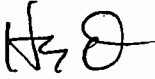


Florida Department of  
**Environmental Protection**

**Memorandum**

---

TO: Power Plant Siting Review Committee

FROM: Buck Oven 

DATE: December 9, 1998

SUBJECT: North & South Broward County RRF PA 85-21 and 86-22

Wheelabrator has submitted the attached requests for modifications of the North and South Resource Recovery plants. Please review the requests and supporting material for completeness and sufficiency. Submit any recommendations to me by January 11, 1999.

Attach:

DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

NOV 17 1998

SITING COORDINATION

REPORT ON

REQUEST FOR MODIFICATION  
OF  
SITE CERTIFICATION PA86-22

NORTH BROWARD COUNTY RESOURCE  
RECOVERY FACILITY

Prepared For:

Wheelabrator North Broward, Inc.  
2600 NW 48<sup>th</sup> Street  
Pompano Beach, Florida 33073

Prepared By:

Golder Associates Inc.  
6241 NW 23rd Street, Suite 500  
Gainesville, Florida 32653

November 1998

9837542Y/F2

DISTRIBUTION:

6 Copies - Wheelabrator  
2 Copies - Golder Associates Inc.

## TABLE OF CONTENTS

COVER LETTER

TABLE OF CONTENTS

i

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION AND APPLICANT.....	1
2.0 ALLOWABLE FUELS.....	2
2.1 BACKGROUND .....	2
2.2 RECENT PERMIT CLARIFICATIONS.....	2
2.3 PROPOSED PERMIT LANGUAGE.....	2
2.4 PSD APPLICABILITY .....	7
3.0 METALS RECOVERY .....	8
3.1 PROJECT OVERVIEW .....	8
3.2 MATERIAL RECOVERY .....	9
3.3 AIR EMISSIONS .....	11
3.4 WATER USE .....	11
3.5 STORMWATER .....	11
3.6 ASH MANAGEMENT PLAN.....	11
3.7 TRANSPORTATION .....	11
3.8 LOCAL APPROVALS.....	12
3.9 PROPOSED CONDITIONS OF CERTIFICATION.....	12
4.0 40 CFR SUBPART CB EMISSION GUIDELINE REQUIREMENTS .....	13
4.1 EXISTING FACILITY DESCRIPTION.....	13
4.2 DESCRIPTION OF SNCR SYSTEM.....	14
4.3 PROPOSED PERMIT CONDITIONS .....	15
4.3.1 EMISSIONS LIMITS.....	15
4.3.2 REMOVAL OF 300°F SDA/FF OUTLET TEMPERATURE LIMIT..	16
4.3.3 FURNACE TEMPERATURE REQUIREMENTS.....	17
5.0 EXISTING AIR EMISSION PERMITS.....	20

## TABLE OF CONTENTS

(Continued)

IN ORDER  
FOLLOWING  
PAGE 20LIST OF TABLES

- TABLE 4-1 Compliance Summary of 40 CFR Part 60; Subpart Cb Emission Limits and Control
- TABLE 4-2 Wheelabrator- North Broward Waste-to-Energy Facility Emission Limits- Current and Pursuant to 40 CFR 60 Subpart Cb.
- TABLE 4-3 Summary of Recent Stack Test Results (3/98) as Compared to Limits of 40 CFR 60 Subpart Cb North Broward Resource Recovery Facility
- TABLE 4-4 Proposed Permit Limits for North Broward Resource Recovery Facility

LIST OF FIGURES

- FIGURE 1-1 North Broward Resource Recovery Facility Plot Plan
- FIGURE 3-1 North Broward Resource Recovery Facility Area of New Construction
- FIGURE 3-2 North Broward Resource Recovery Facility Elevation Views of Areas of New Construction
- FIGURE 3-3 North Broward Resource Recovery Facility Plan View and Flow of Metals Recovery

LIST OF ATTACHMENTS

- ATTACHMENT A CALCULATIONS AND CONVERSIONS
- ATTACHMENT B SNCR DESCRIPTION
- ATTACHMENT C AIR PERMIT APPLICATION FORM

## 1.0 INTRODUCTION AND APPLICANT

Wheelabrator North Broward, Inc. is the operator of the North Broward Resource Recovery Facility located in unincorporated northern Broward County, Florida (see Figure 1-1). The facility received certification under the Florida Power Plant Siting Act (PPSA) in 1986 for the construction and operation of a mass burn resource recovery facility (Site Certification No. PA-86-22; and amendments). The facility was permitted to process 2,250 ton/day (nominal rating) of municipal solid waste in 3 mass burn refuse boilers. Each boiler is permitted to burn up to 806 tons/day.

Wheelabrator is submitting a Request for Modification of the Site Certification for the following:

- a clarification of the fuels allowed to be used in the facility
- the addition of a metal recovery facility
- the addition of Selective Non-Catalytic Reduction (SNCR) required to meet 40 Code of Federal Regulations (CFR) Part 60, Subpart Cb as adopted by reference in Rule 62-204(7)(b) Florida Administrative Code (F.A.C.)
- a new permit condition for the fabric filter outlet temperature in accordance with Cb Emission Guideline requirements
- Elimination of furnace temperature limits
- incorporate Good Combustion Practice (GCP) requirements of Subpart Cb

In addition to the Request for Modification of the Site Certification, Wheelabrator is simultaneously requesting a revision of the Prevention of Significant Deterioration approval issued in 1987 (PSD-FL-112) to incorporate those portions of the modification request related to air emissions and fuels, including the 40 CFR Part 60 Subpart Cb requirements.

## **2.0 ALLOWABLE FUELS**

### **2.1 BACKGROUND**

In its site certification application, Wheelabrator identified its primary fuel as process waste, including "all forms of garbage, commercial waste, rubbish, leaves and brush, paper and cardboard, plastics, wood and lumber, rags, carpeting, a limited amount of tires, wood furniture, mattresses, stumps, wood pallets, timber, tree limbs, ties, and logs, not separated and recycled at the source of generation, and minor amounts of pathological and biological wastes." The Site Certification issued in 1986, as well as the PSD approval issued in 1987, permitted the facility to burn "refuse such as garbage and trash as defined in Chapter 17-7 Florida Administrative Code," but not grease, scum, grit screenings or sewage sludge. Chapter 17-7 did not define "refuse," nor did any other environmental statute or regulation. Because several other resource recovery facilities also have permits which use the undefined term "refuse," the FDEP has recently sought to clarify the allowable fuels at such facilities. Wheelabrator is seeking from FDEP a clarification of its site certification and PSD approval consistent with the approach used by FDEP at other similarly situated resource recovery facilities.

### **2.2 RECENT PERMIT CLARIFICATIONS**

Recent permitting actions by FDEP have clarified the allowable fuels for several resource recovery facilities, including the City of Tampa McKay Bay Resource Recovery Facility and the Hillsborough County Resource Recovery Facility. Permit clarifications were issued by FDEP for both facilities [McKay Bay Permit No. 0570127-002-AC/PSD-FL-086(A) and Hillsborough County PSD-FL-121(B)]. The request made herein is consistent with the clarifications made for these facilities, given the particular circumstances of the North Broward County Resource Recovery Facility.

### **2.3 PROPOSED PERMIT LANGUAGE**

The proposed permit language requested by Wheelabrator is presented below. This language was developed from the permit language for the McKay Bay and Hillsborough County facilities.

### A.1 Fuels

The primary fuel for the facility is 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).

A.1.1 Subject to the limitations contained in this permit, the authorized fuels for the facility also include other solid wastes that are not MSW which are described below. However, the facility shall not burn:

- (a) those materials that are prohibited by state or federal law;
- (b) those materials that are prohibited by this permit;
- (c) lead acid batteries;
- (d) hazardous waste;
- (e) nuclear waste;
- (f) radioactive waste;
- (g) sewage sludge;
- (h) explosives.

A.1.2 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 in the refuse pit; or
- (b) alternately charged with MSW in the hopper.

A.1.3 The facility owner/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 (A.1.6. and A.1.7). For the purposes of this permit, a segregated load is defined to mean a container or truck that is primarily or exclusively filled with a single item or homogenous composition waste material as determined by visual inspection.

A.1.4 To ensure that the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility shall:

- (a) comply with good combustion operating practices in accordance with 40 CFR 60.53b;
- (b) install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and particulate control device inlet temperature in accordance with 40 CFR 60.58b; and
- (c) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit.

Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices. The facility may also use landfill gas as fuel.

A.1.5 Subject to the conditions and limitations contained in this permit, the following other solid waste materials 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, credit cards, magnetic tape 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, land clearing debris and combustible construction and demolition 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.

A.1.6 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 percent, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition A.1.8.

A.1.7 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 percent, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition No. A.1.8 below.

- (a) Non-combustible 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.

A.1.8 Segregated Solid Waste Record Keeping: The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition A.1.6 and A.1.7.

Each segregated load of non-MSW materials, that is subject to the percentage weight limitation of specific conditions A.1.6 and A.1.7, which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3 percent limitation.

Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5 percent limitation.

#### **2.4 PSD APPLICABILITY**

The requested clarification is not subject to the Department's Rules in 62-212.400 F.A.C. regarding Prevention of Significant Deterioration (PSD) approval because the clarification is not classified as a "modification" as defined in Rule 62-210.200(187) F.A.C. A modification is defined as any physical change or change in the method of operation which would result in an increase in the actual emissions of any regulated air pollutant. The requested change simply identifies more specifically the fuels that are acceptable at the facility under the existing site certification and PSD approval. Accordingly, this clarification does not constitute a physical change or a change in the method of operation subject to PSD review.

### **3.0 METALS RECOVERY**

#### **3.1 PROJECT OVERVIEW**

The proposed metal recovery system involves a series of conveyors and mechanical devices that will separate the ferrous and non-ferrous metals from the bottom ash of the MSW fired boilers. The processing will occur in a new building to be constructed adjacent to and in the existing ash loadout building at the site and represent an extension of the ash handling system (see Figures 3-1, 3-2, and 3-3).

The building will be enclosed, with three or more exit doors for removal of ash and recovered metals. The building will add approximately 5,400 square feet (ft<sup>2</sup>) and range in height from 26 to 36 feet, in order to accommodate the height of the conveyors and processing equipment. The ferrous and non-ferrous material will be removed using a grizzly, magnet, eddy current separator, and associated conveyors or similar equipment.

Metals recovered from the system will be discharged into a concrete bunker. Metals will then be transferred using a front end loader to trucks parked outside the building. The metals are not expected to contain significant amounts of dust and will therefore not generate fugitive emissions during loading in this outdoor area. If needed to prevent dust, a water spray will be applied to the recovered metal prior to loading out.

The loaded trucks will be covered with a tarp before leaving the site. The trucks will deliver the metals to a separately-owned, operated, and permitted metal processing facility. It is expected that the metal recovery process will generate an additional four to six trucks per day, six days per week, coming to and leaving the site. Currently, there are three to four trucks per day over six days per week that are used to ship recovered metals. The current operation involves removal of ferrous metals from the bottom ash conveyor with a cross belt magnet. These truck trips would generally be scheduled during daylight hours, usually to avoid peak traffic hours on local roadways. The number of loads of ash to be handled will be offset accordingly, reducing the potential for other fugitive dust generation.

Construction of the new building will not increase the impervious area around the site. The areas for the metal recovery building are currently open pavement. These areas have been previously altered (graded with fill added and paved) during the construction of the facility. Foundations for the metal recovery building may require piling and a methane protection system.

The only wastewater that will be generated from the metal recovery operation will be periodic washdown waters, which will be directed to new U-drains connected to the existing facility wastewater collection and re-use system.

### **3.2 MATERIAL RECOVERY**

Wheelabrator North Broward Inc. is proposing to install equipment and facilities to expand the removal of recoverable metals from the bottom ash generated by the facility. Since the construction and operation of the North Broward County Resource Recovery Facility, Rule 62-701.700 F.A.C. has been promulgated for FDEP to approve and require conditions for material recovery facilities. A material recovery facility is defined as a solid waste management facility that provides for the extraction of recyclable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials from solid waste. Under this broad definition, the proposed metal recovery operation for the North Broward Resource Recovery Facility would be classified as a material recovery facility under the Department Rules in 62-701.700 F.A.C. This section provides the Engineering Report as specified in Rule 62-701.700 (2) F.A.C. The following outlines the information being provided to address the requirements of this rule.

62-701.700(2)(a) As discussed in Section 3.1, the metal recovery facility will only process bottom ash generated by the facility.

62-701.700(2)(b) Section 3.1 presented a description of the operation of the equipment. As discussed, only bottom ash will be processed. Currently, the bottom ash and non-ferrous metals are transported to the landfill. Ferrous metals are removed from the bottom ash with a cross belt magnet prior to transport. Any shutdowns

or malfunctions may result in the transport of bottom ash including metals to the landfill, as is the current practice. Potential hazards, such as fire, are not applicable to the bottom ash since this material has undergone high temperature reduction of the combustible components.

62-701.700(2)(c) Section 3.1 presented a description of the loading, unloading and processing area. All processing will occur in a building with a concrete floor that will not result in leachate formation. Wash down water will be routed to the existing contact water system for re-use. Volumes of wash down water are presented in Section 3.4.

62-701.700(2)(d) There will be no temporary on-site storage facilities associated with the metal recovery operation.

62-701.700(2)(e) As discussed above, all processing will be performed within a building with no leachate generation.

62-701.700(2)(f) Potential groundwater and surface contamination will not result from the metal recovery operation.

62-701.700(2)(g) Any metals not recovered from the operation that are included with the other components of the bottom ash will be transported to the landfill as is the current practice. The bottom ash contains low amounts of putrescible wastes due to the combustion process. Control of vectors and odors would be provided as necessary.

