfaction of the Administrator, one or more operating parameters that can be used to continuously estimate load level (for example, the feed rate of municipal solid waste or refuse-derived fuel). The owner or operator must continuously monitor the selected parameters.
[40 CFR 60.1810]

B.74. Monitoring the Temperature of Flue Gases at the Inlet of the Particulate Matter Control Device.

The owner or operator must install, calibrate, maintain, and operate a device to continuously measure the temperature of the flue gas stream at the inlet of each particulate matter control device.
[40 CFR 60.1815]

B.75. Monitoring the Injection Rate of Activated Carbon. If the municipal waste combustion units use activated carbon to control dioxin/furan or mercury emissions, the owner or operator must meet three requirements:

- (a) Select a carbon injection system operating parameter that can be used to calculate carbon feed rate (for example, screw feeder speed).
- (b) During each dioxin/furan and mercury stack test, determine the average carbon feed rate in kilograms (or pounds) per hour. Also, determine the average operating parameter level that correlates to the carbon feed rate. Establish a relationship between the operating parameter and the carbon feed rate in order to calculate the carbon feed rate based on the operating parameter level.

(c) Continuously monitor the selected operating parameter during all periods when each municipal waste combustion unit is operating and combusting waste and calculate the 8-hour block average carbon feed rate in kilograms (or pounds) per hour, based on the selected operating parameter. When calculating the 8-hour block average, do two things:

- (1) Exclude hours when each municipal waste combustion unit is not operating.
- (2) Include hours when each municipal waste combustion unit is operating, but the carbon feed system is not working correctly.

[40 CFR 60.1820]

B.76. Minimum Amount of Monitoring Data Collection with the Continuous Parameter Monitoring Systems.

(a) Where continuous parameter monitoring systems are used, the owner or operator must obtain 1-hour arithmetic averages for three parameters:

- (1) Load level of the municipal waste combustion unit.
- (2) Temperature of the flue gases at the inlet of the particulate matter control device.
- (3) Carbon feed rate, if activated carbon is used to control dioxin/furan or mercury emissions.

(b) The owner or operator must obtain at least two data points per hour in order to calculate a valid 1-hour arithmetic average.

(c) The owner or operator must obtain valid 1-hour averages for at least 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter. An operating day is any day a municipal waste combustion unit combusts any municipal solid waste or refuse-derived fuel.

(d) If the owner or operator does not obtain the minimum data required in paragraphs (a) through (c), above, the owner or operator is in violation of this data collection requirement and the owner or operator must notify the Administrator according to 40 CFR 60.1885(e). See Specific Condition **B.101**. [40 CFR 60.1825]

Recordkeeping and Reporting Requirements

B.77. Quality Assurance Procedures of 40 CFR 60, Appendix F, applicable to the CEMS (see Specific Condition **B.61.0**), shall be adhered to. These shall include, but not be limited to:

(a) Calibration Drift Assessment: The permittee shall keep all required records, and make them available for Department inspection. The permittee shall report as soon as possible by telephone any instances of Out-of-Control Periods due to calibration drift criteria.

(b) Data Accuracy Assessment: The permittee shall keep all required records, and make them available for Department inspection. The permittee shall report as soon as possible by telephone any instances of Out-of-Control Periods due to excessive inaccuracy.

(c) Reporting Requirements: The permittee shall submit a Data Assessment Report for each quarterly audit on each CEM.

[PSD-FL-129; and, 40 CFR 60, Appendix F]

B.78. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Specific Conditions **B.34.** and **B.35.**, which exceeds the applicable emission limits in Specific Conditions **B.12.** through **B.24.**

[PSD-FL-129]

B.79. The owner or operator of the facility shall submit excess emissions reports for every calendar quarter within 30 days after the quarter. If there are no excess emissions during a quarter, the report will so state.

[PSD-FL-129]

B.80. Any change in the method of operation, fuels, equipment, or operating hours shall be submitted for approval to the Department's Northwest District Office.

[PSD-FL-129]

B.81. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

B.82. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

B.83. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. 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)(1), (2), (3), and (4)]

B.84. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 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 Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 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.

[40 CFR 60.7(d)(1) and (2)]

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

B.85. (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 this part 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
- (iii) The Administrator 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 Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator 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 Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator 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 owner or operator 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 owner or operator may again request approval from the Administrator 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)(1)]

B.86. Any owner or operator subject to the provisions of 40 CFR 60 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); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

B.87. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. 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.]

B.88. The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file at the facility for a period of five years.

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

B.89. 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 on the results of each such test.

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

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department 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.

[Rule 62-297.310(8), F.A.C.]

B.90. The owner or operator must keep four types of records:

- (a) Operator training and certification.
- (b) Stack tests.
- (c) Continuously monitored pollutants and parameters.
- (d) Carbon feed rate.

[40 CFR 60.1830]

B.91. The owner or operator must:

- (a) Keep all records onsite in paper copy or electronic format unless the Administrator approves another format.
- (b) Keep all records on each municipal waste combustion unit for at least 5 years.
- (c) Make all records available for submittal to the Administrator, or for onsite review by an inspector.