The operational requirements of Rule 62-701.700(3) are not applicable to the metal recovery operation since the existing facility has included provisions for operation and maintenance, waste screening, contingency plans and closure plan. The financial responsibility of Rule 62-701.700(4) is not applicable since the facility is currently operating and authorized to handle MSW and does not pose an environmental threat.

Stormwater, as specified in Rule 62-701.700(5) is addressed in Section 3.5. There will not be any contact stormwater generated as a result of adding the metal recovery operation.

### **3.3 AIR EMISSIONS**

The metals recovery area will be enclosed in a building adjacent to the existing ash loadout area. All bottom ash is currently quenched with water after leaving each boiler. The resulting bottom ash will be about 20 to 30 percent moisture and will not generate fugitive dust.

### **3.4 WATER USE**

The current water use will not be affected by the installation of metals recovery. The bottom ash to be processed is sufficiently moist so that additional water for dust control will not be required. Periodically, the area will be washed with the wash water handled in the same manner as that currently performed with the existing ash handling facilities. Water for washing would not exceed about 1,000 gallons per day. Currently, waste water goes to a contact sump where it is subsequently stored and reused in ash quenching and flue gas cooling.

### **3.5 STORMWATER**

The installation of the metal recovery building will not result in an increase in the impervious surface.

### **3.6 ASH MANAGEMENT PLAN**

The facility is currently operating with an ash management plan that has been submitted to the FDEP Southern District Solid Waste Section. This plan will be updated and submitted to FDEP when the system is constructed and initially operated.

### **3.7 TRANSPORTATION**

The existing facility has an average daily truck traffic of about 248 vehicle trips per day with a peak of about 320 trips per day and an average maximum ranging from 250 to 300 trips per day. The increase of 4 to 6 trips per day would be insignificant relative to

the current operation. The plant access road has sufficient capacity to accommodate the small increase in truck traffic. In addition, a majority of the additional truck traffic would occur over the day with limited impacts to peak traffic flow periods.

### **3.8 LOCAL APPROVALS**

Any required local approvals such as building permits and site plan approval will be obtained directly from the Broward County local government.

### **3.9 PROPOSED CONDITIONS OF CERTIFICATION**

Wheelabrator North Broward proposes a descriptive condition be added to allow for the installation of the system. A proposed condition is as follows:

"The North Broward County Resource Recovery Facility may install a Metal Recovery system to process bottom ash for removal of ferrous and non-ferrous metals. The Metal Recovery system must comply with the applicable conditions in this certification as it pertains to the facility as a whole."



#### **4.0 40 CFR SUBPART Cb EMISSION GUIDELINE REQUIREMENTS**

##### **4.1 EXISTING FACILITY DESCRIPTION**

The facility currently consists of 3 mass burn combustion units each rated nominally at 750 tons per day and a generator nameplate rating of 67.6 MW for the facility. Each combustion unit consists of a mass-burn grate furnace, boiler, spray dryer absorber (SDA) and baghouse (FF). Flue gas exiting each individual baghouse is directed to a common stack with separate flues for all three (3) units. The SDA/FF air pollution control technology installed on each unit controls particulate matter, acid gasses, metals and dioxin. To meet the emission limitations for NO<sub>x</sub> pursuant to 40 CFR 60 Subpart Cb the facility is proposing to install a selective non-catalytic reduction (SNCR) system.

The facility is classified as an existing resource recovery facility (waste-to-energy facility) and is subject to 40 CFR 60 Subpart Cb emission limits and other requirements adopted in the Florida Administrative Code (F.A.C.) including Rule 62-296.416 (Waste to Energy Rule) and Rule 62-204.800 which incorporates 40 CFR 60 Subpart Db, Subpart Cb, Subpart E, and Subpart Eb. Table 4-1 provides a compliance summary of 40 CFR Part 60 Subpart Cb emission limits and the status of the control technology installed at the facility. The installation of the SNCR system will not subject the facility to PSD review under Rule 62-212-400 F.A.C., since there will not be an increase in actual emissions.

The proposed addition of the SNCR system will result in the facility's compliance with EPA's emission limits in 40 CFR 60, subpart Cb for NO<sub>x</sub>. The facility's existing pollution control equipment reduces emissions of particulate matter, acid gases, metals and organics. Due to flue gas cooling, organics condense as PM, and are captured by the fabric filters (FF). The flue gas cooling also minimizes the post combustion formation of organics. The SDA's currently achieve 29 PPM (corrected to 7 percent O<sub>2</sub> dry) or a 75 percent reduction of SO<sub>2</sub> and will achieve the 29 PPM (corrected to 7 percent O<sub>2</sub> dry) or 95 percent removal for HCL, as specified in Subpart Cb.

The facility, since it has been operating, has demonstrated compliance with the limits contained in the PSD approval, the Conditions of Certification, and the Florida Mercury

Rule (Section 62-296.416 F.A.C.). The addition of the SNCR system for NO<sub>x</sub> control is needed to meet the Subpart Cb requirements. The facility will also implement as necessary the other requirements of Subpart Cb including good combustion practice, compliance and performance testing, monitoring, and recordkeeping and reporting.

Table 4-2 presents a comparison of the current emission limits, which include those in the PSD approval, the Conditions of Certification (PPSC) and Florida Rules, and those required by Subpart Cb (See Attachment A for calculations). Since the various emissions limits are expressed in different units, the current PPSC and PSD limits were converted to the applicable Subpart Cb units using the EPA F-Factor method as provided in EPA method 19 (see Attachment A). As shown in Table 4-2, the Subpart Cb limits are more stringent than the current limits for SO<sub>2</sub>, PM, visible emissions, NO<sub>x</sub>, and Pb. There are no current PSD or PPSC emission limits for cadmium (Cd), hydrogen chloride (HCL), and dioxins/furans as contained in Subpart Cb. PSD and PPSC limits exist for sulfuric acid mist, beryllium (Be), VOC and total fluorides (HF) however, there are no limits specified in Subpart Cb for these pollutants.

Table 4-3 provides the most recent stack test data and compares results with 40 CFR Part 60 Subpart Cb emission limits for those emissions where testing was performed. The test results are presented in the same units as those for Subpart Cb for comparison. From the table, all pollutants listed are well below the Subpart Cb emission limits for all three units with the exception of NO<sub>x</sub>. The NO<sub>x</sub> emission limits in Subpart Cb requirements (205 ppm corrected to 7% O dry) will be achieved with the addition of an SNCR system.

#### **4.2 DESCRIPTION OF SNCR SYSTEM**

To comply with the NO<sub>x</sub> emission limits specified in Subpart Cb, the North Broward facility is proposing to install a selective non-catalytic reduction (SNCR) system. The proposed retrofit will store, convey, and inject aqueous urea into the furnace of each boiler immediately above the over fire air zone. The SNCR system will use urea, instead of ammonia, to provide the reducing reaction with NO<sub>x</sub> forming nitrogen and

water. The reaction occurs across a wider temperature range than ammonia and reduces the potential health and safety risks associated with the release of ammonia during handling or storage. Ammonia slip is generally controlled to less than 50 ppmvd at 7 percent O<sub>2</sub>.

The SNCR unit will be designed to allow the concentrated reagent to be delivered to the facility in a heated, self-unloading tanker truck and transferred to a heated fiberglass reinforced plastic tank for on site storage. The tank will provide approximately one - two weeks of storage capacity under normal operating conditions.

A common circulation module transfers the chemical from the storage tank to the individual boiler metering modules. A recirculation pump and a supplemental electric heater, both located on the circulation module, provide agitation and heating capability. Flow and pressure control of the urea and dilution water fluids used in the SNCR process is performed with the metering modules. Metering of the concentrated reagent, dilution of the reagent with water and mixing of the resulting solution is also accomplished at these modules. The diluted reagent is pumped to the distribution modules where the individual distribution panels are located. The panel regulates the compressed air and diluted reagent flows to the individual fluid injection nozzles. Vendor information, including flow diagrams, is presented in Attachment B.

### **4.3 PROPOSED PERMIT CONDITIONS**

#### **4.3.1 Emissions Limits**

The proposed permit conditions are presented in Table 4-4. Wheelabrator North Broward proposes that the current PPSC and PSD limits be replaced with the Subpart Cb limits for those emissions where the Subpart Cb limits are more stringent. These emissions include: PM, visible emissions, NO<sub>x</sub>, SO<sub>2</sub>, CO, Pb and Hg. The Subpart Cb performance test and continuous monitoring requirements under 40 CFR 60.58 would be used to simultaneously demonstrate compliance with Subpart Cb limits and therefore the amended PSD and PPSC limits. It is also proposed that the current emission limits for sulfuric acid mist and fluorides (as HF) be deleted. The facility has

continuously demonstrated compliance with the limits for these emissions and compliance with the lower SO<sub>2</sub> and new HCl Subpart Cb limits would further reduce emissions of sulfuric acid mist and HF. The PPSC and PSD limits for CO are proposed to be replaced with the Subpart Cb Good Combustion Practice (GCP) requirements. However, the GCP CO emission limit would be 87 ppm @ 7% O<sub>2</sub> 4 hour block average based on CEM. This new limit is derived from the 0.09 lb/MMBtu PPSC/PSD limit based on a 4 day rolling average. Amending the current PSD/PPSC limits to reflect the more stringent Subpart Cb limits also would establish a direct and consistent approach to demonstrating compliance by incorporating emission limit units of ug/dscm @ 7% O<sub>2</sub> and ppm @ 7% O<sub>2</sub>. This would eliminate the current lb/MMBtu and/or ppm at 12% CO<sub>2</sub> dual emission limit units and the reliance on calculating test specific F factors. The current beryllium limit would be converted to a ug/dscm limit for consistency with the Subpart Cb Pb, Cd and Hg limits.

It is also requested that with GCP, the emission limit for VOC should be deleted since the CO limit would provide the FDEP assurance that emissions of VOC remain low. This approach has been used by the Department in many previous permits. In addition, since arsenic is no longer considered a PSD pollutant pursuant to F.A.C 62-212.400, it is requested that the arsenic emission limit be deleted from the permit. The FDEP Air Permit application is contained in Attachment C.

#### **4.3.2 Removal of 300°F SDA/FF Outlet Temperature Limit**

It is also proposed that the existing 300°F PPSC temperature limit at the acid gas control device exit (fabric filter outlet) be replaced with the Subpart Cb particulate control device inlet temperature limit. The Subpart Cb temperature limit is determined during annual compliance testing and therefore it is directly tied to actual emissions performance of the boiler and air pollution control equipment. The current, PPSC limit of 300°F at the exit of the acid gas control device was primarily intended to ensure that the acid gas control device would achieve at least 90 percent removal of acid gasses and secondarily to ensure that trace metals and semivolatile organics such as dioxins would be condensed onto particulate and therefore collected in the particulate control device.

The 90 percent removal of acid gasses design requirement in the PPSC presumably referred to hydrogen chloride (HCl) since SO<sub>2</sub> had a specific limit of 0.14 lb/mmBtu or 65 percent removal. Subpart Cb incorporates emission limits for MWC acid gasses (HCl and SO<sub>2</sub>). The HCl limit of 29 ppm at 7 percent O<sub>2</sub> or 95 percent removal is based on annual stack testing. The Subpart Cb, HCl limit can be continuously achieved by SDA/FF air pollution control equipment irrespective of a 300°F temperature limit. Additionally, the Subpart Cb temperature limit derived directly from annual compliance tests ensures that control of trace metals and dioxins or other organics will be continuously achieved. The regulated metals, including cadmium, lead, and beryllium, condense onto particulate at temperatures well above 300°F in the convective sections of the boiler. Consequently maintaining a 300°F FF outlet temperature provides no additional control for these metals. Mercury control will increase at lower fabric filter temperatures but test data has shown little difference in mercury removal at temperatures less than 350°F.

Based on the above, the substitution of the Subpart Cb particulate control device inlet temperature limit for the existing 300°F limit will ensure that high removal levels of all metals and semivolatile organics will be continuously achieved. Operating at a higher temperature will also reduce FF maintenance due to higher corrosion levels attributed to operating at a lower temperature.

#### **4.3.3 Furnace Temperature Requirements**

The PPSC requires that the furnace temperature be monitored and maintained above 1,800°F. The furnace temperature and monitoring requirements can be eliminated with the incorporation of the good Combustion Practice (GCP) operational requirements specified in Subpart Cb.

The original objective of furnace temperature requirements was to assure combustion conditions were sufficient for maximum destruction of organics in the combustion zone. USEPA, in the development of the MWC standards and Emissions Guidelines under Subpart Eb and Cb, was concerned that imposing furnace temperature requirements

could be counter productive since air/fuel mixing would be adversely impacted. To maintain furnace temperature at full boiler load generally requires a decrease in total boiler excess air, which is accomplished by decreasing the relative amount of overfire air. With decreasing overfire air, overfire air penetration into the secondary combustion zone will be reduced. Consequently, air/fuel mixing will be reduced, which results in reduced oxidation/destruction potential for organics.

Importantly, a furnace temperature requirement does not address the secondary formation of dioxins on flyash or particulate matter in the low temperature sections of the boiler and particulate control equipment. This secondary formation of dioxins has the largest potential impact on boiler dioxin emissions and is directly addressed by limiting carryover of particulate matter/flyash and minimizing operating temperature of the particulate control equipment, which compliance with the Subpart Cb GCP requirements ensure.

USEPA concluded that the three major components of the GCP standard under NSPS Subparts Ea, Eb, and Cb are the most effective mechanisms for ensuring optimum combustion conditions, maximizing organic destruction, and minimizing the potential for post-combustion zone formation of organics. The three components of GCP include 1) a short term CO emission limit, 2) restricting maximum boiler operating conditions using a steam flow limit and 3) restricting operating temperatures in the particulate control equipment.

Complying with the Subpart Cb CO limit ensures that both optimum furnace/temperature conditions and good air/fuel mixing are being maintained. Limiting boiler steam flow to the average steamflow achieved during annual compliance tests minimizes particulate carryover to the cooler section of the boiler and PM control device reducing potential for low temperature dioxin formation. Finally, minimizing particulate control device operating temperature to within 30°F of that achieved during compliance tests ensures that low temperature post-combustion dioxin formation is minimized.

Based on continuing compliance with the Subpart Cb requirements, the furnace temperature limit and monitoring requirements can be eliminated in the PPSC. The GCP requirements will ensure that optimum boiler combustion and fabric filter operating conditions are continuously achieved minimizing emissions of dioxins and organics, the original intent of the PPSC furnace temperature limit.

## 5.0 EXISTING AIR EMISSION PERMITS

The facility received construction and operation permits from the South Florida District for the installation and operation of baghouses installed on the lime silo and the ash handling system. These emission units have been included in the Title V Permit Applications and the latest operation permit was AO 06-208187. Wheelabrator is providing notice of these emission units which will be regulated under the Title V permit program.



Table 4-1. Compliance Summary of 40 CFR Part 60; Subpart Cb Emission Limits and Control Technology

Parameter	Emission Limit <sup>a</sup>	Section of 40 CFR 60, Subpart Cb	Control Technology	Status of Control Technology
PM	27mg/dscm	60.33b (a) (1) (i)	Fabric Filters (FF)	Existing
Opacity	10 percent	60.33b (a) (1) (iii)	Fabric Filters (FF)	Existing
Cadmium	0.040 mg/dscm	60.33b (a) (2) (i)	Fabric Filters (FF)	Existing
Lead	0.49mg/dscm	60.33b (a) (2) (iii)	Fabric Filters (FF)	Existing
Mercury	0.070mg/dscm	60.33b (a) (3) and 62-296.416 (3) (b)	Separation program, and/or SDA/FF	Existing
Sulfur Dioxide	29 ppm <sup>b</sup>	60.33b (b) (3) (i)	SDA/FF	Existing
HCL	29 ppm <sup>c</sup>	60.33b (c) (3) (ii)	SDA/FF	Existing
Dioxins/Furans	30ng/dscm	60.33b (c) (1) (ii)	SDA/FF, Good combustion practices	Existing
NO <sub>x</sub>	205 ppm <sup>d</sup>	60.33b (d)	SNCR	To be installed
CO	100 ppm <sup>e</sup>	60.34b (a) 60.33b	Good combustion practices	Existing
Fugitive Ash Emissions	No VE > 5 percent of observation period	60.55(b)	Quench/Enclosures	Existing

- <sup>a</sup> Numerical limits corrected to 7% O<sub>2</sub> dry conditions.
- <sup>b</sup> or 75% reduction whichever is less stringent.
- <sup>c</sup> or 95% reduction whichever is less stringent.
- <sup>d</sup> 24-hour block average.
- <sup>e</sup> 4-hour block average.

Table 4-2. Wheelabrator - North Broward Waste to Energy Facility Emission Limits - Current and pursuant to 40 CFR 60 Subpart Cb.

Pollutant	Current Limits	Units	Basis	Current limits In Subpart Cb units	Subpart Cb Limits
SO2	0.31	lb/MMbtu	(1)(a)(b)	129.8 ppm @ 7% O2	29 ppm @ 7% O2
SO2	0.14	lb/MMbtu	(2)(a)(b)	58.6 ppm @ 7% O2	or 75% removed
VOC	0.013	lb/MMbtu	(c)		None
PM	0.015	gr/dscf	(3)(a)(b)	34.9 mg/dscm @ 7% O2	27 mg/dscm @ 7% O2 (9)
PM	0.1	lb/MMbtu	(4)	111.3 mg/dscm @ 7% O2	---
PM	0.08	gr/dscf	(5)	186.0 mg/dscm @ 7% O2	---
NOx	0.56	lb/MMbtu	(6)(a)(b)	325.9 ppm @ 7% O2	205 ppm @ 7% O2 (9)
CO	0.09	lb/MMbtu	(7)(a)(b)	86.9 ppm @ 7% O2	100 ppm @ 7% O2 (10)
CO	400	ppm	(7)(a)(b)	406.4 ppm @ 12% CO2	
Total Flouride (F)	0.004	lb/MMbtu	(a)(b)		None
Sulfuric Acid Mist (SAM)	0.047	lb/MMbtu	(c)		None
HCL gas	None				29 ppm @ 7% O2 or 95% removed
Beryllium (H021)	9.30E-07	lb/MMbtu	(a)(c)		None
Lead (Pb)	0.0015	lb/MMbtu	(a)(b)	1.67 mg/dscm @ 7% O2	0.49 mg/dscm @ 7% O2 (9)
Mercury (H114)	7.50E-04	lb/MMbtu	(a)(c)	0.84 mg/dscm @ 7% O2	0.070 mg/dscm @ 7% O2 (9)
Dioxins/Furans	None				30 mg/dscm @ 7% O2 (9)
Cadmium	None				0.04 mg/dscm @ 7% O2 (9)
VE10	None				10% (11)
VE15	1.50E-01		(a)(b)		NA
VE20	2.00E-01		(8)		NA

Footnotes and Basis:

- (1) and 124 ppm at 12 % CO2 - dry not to exceed; 3-hour rolling average
- (2) and 60 ppm at 12 % CO2 -dry; or 65% removal; 3-hour rolling average
- (3) Corrected to 12% CO2 - dry (MCC)
- (4) 40 CFR 60.43 b(d)
- (5) @ 50 % air - 296.401(3)(a)
- (6) and 350 ppm at 12 % CO2 -dry; 3-hour rolling average
- (7) and 400 ppm at 12 % CO2 -dry; 1-hour rolling average  
88 ppm at 12 % CO2 -dry; 4-day rolling average
- (8) Rule 62-296.320(4)(b)(1)
- (9) Corrected to 7% O2 (dry); FDEP limit
- (10) Corrected to 7% O2 (dry); 4-hour block average
- (11) 6 min. block average
- (a) PSD-FL-105 Part I,1.a.
- (b) Final Order Modifying Conditions of Certification No PA 85-21; (4/17/91)
- (c) Original PA-85-21

Table 4-3. Summary of Recent Stack Test Results (3/98) as compared to Limits of 40 CFR 60 Subpart Cb  
North Broward Resource Recovery Facility

Parameter	Units	Emissions <sup>a</sup>			Cb Limits
		Unit 1	Unit 2	Unit 3	
Sulfur Dioxide	ppm @ 7% O <sub>2</sub>	3.54	7.74	3.73	29
Nitrogen Oxides	ppm @ 7% O <sub>2</sub>	272.39	220.01	239.80	205
Carbon Monoxid	ppm @ 7% O <sub>2</sub>	10.52	17.21	14.34	100
Particulate Matte	mg/dscm @ 7% O	3.67	7.90	1.00	27
Lead	mg/dscm @ 7% O	0.010	0.016	0.004	0.49
Mercury <sup>b</sup>	ug/dscm @ 7% O <sub>2</sub>	12.8	20.5	14.8	70
Dioxins/Furans <sup>c</sup>	ng/dscm @ 7% O <sub>2</sub>	0.68	NC	NC	30
Opacity	percent	0%	0%	0%	10%

<sup>a</sup> converted using EPA Method 19; See Attachment A

<sup>b</sup> 1997 stack tests

Table 4-4. Proposed Permit Limits for North Broward Resource Recovery Facility

Pollutant	Emission Standards	Test Method
PM <sup>(1)</sup> -Particulate Matter	27 mg/dscm (corrected to 7% O <sub>2</sub> )	EPA Method 5
VE-Visible Emissions	10% (6 min. block avg.)	EPA Method 9 and COM
Cd-Cadmium	0.040 mg/dscm (corrected to 7% O <sub>2</sub> )	EPA Method 29
Be-Beryllium	0.001 mg/dscm (corrected to 7% O <sub>2</sub> )	EPA Method 29
Pb-Lead	0.49 mg/dscm (corrected to 7% O <sub>2</sub> )	EPA Method 29
Hg-Mercury	70 µg/dscm or 85% reduction by weight (corrected to 7% O <sub>2</sub> , whichever is less stringent)	EPA Method 29
SO <sub>2</sub> -Sulfur Dioxide	29 ppm <sub>dv</sub> or 75 percent reduction by weight or volume corrected to 7% O <sub>2</sub> (whichever is less stringent)	CEMS 24-hour daily geometric mean
HCl-Hydrochloric Acid	29 ppm <sub>dv</sub> or 95% reduction corrected to 7% O <sub>2</sub> (whichever is less stringent)	EPA Method 26 or 26a
Dioxins/Furans	30 ng/dscm (corrected to 7% O <sub>2</sub> )	EPA Method 23
CO-Carbon Monoxide	100 ppm <sub>dv</sub> (corrected to 7% O <sub>2</sub> )	CEMS 4-hour block average
	87 ppm <sub>dv</sub> (corrected to 7% O <sub>2</sub> )	CEMS 4-day rolling average
NO <sub>x</sub> -Nitrogen Oxides	205 ppm <sub>dv</sub> (corrected to 7% O <sub>2</sub> )	CEMS 24-hour block average
Fabric Filter Inlet Temperature	17° C above maximum demonstrated PM control device inlet	CTMS 4-hour block average

These maximum allowable emission rates are applicable to each MWC combustor unit. [Rules 62-4.030, and 62-296.416, F.A.C., 40 CFR 60.33b and 40 CFR 60.34b]

**Notes:**

(1) This limit for PM is more restrictive than the emission limit for PM in 40 CFR 60.43b

Averaging Times

SO<sub>2</sub>-24-hour daily block geometric mean (midnight to midnight)

NO<sub>x</sub>-24-hour daily block arithmetic mean (midnight to midnight)

CO-4-hour block arithmetic mean beginning at midnight

Opacity-6 minutes block arithmetic mean

Abbreviations

µg/dscm-Micrograms per dry standard cubic meter

mg/dscm-Milligrams per dry standard cubic meter

ppm<sub>dv</sub>-Part per million dry volume

ng/dscm-Nanograms per dry standard cubic meter

Dioxins/furans-Total tetra through octa-chlorinated dibenzo-p dioxins and dibenzofurans

CEMS-Continuous Emission Monitoring System

COM-Continuous Opacity Monitors

CTMS-Continuous Temperature Monitoring System

EPA-U.S. Environmental Protection Agency

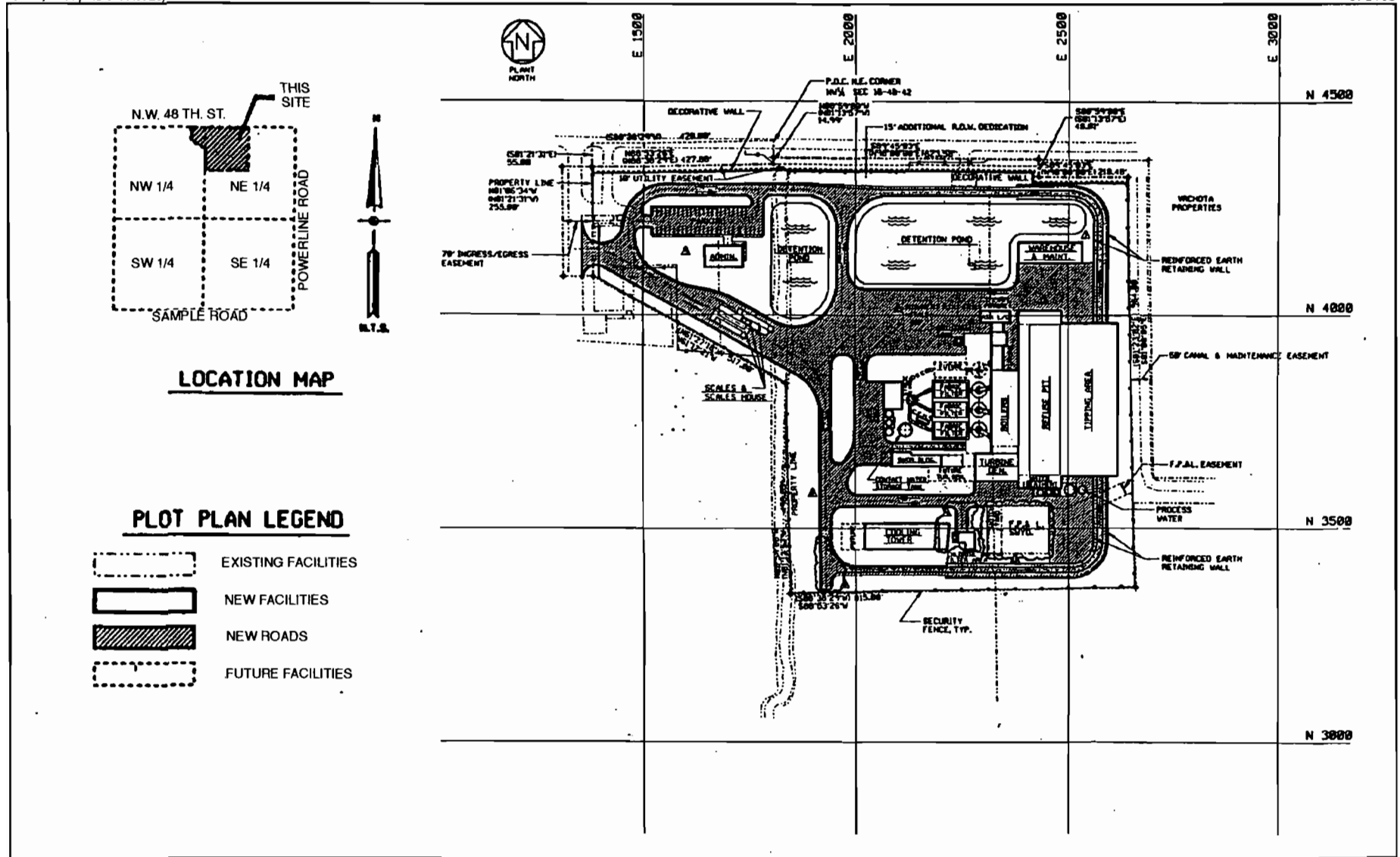


Figure 1-1  
 North Broward Resource Recovery Facility  
 Plot Plan

Source: Wheelabrator Environmental Systems, Inc., 1989; Golder & Associates, 1998.