[40 CFR 60.1835]

B.92. The owner or operator must keep records of six items:

- (a) Records of provisional certifications. Include three items:
 - (1) For the municipal waste combustion plant, names of the chief facility operator, shift supervisors, and control room operators who are provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program.
 - (2) Dates of the initial provisional certifications.
 - (3) Documentation showing current provisional certifications.
- (b) Records of full certifications. Include three items:
 - (1) For the municipal waste combustion plant, names of the chief facility operator, shift supervisors, and control room operators who are fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program.
 - (2) Dates of initial and renewal full certifications.
 - (3) Documentation showing current full certifications.
- (c) Records showing completion of the operator training course. Include three items:
 - (1) For your municipal waste combustion plant, names of the chief facility operator, shift supervisors, and control room operators who have completed the EPA or State municipal waste combustion operator training course. Dates on which each person completed the operator training course.

- (2) Dates of completion of the operator training course.
 - (3) Documentation showing completion of operator training course.
 - (d) Records of reviews for plant-specific operating manuals. Include three items:
 - (1) Names of persons who have reviewed the operating manual.
 - (2) Date of the initial review.
 - (3) Dates of subsequent annual reviews.
 - (e) Records of when a certified operator is temporarily offsite. Include two main items:
 - (1) If the chief facility operator and shift supervisor are offsite for more than 12 hours for 2 weeks or less, and no other certified operator is onsite, record the dates that the chief facility operator and shift supervisor were offsite.
 - (2) When all certified chief facility operators and shift supervisors are offsite for more than 2 weeks and no other certified operator is onsite, keep records of four items:
 - (i) The notice that all certified persons are offsite.
 - (ii) The conditions that cause these people to be offsite.
 - (iii) The corrective actions the owner or operator is taking to ensure a certified chief facility operator or shift supervisor is onsite.
 - (iv) Copies of the written reports submitted every 4 weeks that summarize the actions taken to ensure that a certified chief facility operator or shift supervisor will be onsite.
 - (f) Records of calendar dates. Include the calendar date on each record.
- [40 CFR 60.1840]

B.93. For stack tests required under 40 CFR 60.1775 (see Specific Condition B.38.0.), the owner or operator must keep records of four items:

- (a) The results of the stack tests for eight pollutants or parameters recorded in the appropriate units of measure specified in tables 2, 3, or 4, 40 CFR 60, Subpart BBBBB:
 - (1) Dioxins/furans.
 - (2) Cadmium.
 - (3) Lead.
 - (4) Mercury.
 - (5) Opacity.
 - (6) Particulate matter.
 - (7) Hydrogen chloride.
 - (8) Fugitive ash.
 - (b) Test reports including supporting calculations that document the results of all stack tests.
 - (c) The maximum demonstrated load of the municipal waste combustion units and maximum temperature at the inlet of the particulate matter control device during all stack tests for dioxin/furan emissions.
 - (d) The calendar date of each record.
- [40 CFR 60.1845]

B.94. The owner or operator must keep records of eight items.

- (a) Records of monitoring data. Document six parameters measured using continuous monitoring systems:
 - (1) All 6-minute average levels of opacity.
 - (2) All 1-hour average concentrations of sulfur dioxide emissions.
 - (3) All 1-hour average concentrations of nitrogen oxides emissions.
 - (4) All 1-hour average concentrations of carbon monoxide emissions.
 - (5) All 1-hour average load levels of each municipal waste combustion unit.
 - (6) All 1-hour average flue gas temperatures at the inlet of the particulate matter control device.

- (b) Records of average concentrations and percent reductions. Document five parameters:
 - (1) All 24-hour daily block geometric average concentrations of sulfur dioxide emissions or average percent reductions of sulfur dioxide emissions.
 - (2) All 24-hour daily arithmetic average concentrations of nitrogen oxides emissions.
 - (3) All 4-hour block or 24-hour daily block arithmetic average concentrations of carbon monoxide emissions.
 - (4) All 4-hour block arithmetic average load levels of each municipal waste combustion unit.
 - (5) All 4-hour block arithmetic average flue gas temperatures at the inlet of the particulate matter control device.
- (c) Records of exceedances. Document three items:
 - (1) Calendar dates whenever any of the five pollutants or parameter levels recorded in paragraph (b), above, or the opacity level recorded in paragraph (a)(1), above, did not meet the emission limits or operating levels specified in 40 CFR 60, Subpart BBBBB.
 - (2) Reasons the owner or operator exceeded the applicable emission limits or operating levels.
 - (3) Corrective actions the owner or operator took, or are taking, to meet the emission limits or operating levels.
- (d) Records of minimum data. Document three items:
 - (1) Calendar dates for which the owner or operator did not collect the minimum amount of data required under 40 CFR 60.1750 and 60.1825 (see Specific Conditions B.62.6. and B.76., respectively). Record these dates for five types of pollutants and parameters:
 - (i) Sulfur dioxide emissions.
 - (ii) Nitrogen oxides emissions.
 - (iii) Carbon monoxide emissions.
 - (iv) Load levels of each municipal waste combustion unit.
 - (v) Temperatures of the flue gases at the inlet of the particulate matter control device.
 - (2) Reasons the owner or operator did not collect the minimum data.
 - (3) Corrective actions the owner or operator took or are taking to obtain the required amount of data.
- (e) Records of exclusions. Document each time the owner or operator has excluded data from the calculation of averages for any of the following five pollutants or parameters and the reasons the data were excluded:
 - (1) Sulfur dioxide emissions.
 - (2) Nitrogen oxides emissions.
 - (3) Carbon monoxide emissions.
 - (4) Load levels of each municipal waste combustion unit.
 - (5) Temperatures of the flue gases at the inlet of the particulate matter control device.
- (f) Records of drift and accuracy. Document the results of the daily drift tests and quarterly accuracy determinations according to Procedure 1 of Appendix F, 40 CFR 60. Keep these records for the sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emissions monitoring systems.
- (g) Records of the relationship between oxygen and carbon dioxide. If the owner or operator chooses to monitor carbon dioxide instead of oxygen as a diluent gas, document the relationship between oxygen and carbon dioxide, as specified in 40 CFR 60.1745. See Specific Condition B.62.5.
- (h) Records of calendar dates. Include the calendar date on each record.
[40 CFR 60.1850]