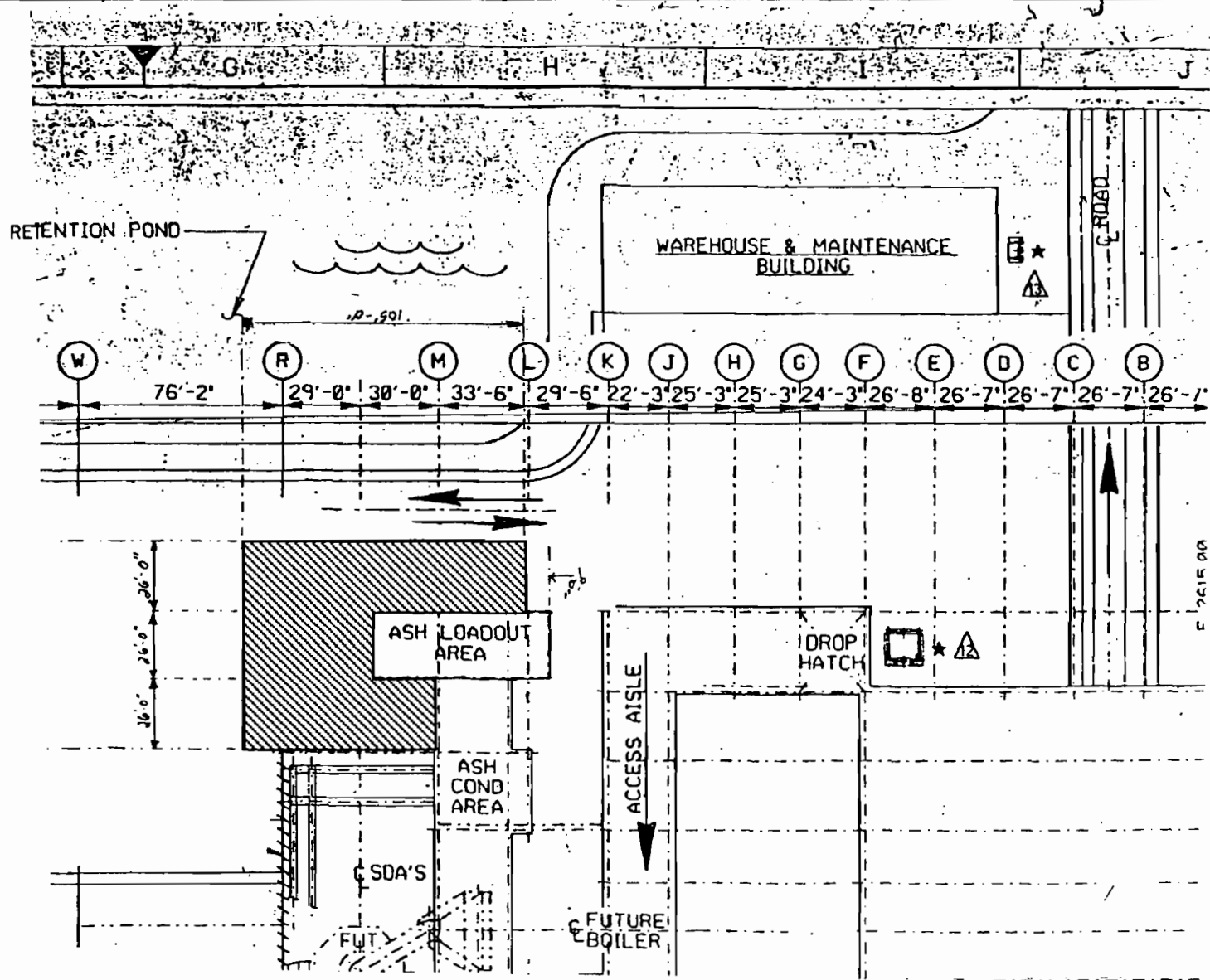


Figure 3-1  
North Broward Resource Recovery Facility  
Area of New Construction

Source: Wheelabrator Environmental Systems, Inc., 1989; Golder & Associates, Inc., 1998.



KEY

AREAS OF NEW CONSTRUCTION

(DRAWINGS ARE NOT TO SCALE)

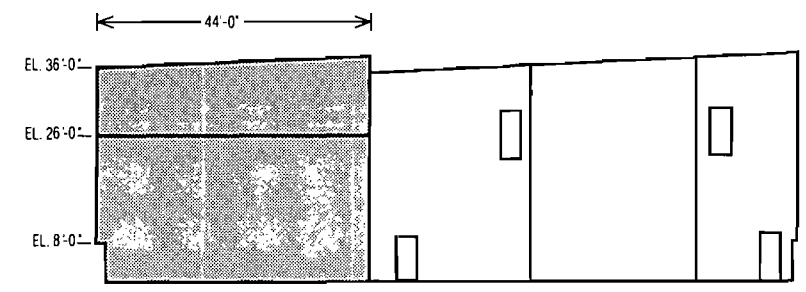
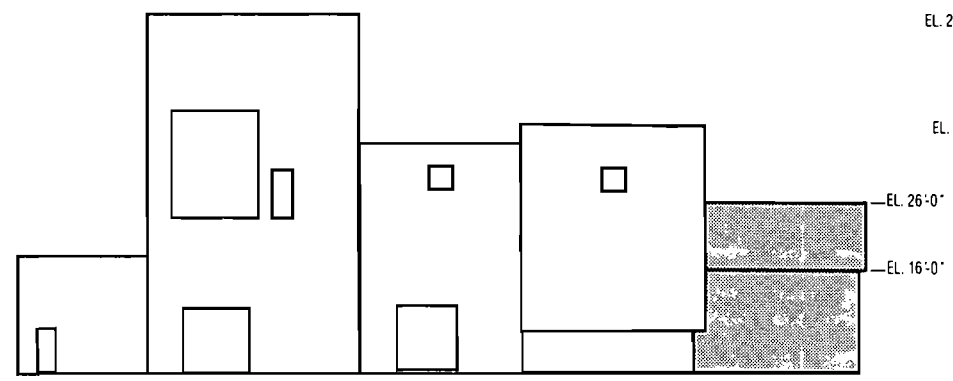
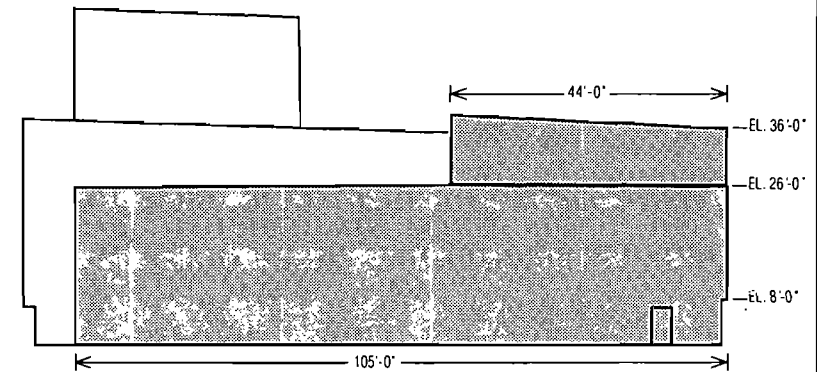
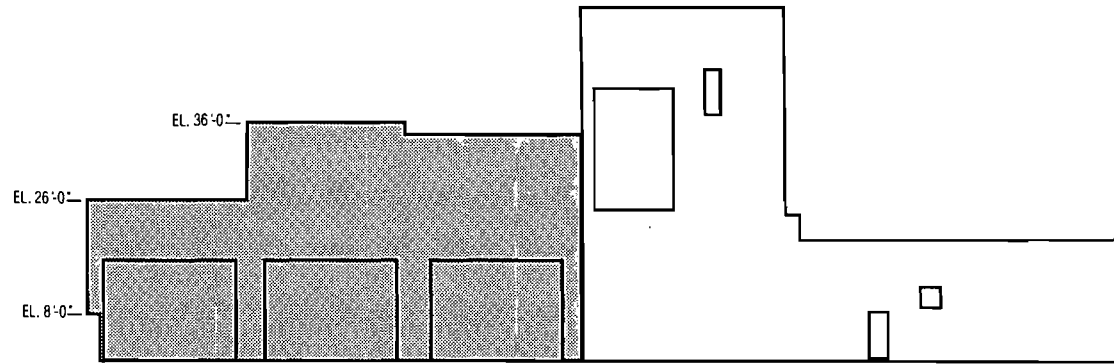


Figure 3-2  
North Broward Resource Recovery Facility  
Elevation Views of Areas of New Construction

Source: Wheelabrator Environmental Systems, Inc., 1989; Golder & Associates, 1998.



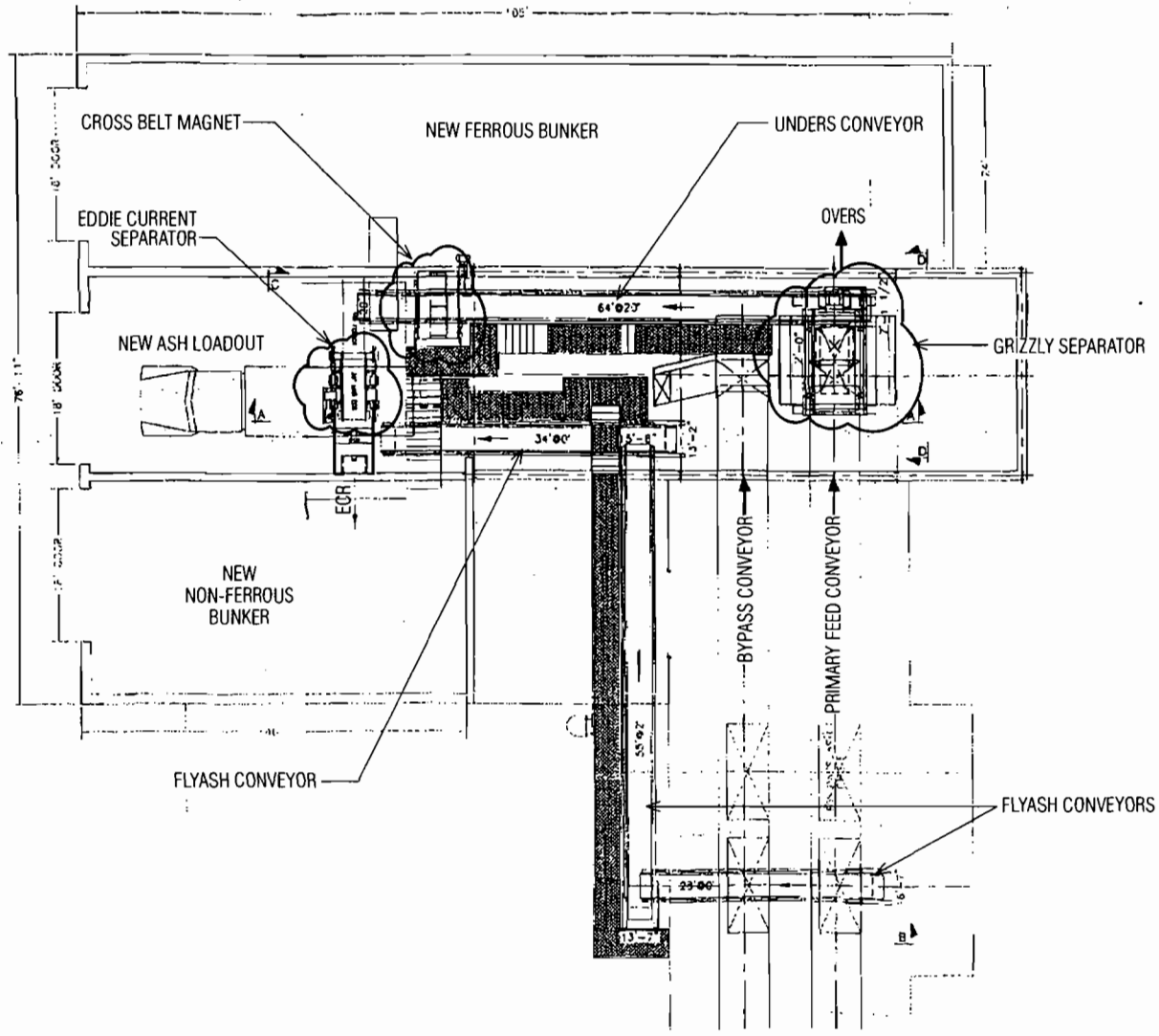


Figure 3-3  
North Broward Resource Recovery Facility  
Plan View and Flow of Metals Recovery

Source: Fritz Enterprises, 1998.





ATTACHMENT A  
CALCULATIONS AND CONVERSIONS

## Calculations Based on EPA Method 19

## Oxygen Based F-Factor

$$E = C_d F_d [20.9/(20.9 - \%O_{2d})] \quad \text{Equation 19-1}$$

where: E is emissions in lb/mmBtu

$C_d$  is actual concentration (dry) in lb/scf

F is F-Factor for MSW or 9,570 dscf/10<sup>6</sup> Btu

Conversions ppm to lb/scf:

Pollutant	Multiply by
SO <sub>2</sub>	1.66E-07
NO <sub>2</sub>	1.194E-07
CO	7.27E-08
HCL	8.88E-08

Correcting to 7% O<sub>2</sub> :

$$C_{7\%O_2} = C_d (20.9 - 7)/(20.9 - O_{2d})$$

$$C_{7\%O_2} = C_d 13.9/(20.9 - O_{2d})$$

$$C_d = C_{7\%O_2} (20.9 - O_{2d})/13.9$$

Substituting for  $C_d$  in Equation 19-1:

$$E = C_{7\%O_2} \times (20.9 - O_{2d})/13.9 \times F_d [20.9/(20.9 - \%O_{2d})]$$

cancelling out oxygen correction:

$$E = C_{7\%O_2}/13.9 \times F_d \times 20.9$$

Example: 29 ppm SO<sub>2</sub> corrected to 7% O<sub>2</sub>

$$E = 29 \times 1.660 \times 10^{-7} \times 9,570 \times 20.9/13.9 = \overset{1.50}{0.069} \text{ lb/MMbtu}$$

Converting lb/MMbtu to mg/dscm @ 7% O<sub>2</sub>

$$C_{7\%O_2} = E \times 13.9 / F_d / 20.9 \text{ (lb/scf)}$$

Converting to mg/scm multiply by

$$\text{lb/scf} \times 453.6 \text{ g/lb} \times 1,000 \text{ mg/g} \times 35.31 \text{ scf/scm}$$

Example: Lead is 0.0015 lb/MMbtu

$$C_{7\%O_2} \text{ (mg/dscm)} = 0.0015 \times 13.9 / 20.9 \times 1/9,570 \times 453.6 \times 1,000 \times 35.31$$

$$C_{7\%O_2} \text{ (mg/dscm)} = \begin{matrix} 1.67 \\ \text{or} \\ 1113.08 \text{ times lb/MMbtu} \end{matrix}$$

ATTACHMENT B  
SNCR DESCRIPTION

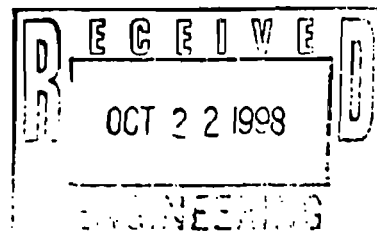


## Wheelabrator Air Pollution Control Inc.

A Waste Management Company  
441 Smithfield Street - 5th Floor  
Pittsburgh, PA 15222-2292

Phone 412.562.7300  
Fax 412.562.7077

October 20, 1998



Mr. Tom Kirk  
Wheelabrator South Broward, Inc.  
4400 South State Road 7  
Fort Lauderdale, FL 33314

Re: Budgetary Proposal for Broward Facilities  
Selective Non-Catalytic Reduction System for NO<sub>x</sub> Control  
WAPC Budgetary Proposal 96-6012-RPT, Rev. 1c

Dear Tom,

Enclosed is WAPC's revised proposal for the engineering, fabrication, delivery and installation of a Selective Non-Catalytic Reduction (SNCR) System for the Broward facilities. This revision is in response to our August 4, 1998 telephone conversation with T. Kirk and R. Mulhorn of Broward, T. Henderson of Broward County, and representatives from Malcolm Pirnie. During that conversation, WAPC was asked to provide some additional information with our proposal. This information includes identification of the Site License Fee, a P&ID of the proposed SNCR system, an adder to increase the capacity of the storage tank to 20,000 gallons from 15,000 gallons, a deduction to provide single pumps on each of the Metering Modules rather than redundant pumps, and performance guarantees and warranties. In addition, WAPC has included representative drawings of the injection lances, injection ports and injector locations from the Westchester retrofit to help provide some additional understanding of our offering.

WES/WAPC was also asked to provide information to allow Broward County to evaluate the cost effectiveness of the provision of sixteen (16) injectors. WES/WAPC performed an evaluation of an increased number of injectors at its Falls facility in early 1995. While the Falls facility was able to achieve its required NO<sub>x</sub> emission limit, it was believed a reduction in reagent usage would be beneficial to the facility's operating costs. A comparison between the original eight (8) injector supply and fourteen (14) injectors was performed. Fourteen (14) injectors was selected to take advantage of existing demonstration equipment.

The theory was to increase the cross sectional reagent coverage of the nozzles. Due to the 2½" diameter tubes on 3" centers, only an extremely small injector (7/16") can be utilized without bending the boiler tubes. These narrow injectors produced a narrow spray pattern. More injectors, therefore would provide more uniform coverage across the injection plane of the boiler. The results of this testing are presented below.

Condition	Unit 1 Chemical Flow Rate	Unit 2 Chemical Flow Rate	Difference gph
8 Injectors each unit	17.95	17.60	0.35
8 Injectors/Unit 1 14 Injectors/Unit 2	14.83	10.73	4.10
8 Injectors/Unit 1 14 Injectors/Unit 2	17.59	9.20	8.39
8 Injectors/Unit 1 14 Injectors/Unit 2	13.81	12.60	1.21
AVERAGE			
8 vs 8 injectors	17.95	17.60	0.35
8 vs 14 injectors	15.41	10.84	4.57
Savings/unit			4.22
Broward Annual Savings @ \$1/gallon	based on 8,000 hrs/yr/unit	\$4.22 x 3 x 8,000	\$101,280

The price reduction to provide eight (8) injectors rather than the proposed sixteen (16) injectors is \$178,350. Thus the additional cost to provide the additional injectors is paid back in reagent savings in less than 2 years. In addition to increased reagent utilization; a greater ability to effectively control NO<sub>x</sub> spikes, the ability to adjust to dramatic load changes without the physical movement of injectors and the probability of lower ammonia slip at any given condition is provided with the greater quantity of nozzles.

WAPC was also asked to provide an estimate of the annual operating costs for the SNCR system. The presented operating costs are based on the design conditions presented in Table 1 of the attached proposal and 8,000 hours per year operation. No additional full-time manpower is required for this system. Spare parts are completely dependent upon individual facility. This estimate is provided for the convenience of Broward County and is not to be construed as a contract guarantee or obligation. The annual operating costs are estimated to be

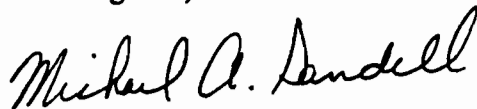
Reagent Usage	15-20 gal. x 3 units x 8,000 hrs	\$360,000-\$480,000
Power	40 kW @ \$0.02/kwhr x 8,000	\$6,400
Spare Parts	Estimate	\$10,000
	<b>TOTAL</b>	<b>\$376,400-\$496,000</b>

Stainless steel tubing is recommended for all chemical reagent lines. Stainless steel is the material of choice because the urea based reagent attacks and degrades carbon steel piping. The use of the flexible SS lines at the end of the injectors is a continuation of that philosophy. Rubber hydraulic hoses can be used but are not as rugged or as permanent as the flexible stainless steel hoses offered. The hydraulic hoses also give the appearance of a non-permanent installation where the stainless steel hoses should last as long as the plant.

It is not believed that heat tracing for the concentrated chemical lines will be required. Insulation is expected to be used on these lines. The combination of the tank heater, the heater on the skid and the mild climate, insulation alone will be sufficient to prevent crystallization of the concentrated reagent in the lines. The dilute chemical lines has a crystallization temperature very similar to water and therefore will follow the philosophy of water piping throughout the facility.

We hope that this letter and proposal satisfies your current needs. Please feel free to call me at (412) 562-7630, if you have any questions.

Best Regards,



Michael A. Sandell  
Manager, Product Applications

cc: A. J. DoVale, Jr.  
T. J. Porter - WES

## 1.0 INTRODUCTION

Wheelabrator Air Pollution Control (WAPC) is pleased to offer Wheelabrator Broward a preliminary proposal for the engineering, supply and installation of a Selective Non-Catalytic Reduction System (SNCR) for the control of NO<sub>x</sub> emissions. This system is to be installed on each of the three (3) 750 TPD units at either Broward Facility. The heating capacity of each boiler has been estimated at 325 MMBtu/hr for the purpose of this proposal. The pollution control system proposed will utilize urea based chemicals and is expected to achieve a controlled emission level of 205 ppm<sub>dv</sub> NO<sub>x</sub> corrected to 7% O<sub>2</sub>.

The design parameters used to develop this budget estimate were assumed by WAPC based on information used in the design of other Wheelabrator facilities. These major design parameters are presented in Table 1.

**TABLE 1**  
**Design Conditions per Combustion Unit**

Design Parameters	Typical
Combustor Heat Input (MMBtu/hr)	325
Oxygen Level (% v)	10.5
Carbon Dioxide (% v)	9.1
Carbon Monoxide (ppm actual)	< 100
Moisture (%)	16
Minimum Injection Temperature (°F)	1,650
Min. Time @ Inj. Temp. (sec)	0.7
Gas Volume (lb/hr)	540,000
Uncontrolled NO <sub>x</sub> (ppm <sub>dv</sub> @ 7% O <sub>2</sub> )	300
Controlled NO <sub>x</sub> (ppm <sub>dv</sub> @ 7% O <sub>2</sub> )	205
Ammonia Slip (ppm <sub>dv</sub> @ 7% O <sub>2</sub> )	20

WAPC will supply the materials, engineering, equipment, delivery and installation for the NO<sub>x</sub> control system. The bulk of the components will be sent to the job site as preassembled, prewired modules. Installation of these modules, as well as the supply and installation of the piping and wiring between the modules was viewed as WAPC's responsibility for the estimation of this preliminary proposal.

## **2.0 WHEELABRATOR AIR POLLUTION CONTROL SCOPE OF SUPPLY**

Wheelabrator Air Pollution Control will provide the following equipment and engineering services for each Broward facility. This equipment and services will include:

- a) One (1) 15,000 gallon FRP Storage Tank. The tank will be heated and insulated. Based on the information provided and several assumptions, this tank will provide a storage capacity for the facility of approximately ten (10) days. The approximate dimensions of the tank will be 12' diameter, 18' straight side and 20' overall height. The approximate weight of the empty tank will be 3,800 lbs.

It is anticipated that the tank will be located outdoors. The heating system will be designed to maintain 80 °F at the minimum ambient temperature. A specific gravity of 1.5 for the concentrated reagent will be used for the tank design. Premium Grade Vinylester Resin is used as an internal corrosion barrier.

The storage tank will be filled from heated, self-unloading tanker trucks. These trucks are capable of supplying the necessary pumping force to transfer the reagent to the storage tank. Approximately 4,000 - 6,000 gallons is delivered per truck load.

The storage tank will also be supplied with:

- Heating pads and insulation with thermostatic control.
  - Top bolted man way
  - Flange fittings made of FRP for inlet, outlet, fill and circulation line valves
  - Hold Down and Lifting Lugs
  - Vent, Siphon Drain, Internal Down Pipe, and External Fill Line
  - Painted Carbon Steel Ladder and Handrail
  - Outlet Isolation, Drain, and Return Control Valves
  - Level Transmitter
- b) One (1) self contained Circulation Module. This module will provide the necessary heating and agitation to ensure that crystallization or reagent inconsistencies are minimized. The Circulation Module will be mounted on a free standing stainless steel



base with integral spill protection. A self-contained, local stainless steel NEMA 4X electrical control panel will be provided. The module will be prewired and preassembled. It is anticipated that the Circulation Module will be located outdoors. The approximate dimensions of the Circulation Module will be 7' in length, 6' in height, and 4' deep. The approximate weight of the module is 1,500 lbs.

The module will be equipped with two (2) stainless steel, close coupled centrifugal pumps, one operating and one standby spare. All wetted materials will be constructed of 316 Stainless Steel (SS). The pumps will be equipped with viton mechanical seals. Pump suction is piped to a common inlet using pipe or tubing. A 316 SS ball valve shall be provided at each pump suction. Pump discharges are to be piped to a common outlet using the same materials of construction. A 316 SS ball valve is to be provided at each pump discharge. Motor size is anticipated to be in the 2 Hp range.

An in-line fluid heater shall be supplied. The heater is to be fabricated of 316 stainless steel with incoloy heating elements. The heater is expected to be 3 kW. A temperature switch will control the operation of the in-line electric heater. The heater circuit is interlocked to allow operation only if the Circulation Pump is running, a low flow condition is not detected and the reagent temperature falls below 80 °F. The heater works in conjunction with the heating pads and insulation supplied with the storage tank to minimize crystallization in the piping. A temperature indicator and transmitter will be located on the discharge of the electric heater.

A duplex strainer of 316 SS construction, capable of continuous filtering of the reagent shall be provided. The device shall be capable of being maintained while on line. Filtering elements shall be constructed of 20 mesh stainless steel screen.

All valving shall be of 316 SS construction. Connections shall be compression ended, where applicable. All valving shall be three piece ball valves. All gauges shall be of 316 stainless steel construction with root valve and diaphragm seals.

- c) Three (3) Metering Modules, one (1) for each unit will be supplied. These modules will regulate the flow of reagent and dilution water. The individual modules mix the reagent with dilution water and provide the necessary pumping force to transfer the solution to the atomizing injectors. The modules will be mounted on a free standing stainless steel base with integral spill protection. A self-contained, local stainless steel NEMA 4X electrical control panel will be provided on each module. The modules will be prewired and preassembled. It is anticipated that the Metering Modules will be located in a Purchaser supplied enclosure. The approximate dimensions of each Metering Module is 8.5' in length, 6' in height and 4' deep. The approximate weight

of is 2,000 lbs each.

Each module will be equipped with a two (2) dilution water pumps, one operating and one standby spare. The pumps shall be regenerative turbine type design for high pressure-low capacity applications, with bronze construction, non-vapor binding impellers, and mechanical seals. All pressure controls, valving and piping necessary to control the dilution water will be incorporated into the design of the Metering Module. A pressure indicator will be provided on the discharge line. The water inlet is anticipated to be constructed of schedule 40 pipe. Motor size is anticipated to be in the 2 Hp range. Materials of construction for the dilution water lines may be either bronze or carbon steel.