B.95. For municipal waste combustion units that use activated carbon to control dioxin/furan or mercury emissions, the owner or operator must keep records of five items:

- (a) Records of average carbon feed rate. Document five items:
 - (1) Average carbon feed rate (in kilograms or pounds per hour) during all stack tests for dioxin/furan and mercury emissions. Include supporting calculations in the records.

- (2) For the operating parameter chosen to monitor carbon feed rate, average operating level during all stack tests for dioxin/furans and mercury emissions. Include supporting data that document the relationship between the operating parameter and the carbon feed rate.
 - (3) All 8-hour block average carbon feed rates in kilograms (pounds) per hour calculated from the monitored operating parameter.
 - (4) Total carbon purchased and delivered to the municipal waste combustion plant for each calendar quarter. If the owner or operator chooses to evaluate total carbon purchased and delivered on a municipal waste combustion unit basis, record the total carbon purchased and delivered for each individual municipal waste combustion unit at the plant. Include supporting documentation.
 - (5) Required quarterly usage of carbon for the municipal waste combustion plant, calculated using the appropriate equation in 40 CFR 60.1935(f) (see Specific Condition B.111.). If the owner or operator chooses to evaluate required quarterly usage for carbon on a municipal waste combustion unit basis, record the required quarterly usage for each municipal waste combustion unit at the plant. Include supporting calculations.
- (b) Records of low carbon feed rates. Document three items:
- (1) The calendar dates when the average carbon feed rate over an 8- hour block was less than the average carbon feed rates determined during the most recent stack test for dioxin/furan or mercury emissions (whichever has a higher feed rate).
 - (2) Reasons for the low carbon feed rates.
 - (3) Corrective actions the owner or operator took or is taking to meet the 8-hour average carbon feed rate requirement.
- (c) Records of minimum carbon feed rate data. Document three items:
- (1) Calendar dates for which the owner or operator did not collect the minimum amount of carbon feed rate data required under 40 CFR 60.1825. See Specific Condition B.76.
 - (2) Reasons the owner or operator did not collect the minimum data.
 - (3) Corrective actions you took or are taking to get the required amount of data.
- (d) Records of exclusions. Document each time the owner or operator has excluded data from the calculation of carbon feed rates and the reasons the data were excluded.
- (e) Records of calendar dates. Include the calendar date on each record.
[40 CFR 60.1855]

B.96. The owner or operator must:

- (a) Submit an initial report and annual reports, plus semiannual reports for any emission or parameter level that does not meet the limits specified in 40 CFR 60, Subpart BBBB.
- (b) Submit all reports on paper, postmarked on or before the submittal dates in 40 CFR 60.1870, 60.1880, and 60.1895. If the Administrator agrees, the owner or operator may submit electronic reports.
- (c) Keep a copy of all reports required by 40 CFR 60.1875, 60.1885, and 60.1900 onsite for 5 years.
[40 CFR 60.1860]

B.97. Appropriate Units of Measurement for Reporting the Data.

See Tables 2, 3, 4 and 5, 40 CFR 60, Subpart BBBB, for appropriate units of measurement.
[40 CFR 60.1865]

B.98. Initial Report. As specified in Subpart A, 40 CFR 60, the owner or operator must submit the initial report by 180 days after the final compliance date.
[40 CFR 60.1870]

B.99. Initial Report. In the initial report, the owner or operator must include seven items:

(a) The emission levels measured on the date of the initial evaluation of the continuous emission monitoring systems for all of the following five pollutants or parameters as recorded in accordance with 40 CFR 60.1850(b). See Specific Condition **B.94**.

(1) The 24-hour daily geometric average concentration of sulfur dioxide emissions or the 24-hour daily geometric percent reduction of sulfur dioxide emissions.

(2) The 24-hour daily arithmetic average concentration of nitrogen oxides emissions.

(3) The 4-hour block or 24-hour daily arithmetic average concentration of carbon monoxide emissions.

(4) The 4-hour block arithmetic average load level of each municipal waste combustion unit.

(5) The 4-hour block arithmetic average flue gas temperature at the inlet of the particulate matter control device.

(b) The results of the initial stack tests for eight pollutants or parameters (use appropriate units as specified in Tables 2, 3, or 4, 40 CFR 60, Subpart BBBB):

(1) Dioxins/furans.

(2) Cadmium.

(3) Lead.

(4) Mercury.

(5) Opacity.

(6) Particulate matter.

(7) Hydrogen chloride.

(8) Fugitive ash.

(c) The test report that documents the initial stack tests including supporting calculations.

(d) The initial performance evaluation of the continuous emissions monitoring systems. Use the applicable performance specifications in Appendix B, 40 CFR 60, in conducting the evaluation.

(e) The maximum demonstrated load of each municipal waste combustion unit and the maximum demonstrated temperature of the flue gases at the inlet of the particulate matter control device. Use values established during the initial stack test for dioxin/furan emissions and include supporting calculations.