The concentrated reagent will be introduced to the system by using a controlled volume chemical metering pumps, equipped with manually or automatically adjusted speed control. Two (2) pumps are provided, one operating and one standby spare. Each pump will be equipped with a higher speed (greater than 60 strokes/minute) to smooth out discharge pressure fluctuations. Each pump will be equipped with an internal recirculation capability. The metering pumps will be sized for the predicted performance (NSR) of the system. The pumps will be driven by a variable speed DC motor, typically  $\frac{1}{2}$  or  $\frac{3}{4}$  Hp.

The chemical metering pumps shall be of stainless steel construction, with a hydraulically actuated Teflon diaphragm, duplex pump heads, common oil system, complete turn-down capability, externally adjustable built in relief valve and double ball check valves for both suction and discharge. A SS ball valve is required on the concentrated reagent inlet line. A motor operated valve is installed to allow for automatic flushing of the lines with dilution water. A magnetic flowmeter, with signal converter to electronically indicate the precise chemical flow, is provided in the discharge line. Calibration of the meter and reagent flow may be accomplished with the use of a PVC graduated column mounted in the common discharge line. Local, manual control of the pumps will be performed with a local PLC. Automatic control of the reagent flow will be based on the  $\text{NO}_x$  measurements provided by the Owner supplied CEM/DCS system.

The proper amount of reagent is blended with the dilution water by feeding the reagent into the dilution water boost pump discharge line and through a SS in-line static mixer to produce a uniform product. Materials of construction for the concentrated reagent and diluted reagent lines shall be 316 SS tubing. 316 SS tubing with compression fittings will be used between the various equipment components for all lines which carry the concentrated or diluted reagent. All valving in these lines shall be three piece

ball valves of 316 SS construction. All gauges shall be of 316 SS construction with root valve and diaphragm.

- d) **Forty-Eight (48) Distribution Panels.** Sixteen (16) panels will be employed on each boiler unit. These panels regulate the supplies of dilute reagent and atomizing air. One panel per atomizing injector is needed.

Four (4) panels will be assembled on a single skid, called a Distribution Module. A total of twelve (12) Distribution Modules will be provided. Four (4) modules will be used for each boiler. The approximate dimensions of the four (4) panel Distribution Module are 4.5' in length, 6' in height and 2' deep. The approximate weight of an individual module is 400 lbs.

Diluted reagent is fed to Distribution Module manifold which is constructed of 316 SS tubing. A separate Distribution Panel is provided for each injector. These Distribution Panels contain flow meters, balancing valves and regulators which accurately control the chemical and atomizing air to each injector.

- e) **Forty-eight (48) Two Fluid Nozzle Atomizing Injectors.** Sixteen (16) injectors will be used by each boiler unit. These injectors will be selected to provide the greatest amount of cross-sectional coverage, while maintaining proper droplet sizing. Each injector is designed for high temperature spray injection of the reagent. The location of these ports will be determined during the contract phase of the project.

The injectors are fabricated of 316 SS. Plant air is fed to the cooling shield at all times the injector is present in the flue gas stream. The air acts as a coolant for the nozzle and the jacket minimizes the amount of direct contact between the flue gas and the nozzle. It is anticipated that the cooling shield will be 7/16" tubing. The length of an individual injector is expected to be 38 inches. Steel braided flexible hoses, 12' in length, attached to the injectors with quick connects will also be supplied. The flexible hoses allow for easy removal from the injection port for inspection and maintenance.

- f) **One (1) air cooled, oil free, rotary compressor** capable of supplying 750 CFM of compressed air at 100 psig will be provided. Compressor package will include motor, starter and inlet filter.
- g) **Engineering and Start-up Services.** These services will include:
- 1) **Establishment of the maximum flow rates for reagent, dilution water, and compressed air.**

- 2) Development of temperature profiles in one (1) of the boiler units to assist in identifying the location of the proper temperature window for reagent injection. Temperature profiling is intended to include three (3) days of testing. One day at full, maximum load; one day at low, minimum load; and one day simulating wet trash to evaluate changing temperature under a worst case scenario.
- 3) Performance of the engineering required to specify, select, purchase and deliver the necessary equipment.
- 4) Determination of the utility hook-up requirements.
- 5) Providing the Material Safety Data Sheets for the reagent.
- 6) An Erection Consultant (Construction Manager) for the installation of the SNCR equipment at the job site. The purpose of this individual will be to oversee the installation of the equipment on a day-to-day basis. The Erection Consultant will be on site through out the installation period.
- 7) Providing the mechanical checkout and start-up of the installed system.
- 8) Establishment and performance of a detailed parameter test matrix to optimize operation once the equipment is installed. Optimization will be performed on one (1) of the three (3) boiler units at each site.
- 9) Providing ten (10) Maintenance and Operation Manuals.
- 10) P&ID's, logic and interlock drawings will be provided.
- 11) Programming of the existing DCS to incorporate the SNCR signals and logic. It is assumed that sufficient DCS memory and hardware exists for the additional programming and I/O's required for the SNCR system at each facility. Preliminary estimates are that 30 DI's, 20 DO's, 15 AI's and 6 AO's will be required for each facility. Refer to Attachment 1.
- 12) Performance testing of each unit to demonstrate compliance with the Performance Guarantee. Testing will be performed using the plant CEM's for the NO<sub>x</sub> readings and manual sampling using EPA Method 26 for ammonia slip testing. Three (3) one hour test runs per unit will be performed. Testing will be performed at the outlet test platform for each boiler train.

h) Installation of WAPC supplied equipment. This installation will include:

- 1) Receipt, unloading and placement of the individual components.
- 2) Permanent piping or tubing between the various WAPC equipment components. All concentrated reagent piping and components shall be 316 stainless steel tubing with compression fittings or 304 stainless steel Sch. 40 piping, socket welded as per ANSI/ASME B31.1 Threaded fittings are not acceptable. Piping will not exceed 2" in diameter. All concentrated reagent lines shall be heat traced and insulated.

All interconnecting water, dilute reagent and air lines shall follow the typical construction requirements of the facility. Proper insulation, drains, vents, and supports for this piping shall be provided. It has been assumed that existing structural members within the boiler building will be within three (3) feet of the interconnecting water, dilute reagent and air lines and will be utilized for the piping supports for this system.

"Not to exceed" piping quantities included in the estimate are given below and will be field run.

Description	No. Lines	Material	Size	Total Length	Connection Method
Storage Tank to Circulation Module	1	316L	2"	25'	Socket Welded
Circulation Module to Metering Modules to Storage Tank	1	316L	1"	500'	Socket Welded
Metering Modules to Distribution Modules	3	316L	1"	200'	Welded or Comp. Fittings
Distribution Modules to Injectors (16 inj x 3 boilers x 2 lines/inj)	96	316L	½"	1,920'	Welded or Comp. Fittings

- 3) Power and electrical connections to each process skid. The Circulation and Metering Control Module will each require 480V/3 phase/60 Hz service. The storage tank heating pads will require 110 VAC, single phase 60 Hz service. Power requirements are estimated to be approximately 40-50 kW.

Electrical connections and wiring to/from the DCS will also be needed.

Preliminary estimates are that 30 DI's, 20 DO's, 15 AI's and 6 AO's will be required for each facility. Refer to Attachment 1. WAPC's estimate of the "not to exceed" electrical wiring requirements for the project are

DESCRIPTION	NUMBER	LENGTH	TOTAL LENGTH
Power Lines (480V, 3 phase, 60 hz)	4	30' ea	120'
Circ Mod to/from DCS (#16 shielded pair)	6 pair	360'	2160'
MM#1 to/from DCS (#16 shielded pair)	13 pair	280'	3640'
MM#2 to/from DCS (#16 shielded pair)	13 pair	210'	2730'
MM#3 to/from DCS (#16 shielded pair)	13 pair	120'	1560'
MM#1 to Circ Mod (2 connection #14)		140'	140'
MM#2 to Circ Mod (2 connection #14)		200'	200'
MM#3 to Circ Mod (2 connection #14)		290'	290'
Tank to Circ Mod (#16 shielded pair)	2 pair	30'	60'

- 4) Foundations for the SNCR storage tank is based on a 16' diameter octagon 3' thick slab. Pilings or caissons are not included in the pricing at this time. A concrete containment wall sized at 110% capacity of the storage tank and sump with manually controlled pump will be installed. It is expected that the Circulation Module will be placed outside the containment wall.

The Circulation and Metering Modules will be placed on 4" slabs. The Distribution Modules will be attached to grating with 'J' hooks. It is assumed that the air compressor will be located near the existing air compressors and that a pad is already present.

- 5) Pricing is based on installing the SNCR System for the three (3) units at one (1) facility over a period of eight (8) weeks. Only one mobilization has been included for each facility.
- 6) Pricing does not include testing or removal of asbestos or other hazardous materials.

- 7) A estimated minimum of sixteen (16) injection ports on each boiler unit. The vicinity around the ports must be clear and available for installation of the injectors. These ports should be located to provide maximum residence time in the temperature range of 1600-1800 °F and have sufficient access for operation and maintenance.
- 8) The air compressor at each facility will be tied into the existing compressed air system of the plant.

### 3.0 SUPPLY BY OTHERS

Items to be supplied by Wheelabrator Broward at each facility shall include:

- a) Approximately 16 gpm of dilution water @ 25-30 psig, is expected to be needed by each boiler. Dilution water will be connected to each Metering Module. The total quantity of dilution water anticipated to be used for the entire facility is 48 gpm. The quality of the dilution water should approach the following specifications:

	Temperature	50 °F (min)
pH		6-8
Total dissolved solids		500 ppm (max)
Calcium as Ca		80 ppm (max)
Total Hardness as CaCO <sub>3</sub>		200 ppm (max)
Total suspended solids		10 ppm (max)
Chlorides		50 ppm (max)
Heavy metals		1 ppm (max)

Water of lesser quality may be used in this process. However, supplemental stabilizers/inhibitors may be necessary to prevent fouling of the injectors.

- b) Approximately 15-20 gallons per hour of concentrated urea based reagent is expected to be required by each individual boiler unit during normal boiler operation using the assumptions presented in Table 1. The current cost of NOxOUT<sup>®</sup> A reagent is approximately \$1.00 per gallon delivered. The lower priced reagent, NOxOUT<sup>®</sup> HP may be used if the dilution water quality is sufficient. The cost of NOxOUT<sup>®</sup> HP is approximately \$0.85 per gallon delivered. A total of approximately 45-60 gallons per hour is expected to be used by the entire facility.
- c) Power to each process skid. The Circulation and Metering Control Module will each require 480V/3 phase/60 Hz service. The storage tank heating pads will require 110 VAC, single phase 60 Hz service. Anticipated power requirements are approximately

40-50 kW. A more exact requirement will be determined during the contract phase.

- d) Any additional Distributive Control System (DCS) hardware needed.
- e) All permits and/or licenses.
- f) Access to an area near the storage tank to allow the reagent delivery truck to deliver the reagent to the storage tank.
- g) Adequate trenches, sumps, and drains.
- h) Adequate space with sufficient ventilation for all equipment components.
- i) Continuous Emission Monitoring System (CEMS) capable of measuring NO<sub>x</sub> at the stack exit.

#### 4.0 SCHEDULE

WAPC estimates the schedule for the design engineering, equipment procurement and fabrication, delivery and installation for the NO<sub>x</sub> control system at each of the Broward facilities to be:

TASK	WEEKS FROM AWARD
Begin Equipment Design	0
Boiler Temperature Profile	8
Complete Equipment Design	12
Begin Equipment Procurement	6
Begin Equipment Fabrication	12
Complete Equipment Fabrication	24
Complete Delivery to Jobsite	28
Begin Installation	30
Complete Installation	36
Begin Equipment Optimization	37
End Equipment Optimization	40



## **5.0 PRICING**

WAPC offers the engineering, equipment and installation as described above for the Wheelabrator Broward facilities described above for the firm price of:

Equipment for One (1) Facility

Equipment for Two (2) Facilities

Installation Price for One (1) Facility

License Fee for One (1) Facility  
(Included with above pricing)

Additional Cost/facility to increase tank size  
to 20,000 gallons

Additional Cost/facility for 15,000 gallon  
storage tank containment wall

Additional Cost/facility for 20,000 gallon  
storage tank containment wall

Additional Cost/facility for Performance  
Testing

Deduction/facility to eliminate redundant  
pumps on Metering Modules

The above price is based on third quarter, 1998 dollars. Freight charges and licensing fees have been included. Freight will be F.O.B. Jobsite. The above pricing is a formal proposal on the part of WAPC and is valid for sixty (60) days from the date of this proposal. The above price is based on Terms and Conditions attached.

Terms of Payment to be negotiated at a later date.

## **6.0 PERFORMANCE GUARANTEE**

### **6.1 GUARANTEES**

When operating within the design criteria set forth in Table I, WAPC guarantees that the outlet NO<sub>x</sub> emissions for each unit will not exceed 205 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> and ammonia slip will

not exceed 20 ppm as measured at the stack. This guarantee will be demonstrated in a Performance Test to be scheduled within 90 days after the equipment is ready for initial operation and testing as determined by WAPC. The duration of the Performance Guarantees set forth above shall be for 12 months after successful completion of the Performance Test; 15 months after start up of the equipment; 18 months after substantial completion of erection; or 21 months after substantial completion of delivery, whichever comes first. If such field performance test is not completed within the previously specified 90 day period, through no fault of the Seller, and Purchaser has received from Seller written notice thereof, the Equipment shall conclusively be deemed to meet the stated Performance Guarantee(s).

In the event that the operating conditions vary from the Design Conditions given in Table I, the guarantees set forth herein affected by such changed conditions shall be subject to modification and, if the parties mutually agree in writing, the guarantees herein may be appropriately revised.

## 6.2 PERFORMANCE TEST

### a) Nitrogen Oxides

The maximum outlet emission level of 205 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> will be demonstrated by manual sampling. Measurements to determine compliance with this guarantee shall be made using the plant's CEM's. Three (3) seventy-two (72) minute test runs shall be conducted. The operation of the unit to be tested will be held constant for at least two (2) hours prior to the Performance Test and be at or near the design conditions given in Table 1.