(f) If the municipal waste combustion unit(s) uses activated carbon to control dioxin/furan or mercury emissions, the average carbon feed rates that the owner or operator recorded during the initial stack tests for dioxin/furan and mercury emissions. Include supporting calculations as specified in 40 CFR 60.1855(a)(1) and (2). See Specific Condition **B.95**.

(g) If the owner or operator chooses to monitor carbon dioxide instead of oxygen as a diluent gas, documentation of the relationship between oxygen and carbon dioxide, as specified in 40 CFR 60.1745. See Specific Condition **B.62.5**.

[40 CFR 60.1875]

B.100. Annual Report. The owner or operator must submit the annual report no later than February 1 of each year that follows the calendar year in which the owner or operator collected the data. If the owner or operator has an operating permit for any unit under Title V of the Clean Air Act, the permit may require the owner or operator to submit semiannual reports. 40 CFR Parts 70 and 71 contain program requirements for permits.

[40 CFR 60.1880]

B.101. Annual Report. The owner or operator must summarize data collected for all pollutants and parameters regulated under 40 CFR 60, Subpart BBBBB. The summary must include twelve items:
(a) The results of the annual stack test, using appropriate units, for eight pollutants, as recorded under 40 CFR 60.1845(a): (see Specific Condition B.93.)

- (1) Dioxins/furans.
- (2) Cadmium.
- (3) Lead.
- (4) Mercury.
- (5) Opacity.
- (6) Particulate matter.
- (7) Hydrogen chloride.
- (8) Fugitive ash.

(b) The owner or operator must include a list of the highest average emission levels recorded, in the appropriate units. List these values for five pollutants or parameters:

- (1) Sulfur dioxide emissions.
- (2) Nitrogen oxides emissions.
- (3) Carbon monoxide emissions.
- (4) Load level of each municipal waste combustion unit.
- (5) Temperature of the flue gases at the inlet of the particulate matter air pollution control device (4-hour block average).

(c) The owner or operator must include the highest 6-minute opacity level measured. Base this value on all 6-minute average opacity levels recorded by the continuous opacity monitoring system (40 CFR 60.1850(a)(1)). See Specific Condition B.94.

(d) For municipal waste combustion units that use activated carbon for controlling dioxin/furan or mercury emissions, include four records:

- (1) The average carbon feed rates recorded during the most recent dioxin/furan and mercury stack tests.
- (2) The lowest 8-hour block average carbon feed rate recorded during the year.
- (3) The total carbon purchased and delivered to the municipal waste combustion plant for each calendar quarter. If the owner or operator chooses to evaluate total carbon purchased and delivered on a municipal waste combustion unit basis, record the total carbon purchased and delivered for each individual municipal waste combustion unit at the plant.
- (4) The required quarterly carbon usage of the municipal waste combustion plant calculated using the equation 4 or 5 in 40 CFR 60.1935(f) (see Specific Condition B.111.). If the owner or operator chooses to evaluate required quarterly usage for carbon on a municipal waste combustion unit basis, record the required quarterly usage for each municipal waste combustion unit at the plant.

(e) The total number of days that the owner or operator did not obtain the minimum number of hours of data for six pollutants or parameters. Include the reasons the owner or operator did not obtain the data and corrective actions that the owner or operator has taken to obtain the data in the future. Include data on:

- (1) Sulfur dioxide emissions.
- (2) For Class I municipal waste combustion units only, nitrogen oxides emissions.
- (3) Carbon monoxide emissions.
- (4) Load level of each municipal waste combustion unit.
- (5) Temperature of the flue gases at the inlet of the particulate matter air pollution control device.
- (6) Carbon feed rate.

(f) The number of hours the owner or operator has excluded data from the calculation of average levels (include the reasons for excluding it). Include data for six pollutants or parameters:

- (1) Sulfur dioxide emissions.

- (2) Nitrogen oxides emissions.
 - (3) Carbon monoxide emissions.
 - (4) Load level of each municipal waste combustion unit.
 - (5) Temperature of the flue gases at the inlet of the particulate matter air pollution control device.
 - (6) Carbon feed rate.
- (g) A notice of the intent to begin a reduced stack testing schedule for dioxin/furan emissions during the following calendar year if the owner or operator is eligible for alternative scheduling (40 CFR 60.1795(a) or (b)). See Specific Condition **B.38.4**.
- (h) A notice of the intent to begin a reduced stack testing schedule for other pollutants during the following calendar year if the owner or operator is eligible for alternative scheduling (40 CFR 60.1795(a)). See Specific Condition **B.38.4**.
- (i) A summary of any emission or parameter level that did not meet the limits specified in 40 CFR 60, Subpart BBBB.
- (j) A summary of the data in paragraphs (a) through (d), above, from the year preceding the reporting year. This summary gives the Administrator a summary of the performance of each municipal waste combustion unit over a 2-year period.
- (k) If the owner or operator chooses to monitor carbon dioxide instead of oxygen as a diluent gas, documentation of the relationship between oxygen and carbon dioxide, as specified in 40 CFR 60.1745. See Specific Condition **B.62.5**.
- (l) Documentation of periods when all certified chief facility operators and certified shift supervisors are offsite for more than 12 hours.
[40 CFR 60.1885]

B.102. Semiannual Report. The owner or operator must submit a semiannual report on any recorded emission or parameter level that does not meet the requirements specified in this subpart.
[40 CFR 60.1890]

B.103. Semiannual Report.

- (a) For data collected during the first half of a calendar year, the owner or operator must submit the semiannual report by August 1 of that year.
- (b) For data collected during the second half of the calendar year, the owner or operator must submit the semiannual report by February 1 of the following year.
[40 CFR 60.1895]

B.104. Semiannual Out-of-Compliance Reports. The owner or operator must include three items in the semiannual report:

- (a) For any of the following six pollutants or parameters that exceeded the limits specified in 40 CFR 60, Subpart BBBB, include the calendar date they exceeded the limits, the averaged and recorded data for that date, the reasons for exceeding the limits, and the corrective actions:
 - (1) Concentration or percent reduction of sulfur dioxide emissions.
 - (2) Concentration of nitrogen oxides emissions.
 - (3) Concentration of carbon monoxide emissions.
 - (4) Load level of each municipal waste combustion unit.
 - (5) Temperature of the flue gases at the inlet of your particulate matter air pollution control device.
 - (6) Average 6-minute opacity level.
- (b) If the results of the annual stack tests (as recorded in 40 CFR 60.1845(a)) (see Specific Condition **B.93.**), show emissions above the limits specified in Table 2, 3 or 4, 40 CFR 60, Subpart BBBB, as applicable for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride,

and fugitive ash, include a copy of the test report that documents the emission levels and the corrective actions.

(c) For municipal waste combustion units that apply activated carbon to control dioxin/furan or mercury emissions, include two items:

(1) Documentation of all dates when the 8-hour block average carbon feed rate (calculated from the carbon injection system operating parameter) is less than the highest carbon feed rate established during the most recent mercury and dioxin/furan stack test (as specified in 40 CFR 60.1855(a)(1)).

See Specific Condition B.95. Include four items:

- (i) Eight-hour average carbon feed rate.
- (ii) Reasons for these occurrences of low carbon feed rates.
- (iii) The corrective actions the owner or operator has taken to meet the carbon feed rate requirement.
- (iv) The calendar date.

(2) Documentation of each quarter when total carbon purchased and delivered to the municipal waste combustion plant is less than the total required quarterly usage of carbon. If the owner or operator chooses to evaluate total carbon purchased and delivered on a municipal waste combustion unit basis, record the total carbon purchased and delivered for each individual municipal waste combustion unit at your plant. Include five items:

- (i) Amount of carbon purchased and delivered to the plant.
- (ii) Required quarterly usage of carbon.
- (iii) Reasons for not meeting the required quarterly usage of carbon.
- (iv) The corrective actions the owner or operator has taken to meet the required quarterly usage of carbon.
- (v) The calendar date.

[40 CFR 60.1900]

B.105. Reporting Date Changes.

(a) If the Administrator agrees, the owner or operator may change the semiannual or annual reporting dates.

(b) See 40 CFR 60.19(c), in Subpart A, 40 CFR 60, for procedures to seek approval to change the reporting date.

[40 CFR 60.1905]

B.106. Additional Daily Recordkeeping Requirements.

The owner or operator of the facility shall maintain daily records of:

(a) The total tons of waste charged to each municipal waste combustor, as determined by compliance with Specific Conditions B.6.2.1. through B.6.2.13.

(b) The charging rates of wood waste, as determined by compliance with Specific Condition B.8.1.1.

(c) The charging rates of waste tires, as determined by compliance with Specific Condition B.8.1.7.

(d) The charging rates of non-MSW material, as determined by compliance with Specific Condition B.8.1.8.

(e) The natural gas quantities utilized during startup and shutdown of operations.

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

B.107. The monitoring data must be maintained for periodic inspections by the Department and U.S. EPA, Region 4.

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

B.108. Any 24-hour average steam flow in excess of 65,333 lbs/hr for each unit (or the full load steam flow rate determined from the demonstration test) must be reported within seven calendar days to the Department and the U.S. EPA, Region 4.

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

B.109. Any 4-hour block arithmetic average steam flow rate in excess of 66,667 lbs/hr for each unit must be reported within seven calendar days to the Department and the U.S. EPA, Region 4.

[PSD-FL-129 Amendment; and, Mr. Winston A. Smith's letter dated September 30, 1999]

Periodic Monitoring

B.110. The existing COMS will be used for purposes of periodic monitoring of PM emissions. If the opacity standard is exceeded, a PM performance test may be required. The stack test shall comply with all of the testing and reporting requirements contained in the preceding specific conditions, and where practicable, shall be performed while operating at conditions representative of opacity levels which triggered the test.

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

Equations

B.111. The owner or operator must use the following equations as appropriate:

(a) Concentration correction to 7 percent oxygen. Correct any pollutant concentration to 7 percent oxygen using equation 1, below:

$$C_{7\%} = C_{unc} * (13.9) * (1 / (20.9 - C_{O_2})) \quad (\text{Eq. 1})$$

Where:

$C_{7\%}$ = concentration corrected to 7 percent oxygen.

C_{unc} = uncorrected pollutant concentration.

C_{O_2} = concentration of oxygen (%).