### b) Ammonia Slip

The maximum outlet emission level of 20 ppm as measured at the stack will be demonstrated by manual sampling. A total of three (3) ammonia slip tests shall be conducted with a sampling duration of at least seventy-two (72) minutes. The tests shall be conducted at the fabric filter outlet. Concentration of ammonia will be determined using EPA Method 26.

### c) Steady State Conditions

All testing shall be conducted only at steady state conditions. The boiler and equipment must be at steady state a minimum of two hours prior to testing. Steady state is defined as conditions where flue gas flow rates and temperatures from the boiler do not vary more than +/- 12½% and are within design conditions as identified

in Table I.

### **6.3 GUARANTEE PROVISIONS**

The guarantee(s) set forth herein (is) are subject to the following provisions:

- a) The Equipment supplied and installed by Seller shall be operated and maintained according to Seller's guidelines, good engineering and operating principles and Seller's Operating and Maintenance Manual.
- b) All replacement parts shall be of Seller's manufacture, or as approved by Seller.
- c) Seller reserves the right to inspect the Equipment to determine that the operation has been in accordance with Seller's Maintenance and Operation Manual. If required by Seller, the Purchaser will restore the Equipment to good operating conditions before any Performance Tests are conducted.
- d) Seller will have access to any test records at all times and will have the cooperation of the Purchaser in conducting any preliminary tests that the Seller may deem necessary.
- e) As soon as possible after installation, the Seller shall be permitted to conduct preparational tests at his option and make adjustments, as is necessary, to assure that the Performance Guarantee can be fulfilled.
- f) In the event that the operating conditions vary from the design conditions set forth in Table I, the guarantee(s) set forth herein affected by such changed conditions shall be null and void, or if the parties mutually agree, in writing, the guarantee herein may be appropriately modified.

### **6.4 REMEDY**

If prior to the expiration of the Guarantee Period set forth herein, WAPC receives written notice from the Purchaser that the Equipment fails to meet the above Performance Guarantee (as determined by the results of the Performance Testing provisions stated herein), WAPC agrees to provide all necessary materials in accordance with the F.O.B. terms of the contract for modifications or corrections to the Equipment in order to meet the Performance Guarantee. Such

modifications or corrections shall be performed at a time mutually agreeable to Purchaser and WAPC. Within thirty (30) days after completion of any necessary modifications or corrections as determined by WAPC and made pursuant to this section, the applicable Performance Guarantee Test will be conducted to determine if the affected Performance Guarantee has been attained.

**ANY OTHER PROVISIONS OF THE CONTRACT TO THE CONTRARY NOTWITHSTANDING, THIS PERFORMANCE GUARANTEE IS IN LIEU OF ANY OTHER PERFORMANCE GUARANTEES OR WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WHETHER ARISING BY LAW, CUSTOM, OR CONDUCT, AND THE RIGHTS AND REMEDIES PROVIDED HEREIN ARE EXCLUSIVE AND IN LIEU OF ANY OTHER RIGHTS OR REMEDIES.**

Any liability of Seller under the Performance Guarantee set forth herein is conditioned upon the Equipment being handled, erected, operated and maintained in accordance with the written instructions provided or approved in writing by Seller. The Performance Guarantee does not cover and Seller makes no Guarantee which extends to damage to the Equipment due to deterioration or wear occasioned by chemicals, abnormal chemicals, abrasion, corrosion or erosion; Purchaser's misapplications; abuse; improper erection, operation or maintenance; conditions of temperature or dirt; operation of the Equipment above rated capacities or in an otherwise improper manner. The liability of Seller arising out of the supply of the Equipment whether founded in warranty, contract, negligence, operation of law, or otherwise, shall not in any case exceed the costs of correcting defects in the Equipment and upon the expiration of the Guarantee Period set forth herein, all liability of Seller shall terminate. Seller's sole responsibility and Purchaser's exclusive remedy shall be limited to such modification or correction as above provided.

**THE EXCLUSIVE REMEDIES set forth above shall not be deemed to have failed of their essential purpose so long as Seller is willing to repair, replace, modify or correct in the manner and within the limits prescribed herein.**

If, for any reason, any or all of the exclusive remedies provided in this Agreement are deemed by a court of law to have failed of their essential purpose or otherwise by unavailing as limits on the Owner's remedies for breach of any of the Guarantees contained in this agreement, then it is the intent of the parties that the Limitation On Liability which limits liability and prohibits consequential damages, nevertheless shall be accorded independent effect and would remain in full force as reflecting the allocation of risk intended by the parties.

**TERMS AND CONDITIONS OF EQUIPMENT AND ERECTION SALES**

**1. ACCEPTANCE**

These Terms and Conditions of Sales form part of each Proposal submitted by Wheelabrator Air Pollution Control (WAPC) for the sale of Equipment described herein (Equipment) and Erection Services to Buyer. ANY CONTRACT MADE BY AND BETWEEN THE PARTIES IS EXPRESSLY CONDITIONED ON BUYER'S ASSENT TO THESE TERMS AND CONDITIONS AND TO WAPC'S REVIEW AND APPROVAL OF BUYER'S CREDIT. Unless otherwise stated herein, Buyer has thirty (30) days from the date of the Proposal to notify WAPC in writing of Buyer's offer to enter into a contract on the basis of this Proposal. Upon notification by WAPC from its office in Pittsburgh, Pennsylvania that it has accepted such offer by Buyer, this Proposal shall become a contract between Buyer and WAPC.

**2. WARRANTY**

WAPC warrants for a period equal to the lesser of (i) twelve (12) months after completion of the Work or (ii) eighteen (18) months after delivery of the Equipment (the "Warranty Period") that the Equipment and Work described herein will be free from defects in material and workmanship, will be of the kind and quality herein designated or described, and will conform to the specifications herein set forth. If within the Warranty Period, WAPC receives written notice promptly after the discovery of any nonconformance to the above warranties, WAPC shall correct each such defect, at its option, either by repairing or replacing any defective part(s). The liability of WAPC to Buyer arising out of the foregoing, whether under warranty, tort, contract, negligence, strict liability or otherwise, shall not in any case exceed the cost of correcting defects in the Equipment or Work and upon the expiration of said warranty, all such liability shall terminate. Except as otherwise expressly set forth herein, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Liability of WAPC under this warranty is conditioned upon the Equipment being handled, operated, and maintained in accordance with the written instructions provided or approved in writing by WAPC. The warranties specified above do not cover and WAPC makes no warranties which extend to damage due to deterioration or wear or failure occasioned by chemicals, abrasion, corrosion or erosion; Buyer's misapplication; abnormal conditions of temperature or dirt; or operation of the Equipment other than as instructed in writing. WAPC's sole responsibility, and Buyer's exclusive remedy hereunder, shall be limited to such repair or replacement as above provided.

**3. TAXES**

In addition to the price specified herein, Buyer shall pay any tax imposed by any governmental body on the sale, delivery, use or other handling of Equipment sold hereunder, the performance of the Work, or in connection with this Proposal or any transactions contemplated hereby.

**4. FORCE MAJEURE**

WAPC shall not be responsible for losses or damages to Buyer (or any third person) occasioned by delays in the performance or the nonperformance of any of WAPC's obligations or by loss of or damage to any of the Equipment specified in the Proposal when caused directly or indirectly by acts of God, acts of government or military authority, casualty, riot, acts of Buyer, strikes or other labor difficulties, shortages of labor, supplies, and transportation facilities or any other cause beyond WAPC's control. The schedule shall be adjusted in accordance with the impact of any such delay or postponement and the price shall

be equitably adjusted to include all additional costs, including overheads, plus a reasonable profit thereon.

**5. CANCELLATION**

Buyer may cancel any contract resulting from this Proposal only upon written notice to WAPC and only upon such terms as will indemnify and reimburse WAPC for all loss or damage resulting therefrom, including, without limitation, WAPC's direct costs incurred, overhead, reasonable contract profits, costs, and expenses to which WAPC has become committed for fulfillment of the contract prior to cancellation, plus reasonable settlement expenses.

**6. LAWS AND REGULATIONS**

WAPC does not assume responsibility for compliance with federal, state, and local laws and regulations unless expressly set forth in WAPC's Proposal. All laws and regulations expressly referenced herein shall refer only to those editions or versions thereof in effect on the date of this Proposal. In the event of revisions or changes thereto subsequent to the date of this Proposal, WAPC assumes no responsibility or liability for compliance therewith. If Buyer desires a modification to the Equipment as a result of a revision or change in such laws or regulations, such modification shall be treated as a Change Order.

**7. CHANGE ORDERS**

The Buyer may make minor changes within the general scope of Work, to the plans or equipment specifications included in this Proposal by giving WAPC written notification thereof in a Change Order. WAPC shall submit to the Buyer in writing the changes required to the contract price and to the fabrication and erection schedule and other obligations resulting from such Change Order. WAPC shall have no obligation to proceed with such Change Order until WAPC and Buyer agree in writing to such changes in the contract provisions.

**8. LIMITATION ON LIABILITY**

Whether attributable to contract, tort, warranty, negligence, strict liability or otherwise, WAPC's responsibility for any claims, damages, losses or liabilities arising out of or related to its performance of this Proposal or the Equipment covered hereunder, including but not limited to any correction of Equipment defects under the Warranty or any applicable performance guarantees, shall not exceed the purchase price. IN NO EVENT SHALL WAPC BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OF ANY CHARACTER, INCLUDING BUT NOT LIMITED TO, LOSS OF USE OF PRODUCTIVE FACILITIES OR EQUIPMENT, LOST PROFITS, GOVERNMENTAL FINES OR PENALTIES, PROPERTY DAMAGES, PERSONAL INJURIES OR LOST PRODUCTION, WHETHER SUFFERED BY BUYER OR ANY THIRD PARTY, IRRESPECTIVE OF WHETHER CLAIMS OR ACTIONS FOR SUCH DAMAGES ARE BASED UPON CONTRACT, TORT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE.

**9. PATENTS**

WAPC assumes the expenses involved in the defense of suits brought in the U.S., (plus damages, profits and costs awarded against Buyer in such a suit,) on the charge that Equipment delivered hereunder and manufactured by WAPC and used in the manner for which it was sold constitutes in and of itself an infringement of a U.S. patent, in an amount not to exceed in the aggregate purchase price of the items or parts thereof found to directly infringe any such patent. If, as a result of any such suit, the use of the Equipment is enjoined, WAPC shall either procure for Buyer the right to use the Equipment or modify it so that it no longer infringes or replace it with non-infringing Equipment. WAPC's patent obligation is conditional upon Buyer notifying WAPC promptly in writing when such suit is brought or threatened and giving WAPC full authority, information and assistance for the defense of the suit and such

patent obligation does not apply to any item, or part thereof, manufactured to Buyer's specifications, or to any product manufactured by use of WAPC Equipment and, as to such item or product, WAPC assumes no liability for patent infringement. Except as herein expressly set forth, WAPC does not assume any other obligation or liability in connection with patent infringement suits brought against Buyer or the user of the Equipment which may be delivered hereunder.

#### 10. PROPRIETARY MATERIAL

All drawings, patterns, specifications and information included in this Proposal, and all information otherwise supplied by WAPC relating to the design, erection, operation, and maintenance of the Equipment is the proprietary and/or confidential material or information of WAPC. Buyer shall not disclose such material or information to others or allow others to use such material or information except as required for Buyer to obtain service for the Equipment.

#### 11. LICENSES AND PERMITS

WAPC shall obtain required contractors' licenses. All other licenses and/or permits shall be supplied by Buyer.

#### 12. INSURANCE

WAPC shall maintain the following insurance coverage during the erection schedule:

Workmen's Compensation as required by statute; and Employer's Liability with a limit of liability of \$100,000.

Comprehensive General Liability including Completed Operations with the following limits:

Bodily Injury	\$1,000,000 Each Occurrence
	\$1,000,000 Aggregate
Property Damage	\$1,000,000 Each Occurrence
	\$1,000,000 Aggregate

Automobile Liability on all owned, leased and hired automobiles with the following limits:

Bodily Injury	\$ 500,000 Each Person
	\$1,000,000 Each Occurrence
Property Damage	\$ 500,000 Each Occurrence

"All Risk" Builder's Risk Insurance on the entire Work including all equipment, material and supplies. This insurance shall include the interest of WAPC, the Buyer and all Subcontractors. WAPC's responsibility under this insurance shall cease and such coverage shall be cancelled upon WAPC's decision, in its sole discretion, that the Work is complete for the purpose of Builder's Risk Insurance Coverage. A Certificate of Insurance shall be furnished at the start of work.

#### 13. WAIVER OF SUBROGATION

WAPC and Buyer shall waive their rights and their respective insurance carriers subrogation rights against each other with respect to property damage. In the event that the Buyer is not the Owner of the facilities where the Equipment is being erected, the Buyer agrees to include a provision in its contract with the Owner of such facilities requiring the Owner to supply WAPC with a written waiver of its rights of recovery and its insurance carrier's right of subrogation against WAPC as specified in this Article.

#### 14. ASSIGNMENT/SUBCONTRACT

WAPC may assign/subcontract all or any portion of the contract included in its Proposal.

#### 15. ERECTION LABOR

All erection labor included in this Proposal is based on the labor working the first shift of the established working day, Monday through Friday (excluding holidays), and upon paying the local prevailing rates for the labor which is to be used for the erection of the proposed equipment.

#### 16. INTERPRETATION AND ENFORCEMENT

Any contract resulting from this Proposal, shall be construed according to the laws of the Commonwealth of Pennsylvania without giving effect to the conflict of law provisions thereof and suit may be instituted for the enforcement thereof in any state or federal court situate in Pennsylvania.