(b) Percent reduction in potential mercury emissions. Calculate the percent reduction in potential mercury emissions ($\%P_{Hg}$) using equation 2, below:

$$\%P_{Hg} = (E_i - E_o) * (100/E_i) \quad (\text{Eq. 2})$$

Where:

$\%P_{Hg}$ = percent reduction of potential mercury emissions

E_i = mercury emission concentration as measured at the air pollution control device inlet, corrected to 7 percent oxygen, dry basis

E_o = mercury emission concentration as measured at the air pollution control device outlet, corrected to 7 percent oxygen, dry basis

(c) Percent reduction in potential hydrogen chloride emissions. Calculate the percent reduction in potential hydrogen chloride emissions (%P_{HCl}) using equation 3, below:

$$\%P_{HCl} = (E_i - E_o) * (100/E_i) \quad (\text{Eq. 3})$$

Where:

- %P_{HCl} = percent reduction of the potential hydrogen chloride emissions
- E_i = hydrogen chloride emission concentration as measured at the air pollution control device inlet, corrected to 7 percent oxygen, dry basis
- E_o = hydrogen chloride emission concentration as measured at the air pollution control device outlet, corrected to 7 percent oxygen, dry basis

(d) Capacity of a municipal waste combustion unit. For a municipal waste combustion unit that can operate continuously for 24-hour periods, calculate the capacity of the municipal waste combustion unit based on 24 hours of operation at the maximum charge rate. To determine the maximum charge rate, use one of two methods:

- (1) For municipal waste combustion units with a design based on heat input capacity, calculate the maximum charging rate based on this maximum heat input capacity and one of two heating values:
 - (i) If your municipal waste combustion unit combusts refuse-derived fuel, use a heating value of 12,800 kilojoules per kilogram (5,500 British thermal units per pound).
 - (ii) If your municipal waste combustion unit combusts municipal solid waste, use a heating value of 10,500 kilojoules per kilogram (4,500 British thermal units per pound).
- (2) For municipal waste combustion units with a design not based on heat input capacity, use the maximum designed charging rate.

(e) Capacity of a batch municipal waste combustion unit. Calculate the capacity of a batch municipal waste combustion unit as the maximum design amount of municipal solid waste they can charge per batch multiplied by the maximum number of batches they can process in 24 hours. Calculate this maximum number of batches by dividing 24 by the number of hours needed to process one batch. Retain fractional batches in the calculation. For example, if one batch requires 16 hours, the municipal waste combustion unit can combust 24/16, or 1.5 batches, in 24 hours.

(f) Quarterly carbon usage. If the owner or operator uses activated carbon to comply with the dioxin/furan or mercury limits, calculate the required quarterly usage of carbon using equation 4, below, for plant basis, or equation 5, below, for unit basis:

- (1) Plant basis. (Eq. 4)

$$C = \sum_{i=1}^n f_i \times h_i$$

Where:

- C = required quarterly carbon usage for the plant in kilograms (or pounds).
- f_i = required carbon feed rate for the municipal waste combustion unit in kilograms (or pounds) per hour. This is the average carbon feed rate during the most recent mercury or dioxin/furan stack tests (whichever has a higher feed rate).
- h_i = number of hours the municipal waste combustion unit was in operation during the calendar quarter (hours).
- n = number of municipal waste combustion units, i, located at the plant.

(2) Unit basis.

$$C = f * h \quad (\text{Eq. 5})$$

Where:

C = required quarterly carbon usage for the unit in kilograms (or pounds).

f = required carbon feed rate for the municipal waste combustion unit in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxin/furan stack tests (whichever has a higher feed rate).

h = number of hours the municipal waste combustion unit was in operation during the calendar quarter (hours).

[40 CFR 60.1935]

Miscellaneous

B.112. 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)]

Appendix H-1. Permit History/ID Number Changes

Bay County Energy Systems, Inc.
 Bay Resource Management Center

FINAL Permit No.: 0050031-008-AV
 Facility ID No.: 0050031

Permit History (for tracking purposes):

| EU ID No. | Description | Permit No. | Effective Date | Expiration Date | Project Type ¹ |
|-----------|---|----------------|----------------|-----------------|---------------------------|
| 001 | Municipal Waste Combustion Unit No. 1 (North) | PSD-FL-129 | | | Construction (new) |
| | | AC03-145061 | 10/14/1988 | 06/01/1989 | Construction (mod.) |
| | | AO03-165754 | 04/13/1990 | 04/01/1995 | Operation |
| | | 0050031-002-AV | 08/01/2000 | 08/01/2005 | Initial |
| | | 0050031-006-AC | 05/30/2001 | 08/01/2005 | Construction (mod.) |
| | | 0050031-007-AV | 09/29/2001 | 08/01/2005 | Revision |
| | | 0050031-008-AV | 06/25/2003 | 08/01/2005 | Revision |
| 002 | Municipal Waste Combustion Unit No. 2 (South) | PSD-FL-129 | | | Construction (new) |
| | | AC03-152196 | 10/14/1988 | 06/01/1989 | Construction (mod.) |
| | | AO03-165755 | 04/13/1990 | 04/01/1995 | Operation |
| | | 0050031-002-AV | 08/01/2000 | 08/01/2005 | Initial |
| | | 0050031-006-AC | 05/30/2001 | 08/01/2005 | Construction (mod.) |
| | | 0050031-007-AV | 09/29/2001 | 08/01/2005 | Revision |
| | | 0050031-008-AV | 06/25/2003 | 08/01/2005 | Revision |

ID Number Changes (for tracking purposes):

From: Facility ID No.: 10PCY030031

To: Facility ID No.: 0050031

Notes:

¹ Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).

² Change to an actual date, which is day 55 from the date of posting the PROPOSED Permit for EPA review (see confirmation e-mail from Tallahassee) or the date that EPA confirms resolution of any objections.

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

Bay County Energy Systems, Inc.
 Bay Resource Management Center

FINAL Permit No.: 0050031-008-AV
 Facility ID No.: 0050031

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.

| | Brief Description of Emissions Units and/or Activities |
|----|--|
| 1 | Plant Grounds Maintenance (small engines) |
| 2 | Maintenance and Repair Activities (cleaning, painting, etc.) |
| 3 | Main Steam Pressure Relief Valves |
| 4 | Office Activities (vacuum cleaning, refrigerators, etc.) |
| 5 | Chemical Storage Tanks (sulfuric acid: 1500 gallons; propane: 125 gallons, etc.) |
| 6 | Testing and Monitoring Equipment (CEMs, stack sampling calibration gases, etc.) |
| 7 | Fire/Safety Diesel Pump |
| 8 | HVAC Equipment |
| 9 | Various Vents/Exhausts (boiler feed pump relief valve, etc.) |
| 10 | Air Compressors |
| 11 | Waste Accumulation (10 gallon closed containers) |
| 12 | Fuel Oil Storage Tanks (4000 gallon, 1000 gallon, and 250 gallon) |
| 13 | Laboratory Vents |
| 14 | Air Compressors |
| 15 | Cooling Tower |
| 16 | Transportation/Conveying and Hauling of Waste and Ash |
| 17 | Road Emissions |

FINAL Determination

Bay County Energy Systems, Inc.
Bay Resource Management Center

Facility ID No.: 0050031
Bay County

Title V Air Operation Permit Revision
FINAL Permit No.: 0050031-008-AV

I. Comment(s).

No comments were received from the USEPA during their 45-Day review period of the PROPOSED Permit. The permit went final on June 25, 2003, which was Day 55.

II. Conclusion.

In conclusion, the permitting authority hereby issues the FINAL Permit.

STATEMENT OF BASIS

Title V Air Operation Permit Revision
FINAL Project No.: 0050031-008-AV
Bay County
Bay Resource Management Center

The initial Title V Air Operation Permit, No. 0050031-002-AV, was issued/effective on August 8, 2000. This Title V air operation permit revision (opening-for-cause) 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 revision.

The subject of this permit revision is to install the applicable requirements of 40 CFR 60, Subpart BBBB. On December 6, 2000, the regulations at 40 CFR Part 60, Subpart BBBB, Emission Guidelines and Compliance Times for Small Municipal Waste Combustion Units Constructed on or before August 30, 1999, became applicable to the facility. Since the additional applicable requirements became applicable to the facility and there is more than 3 (three) years left on the existing Title V permit as of the effective date of the new regulations, the Department is required to open the Title V permit for cause and install these requirements in accordance with Rules 62-4.080(1) and 62-213.430(4), F.A.C., and 40 CFR 70.7(f). By this permit revision, the following changes are being made:

A. In Section II. Facility-wide Conditions.

1. Condition 1.

FROM:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-3, 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.}

TO:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-4, 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. Condition 11.

FROM:

11. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. {See condition 51., APPENDIX TV-3, TITLE V CONDITIONS}
[Rule 62-213.440(3), F.A.C.]

TO:

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

3. Condition 12. (new)

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

B. In Section III. Subsection A, the following "new" Specific Conditions were added:

A.0. The following Specific Conditions are in effect until midnight of November 15, 2005.
[Rule 62-204.800, F.A.C.; and, 40 CFR 60.1585(a)]

A.73. Increments of Progress. The following 111(d) SIP Compliance Plan: Increments of Progress shall be implemented:

| | |
|------------------------------|------------|
| Submit Final Control Plan | 09/30/2001 |
| Award Contracts | 05/01/2004 |
| Begin Onsite Construction | 06/01/2004 |
| Complete Onsite Construction | 07/15/2005 |
| Achieve Final Compliance | 11/15/2005 |

A.74. Notifications of Achievement of Increments of Progress. Notifications of the achievement of increments of progress to the Department's Northwest District must be postmarked no later than 10 days after the compliance date for the increment.
[40 CFR 60.1600]

A.75. Notifications of Non-Achievement of Increments of Progress. If an increment of progress is not achieved, the owner or operator must submit a notification to the Administrator postmarked within 10 business days after the specified date contained in Specific Condition A.73. for achieving that increment of progress. This notification must inform the Administrator that an increment was not achieved. The owner or operator must include in the notification an explanation of why the increment of progress was not met and the plan for meeting the increment as expeditiously as possible. The owner or operator must continue to submit reports each subsequent month until the increment of progress is met.
[40 CFR 60.1605]

A.76. Compliance with the Increment of Progress for Submittal of a Control Plan. For the control plan's increment of progress, the owner or operator must complete two items as follows:
(a) Submit the final control plan, including a description of the devices for air pollution control and process changes that will be used to comply with the emission limits and other requirements of 40 CFR 60, Subpart BBBB.
(b) The owner or operator must maintain an onsite copy of the final control plan.
[40 CFR 60.1610]

STATEMENT OF BASIS (cont.)

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A.77. Compliance with the Increment of Progress for Awarding Contracts. The owner or operator must submit a signed copy of the contracts awarded to initiate onsite construction, initiate onsite installation of emission control equipment, and incorporate process changes. Submit the copy of the contracts with the notification that this increment of progress has been achieved. The owner or operator does not need to include documents incorporated by reference or the attachments to the contracts.
[40 CFR 60.1615]

A.78. Compliance with the Increment of Progress for Initiating Onsite Construction. The owner or operator must initiate onsite construction and installation of emission control equipment and initiate the process changes outlined in the final control plan.
[40 CFR 60.1620]

A.79. Compliance with the Increment of Progress for Completing Onsite Construction. The owner or operator must complete onsite construction and installation of emission control equipment and complete process changes outlined in the final control plan.
[40 CFR 60.1625]

A.80. Compliance with the Increment of Progress for Achieving Final Compliance. For the final compliance increment of progress, the owner or operator must complete two items:
(a) Complete all process changes and complete retrofit construction as specified in the final control plan.
(b) Connect the air pollution control equipment with the municipal waste combustion unit identified in the final control plan and complete process changes to the municipal waste combustion unit so that if the affected municipal waste combustion unit is brought online, all necessary process changes and air pollution control equipment are operating as designed.
[40 CFR 60.1630]

A.81. Required Training. The owner or operator shall comply with the two types of required training:
(a) Training of operators of municipal waste combustion units using the EPA or a State-approved training course.
(b) Training of plant personnel using a plant-specific training course.
[40 CFR 60.1645]

A.82. Operator Training Course. The operator training course shall be completed by the following person(s) and by the stated timeframe(s):
(a) Three types of employees must complete the EPA or State-approved operator training course:
(1) Chief facility operators.
(2) Shift supervisors.
(3) Control room operators.
(b) These employees must complete the operator training course by the later of two dates:
(1) One year after the effective date of the State plan approval.
(2) Reserved.
(3) The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit.
(c) The requirement in paragraph (a), above, does not apply to chief facility operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before the effective date of State plan approval.

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(d) The owner or operator may request that the EPA Administrator waive the requirement in paragraph (a), above, for chief facility operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the effective date of State plan approval.

[40 CFR 60.1650]

A.83. Plant-specific Training Course. All employees with responsibilities that affect how a municipal waste combustion unit operates must complete the plant-specific training course. The owner or operator must include at least six types of employees:

- (a) Chief facility operators.
- (b) Shift supervisors.
- (c) Control room operators.
- (d) Ash handlers.
- (e) Maintenance personnel.
- (f) Crane or load handlers.

[40 CFR 60.1655]

A.84. Plant-specific Training Requirements. For plant-specific training, the owner or operator must do four things:

(a) For training at a particular plant, develop a specific operating manual for that plant by the later of two dates:

- (1) Six months after the municipal waste combustion unit(s) starts up.
- (2) One year after the effective date of State plan approval.

(b) Establish a program to review the plant-specific operating manual with people whose responsibilities affect the operation of the municipal waste combustion unit(s). Complete the initial review by the later of three dates:

- (1) One year after the effective date of State plan approval.
- (2) Six months after the municipal waste combustion unit(s) starts up.
- (3) The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit(s).

(c) Update the manual annually.

(d) Review the manual with staff annually.

[40 CFR 60.1660]

A.85. Plant-specific Operating Manual Information Requirements. The owner or operator must include eleven (11) items in the operating manual for the plant:

- (a) A summary of all applicable standards in 40 CFR 60, Subpart BBBB.
- (b) A description of the basic combustion principles that apply to municipal waste combustion units.
- (c) Procedures for receiving, handling, and feeding municipal solid waste.
- (d) Procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustion unit(s).
- (e) Procedures for maintaining a proper level of combustion air supply.
- (f) Procedures for operating the municipal waste combustion unit(s) within the standards contained in 40 CFR 60, Subpart BBBB.
- (g) Procedures for responding to periodic upset or off-specification conditions.
- (h) Procedures for minimizing carryover of particulate matter.
- (i) Procedures for handling ash.
- (j) Procedures for monitoring emissions from the municipal waste combustion unit(s).
- (k) Procedures for recordkeeping and reporting.

[40 CFR 60.1665]

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A.86. Plant-specific Operating Manual Location. The owner or operator must keep the operating manual in an easily accessible location at the plant. It must be available for review or inspection by all employees who must review it and by the Administrator.
[40 CFR 60.1670]

A.87. Operator Certification: Chief Facility Operator and Shift Supervisor.

(a) Each chief facility operator and shift supervisor must obtain and keep a current provisional operator certification from the American Society of Mechanical Engineers (QRO-1-1994 (incorporated by reference in 40 CFR 60.17, Subpart A)) or a current provisional operator certification from your State certification program.

(b) Each chief facility operator and shift supervisor must obtain a provisional certification by the later of two dates:

(1) 12 months after the effective date of State plan approval.

(2) Reserved.

(3) Six months after they transfer to the municipal waste combustion unit(s) or 6 months after they are hired to work at the municipal waste combustion unit(s).

(c) Each chief facility operator and shift supervisor must take one of three actions:

(1) Obtain a full certification from the American Society of Mechanical Engineers or a State certification program in your State.

(2) Schedule a full certification exam with the American Society of Mechanical Engineers (QRO-1-1994 (incorporated by reference in 40 CFR 60.17, Subpart A)).

(3) Schedule a full certification exam with your State certification program.

(d) The chief facility operator and shift supervisor must obtain the full certification or be scheduled to take the certification exam by the later of the following dates:

(1) 12 months after the effective date of State plan approval.

(2) Reserved.

(3) Six months after they transfer to the municipal waste combustion unit(s) or 6 months after they are hired to work at the municipal waste combustion unit(s).

[40 CFR 60.1675]

C. Added a "new" subsection, Subsection B, to Section III., of the permit.