#### 17. BUYER'S SERVICES

ATTACHMENT C  
AIR PERMIT APPLICATION FORM

# Department of Environmental Protection

## DIVISION OF AIR RESOURCES MANAGEMENT

### APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

#### Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.


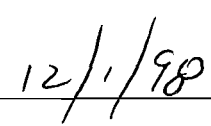
1. Facility Owner/Company Name: <b>Wheelabrator North Broward, Inc.</b>	
2. Site Name: <b>Wheelabrator North Broward, Inc.</b>	
3. Facility Identification Number: <b>0112120</b> [ ] Unknown	
4. Facility Location Information: Street Address or Other Locator: <b>2600 N.W. 48th St.</b> City: <b>Pompano Beach</b> County: <b>Broward</b> Zip Code: <b>33073</b>	
5. Relocatable Facility? [ ] Yes [x] No	6. Existing Permitted Facility? [x] Yes [ ] No

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	



**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Thomas D. Kirk, Plant Manager</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: <b>Wheelabrator North Broward, Inc.</b> Street Address: <b>2600 N.W. 48th St.</b> City: <b>Pompano Beach</b> State: <b>FL</b> Zip Code: <b>33073</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:  Telephone: <b>(954) 971-8701</b> Fax: <b>(954) 971-8703</b>
4. Owner/Authorized Representative or Responsible Official Statement:  <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>   _____ Signature   _____ Date

\* Attach letter of authorization if not currently on file.

**Scope of Application**

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

**Emissions Unit ID**                      **Description of Emissions Unit**                      **Permit Type**

Unit #	Unit ID		
1R	001	MSW - fired Boiler No. 1	ACM1
2R	002	MSW - fired Boiler No. 2	ACM1
3R	003	MSW - fired Boiler No. 3	ACM1

**See individual Emissions Unit (EU) sections for more detailed descriptions.  
Multiple EU IDs indicated with an asterisk (\*). Regulated EU indicated with an "R".**

**Purpose of Application and Category**

Check one (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.**

This Application for Air Permit is submitted to obtain:

Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: \_\_\_\_\_

Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit to be renewed: \_\_\_\_\_

Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: \_\_\_\_\_

\_\_\_\_\_

Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

\_\_\_\_\_

**Category II: All Air Construction Permit Applications Subject to Processing Under Rule 62-210.300(2)(b),F.A.C.**

This Application for Air Permit is submitted to obtain:

- ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): \_\_\_\_\_  
\_\_\_\_\_

- ] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: \_\_\_\_\_

- ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g.; to address one or more newly constructed or modified emissions units.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_  
\_\_\_\_\_

**Category III: All Air Construction Permit Applications for All Facilities and Emissions Units.**

This Application for Air Permit is submitted to obtain:

- ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: \_\_\_\_\_  
\_\_\_\_\_

- ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): \_\_\_\_\_  
PSD-FL-122,PPSA

- ] Air construction permit for one or more existing, but unpermitted, emissions units.

**Application Processing Fee**

Check one:

Attached - Amount: \_\_\_\_\_

Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:  <b>Retrofit project to install air pollution control equipment to comply with the emission limits and monitoring requirements fo 40 CFR 60 Subpart Cb. Appropriate fee will be included for revision of Site Certification; no individual permit fee required. (See Section 1.0 of the attached request for Site Certification Modification for additional specific proposed revisions.)</b>
2. Projected or Actual Date of Commencement of Construction : <b>13 Nov 1999</b>
3. Projected Date of Completion of Construction : <b>13 Sep 2000</b>

**Professional Engineer Certification**

1. Professional Engineer Name: <b>Kennard Kosky</b> Registration Number: <b>14996</b>
2. Professional Engineer Mailing Address: Organization/Firm: <b>Golder Associates Inc.</b> Street Address: <b>6241 NW 23rd Street Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653-1500</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>(352) 336-5600</b> Fax: <b>(352) 336-6603</b>

4. Professional Engineer's Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

*Kenneth F. Galy*

*11/23/98*

Signature

Date

(seal)

\*Attach any exception to certification statement.

**Application Contact**

1. Name and Title of Application Contact: <b>Thomas D. Kirk, Plant Manager</b>
2. Application Contact Mailing Address:  Organization/Firm: <b>Wheelabrator North Broward, Inc.</b> Street Address: <b>2600 N.W. 48th St.</b> City: <b>Pompano Beach</b> State: <b>FL</b> Zip Code: <b>33073</b>
3. Application Contact Telephone Numbers:  Telephone: <b>(954) 971-8701</b> Fax: <b>(954) 971-8703</b>

**Application Comment**

<p><b>Application is being submitted to incorporate the requirements of 40 CFR Part 60 Subpart Cb. Specific proposed modifications to permitted emission levels for particular regulated pollutants are shown in Table 4-4 of the attached Site Certification Modification Request.</b></p>
---

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: <b>17</b> East (km): <b>583.5</b> North (km): <b>2907.5</b>			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): <b>26 / 17 / 12</b> Longitude: (DD/MM/SS): <b>80 / 9 / 48</b>			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4953</b>
7. Facility Comment (limit to 500 characters):			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Thomas D. Kirk, Plant Manager</b>			
2. Facility Contact Mailing Address: Organization/Firm: <b>Wheelabrator North Broward, Inc.</b> Street Address: <b>2600 N.W. 48th St.</b> City: <b>Pompano Beach</b> State: <b>FL</b> Zip Code: <b>33073</b>			
3. Facility Contact Telephone Numbers: Telephone: <b>(954) 971-8701</b> Fax: <b>(954) 971-8703</b>			



**Facility Regulatory Classifications**

1. Small Business Stationary Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
2. Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Synthetic Non-Title V Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6. Major Source of Hazardous Air Pollutants (HAPs)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. One or More Emissions Units Subject to NSPS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9. One or More Emissions Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Facility Regulatory Classifications Comment (limit to 200 characters):  <b>Regulatory classification assumed to be same as Title V application. 40 CFR Part 60 Subpart Cb will be applicable.</b>

**B. FACILITY REGULATIONS**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

[Empty rectangular box for Rule Applicability Analysis]

**List of Applicable Regulations** (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

**No change in facility regulatory requirements.**

**C. FACILITY POLLUTANTS**

**Facility Pollutant Information**

1. Pollutant Emitted	2. Pollutant Classification

## D. FACILITY POLLUTANT DETAIL INFORMATION

### Facility Pollutant Detail Information:

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

### Facility Pollutant Detail Information:

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

## E. FACILITY SUPPLEMENTAL INFORMATION

### Supplemental Requirements for All Applications

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: <u>Fig 1-1</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>Fig 1-1</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID(s): _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

### Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached Document ID: _____</p> <p><input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>
<p>15. Compliance Statement (Hard-copy Required)</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>

**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

**A. TYPE OF EMISSIONS UNIT  
(Regulated and Unregulated Emissions Units)****Type of Emissions Unit Addressed in This Section**

1. Regulated or Unregulated Emissions Unit? Check one:

[ x ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one:

[ x ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] [ ] 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.

[ ] [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.



**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)****Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <b>MSW - fired Boiler No. 1</b>		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown <b>001</b>		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ ] Yes [ <b>x</b> ] No	5. Emissions Unit Major Group SIC Code: <b>49</b>
6. Emissions Unit Comment (limit to 500 characters):		

**Emissions Unit Control Equipment Information**

**A.**

1. Description (limit to 200 characters):  <b>Spray dryer adsorber</b>
2. Control Device or Method Code: <b>67</b>

**B.**

1. Description (limit to 200 characters):  <b>Baghouse (fabric filter)</b>
2. Control Device or Method Code: <b>16</b>

**C.**

1. Description (limit to 200 characters):  <b>Selective Noncatalytic Reduction for NOx</b>
2. Control Device or Method Code: <b>107</b>

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Details**

1. Initial Startup Date:		
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer:		Model Number:
4. Generator Nameplate Rating:	<b>69</b>	MW
5. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate:	<b>303</b>	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Rate:	<b>67,217</b>	lb/hr
4. Maximum Production Rate:	<b>185,000</b>	lb/hr steam
5. Operating Capacity Comment (limit to 200 characters):		
<p><b>Generator Nameplate Rating = 68.5 (rounded to 69). Maximum Heat Input Rate = 302.5 (rounded to 303). Max Production Rate - 3 hour rolling average.</b></p>		

**Emissions Unit Operating Schedule**

1. Requested Maximum Operating Schedule:		
	<b>24</b> hours/day	days/week
	<b>52</b> weeks/yr	<b>8,760</b> hours/yr

**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

A large, empty rectangular box with a black border, intended for the user to provide a Rule Applicability Analysis. The box is currently blank.

**List of Applicable Regulations** (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Table 4-1 in Site Certification modification request

**E. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: N.A.	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>One stack containing one flue for each of three boilers.</b>	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	<b>195</b> feet
7. Exit Diameter:	<b>7.5</b> feet
8. Exit Temperature:	<b>300</b> °F

9. Actual Volumetric Flow Rate:	<b>169,000</b> acfm
10. Percent Water Vapor:	<b>20.6</b> %
11. Maximum Dry Standard Flow Rate:	<b>92,530</b> dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates:	
Zone: <b>17</b>	East (km): <b>583.5</b> North (km): <b>2907.5</b>
14. Emission Point Comment (limit to 200 characters):	
	<b>Exit temperature, actual volumetric flow rate, percent water vapor, and maximum dry standard flow rate represent average values measured at the fabric filter outlet.</b>

**F. SEGMENT (PROCESS/FUEL) INFORMATION**  
**(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):  <b>Municipal Solid Waste (emissions related to tons MSW fired in boiler) - SCC Electric Utility Boiler - Solid Waste</b>	
2. Source Classification Code (SCC):  <p style="text-align: center;"><b>101012</b></p>	
3. SCC Units:  <p style="text-align: center;"><b>Tons</b></p>	
4. Maximum Hourly Rate:  <p style="text-align: center;"><b>36</b></p>	5. Maximum Annual Rate:  <p style="text-align: center;"><b>314,995</b></p>
6. Estimated Annual Activity Factor:  <p style="text-align: center;"><b>1</b></p>	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):  <p style="text-align: center;"><b>Fuel for boiler is as defined in Section 2.3 of Site Certification Modification Request.</b></p>	



**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): <b>Natural gas (emissions related to million cubic feet of gas fired in boiler) - SCC Electric Utility Boiler - Natural Gas</b>	
2. Source Classification Code (SCC): <b>1011006</b>	
3. SCC Units: <b>Million cubic feet</b>	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): <b>Annual Capacity (Activity) Factor is less than 10% for start-up burners (PSD-FL-122)</b>	

**G. EMISSIONS UNIT POLLUTANTS  
(Regulated and Unregulated Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	067	016	EL
PM10	016		EL
NOx	107		EL
CO			EL
H021	016		EL
PB	016		EL
H114	016	067	EL
H106	067	016	EL
DIOX	067	016	EL
H027	016		EL

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>SO2</b>	
2. Total Percent Efficiency of Control:	<b>75 %</b>
3. Potential Emissions:	<b>35.1 lb/hour                      153.7 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor: <b>29 ppmvd @ 7% O2</b>  Reference: <b>40 CFR 60 Subpart Cb</b>	
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>36 tons/hr x 3.9 lb/ton x (1-0.75) = 35.1 lb/hr; 3.9 lb/ton = uncontrolled SO2 from Table 2.1.8 AP-42</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Emission limit is the less stringent requirement of 75% removal or 29 ppmvd @ 7% O2.</b>	

Emissions Unit Information Section 1 \_\_\_\_\_ of \_\_\_\_\_ 3  
Allowable Emissions (Pollutant identified on front page)

## A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>29 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>35.1 lb/hour</b>	<b>153.7 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Stack Test Method 6C</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb specifies the less stringent requirement of 75% removal or 29 ppmvd @ 7% O2.</b>		

## B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
 (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>PM10</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	7.35 lb/hour	32.2 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		27 mg/dscm @ 7% O2
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<b>0.0243 lb/MMBtu x 302.5 MMBtu/hr = 7.35 lb/hr; See Attachment A in Site Certification modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 1 of 3  
**Allowable Emissions (Pollutant identified on front page)**

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>27 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>7.35 lb/hour</b>	<b>32.2 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Stack Test - Method 5</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>NO<sub>x</sub></b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>106.5 lb/hour</b>	<b>466.4 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		<b>205 ppmvd @ 7% O<sub>2</sub></b>
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<b>0.352 lb/MMBtu x 302.5 MMBtu/hr = 106.5 lb/hr. See Attachment A in Site Certification Modification Request.</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 1 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>205 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>106.5 lb/hour</b>	<b>466.4 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>CEM</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: CO		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	31.8 lb/hour	139.1 tons/year
4. Synthetically Limited? [ ] Yes [x] No		
5. Range of Estimated Fugitive/Other Emissions:		
[ ] 1	[ ] 2	[ ] 3 _____ to _____ tons/yr
6. Emission Factor:		100 ppm@7% O2, dry
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
[x] 0	[ ] 1	[ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters):		
$0.105 \text{ lb/MMBtu} \times 302.5 \text{ MMBtu/hr} = 31.8 \text{ lb/hr}; 31.8 \text{ lb/hr} \times 8760 \text{ hr/yr} \times \text{ton}/2000 \text{ lb} = 139.1 \text{ TPY}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 1 \_\_\_\_\_ of \_\_\_\_\_ 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>OTHER</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>100 ppm@ 7% O2, dry</b>		
4. Equivalent Allowable Emissions:	<b>31.8 lb/hour</b>	<b>139.1 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>CEMS; 4-hour block average</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR Part 60; Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H021</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.0003</b> lb/hour	<b>0.0012</b> tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		<b>9.3 E-07</b> lb/MMBtu
Reference: Permit Limit		
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>9.3E-07 lb/MMBtu x 302.5 MMBtu/hr = 2.81E-04 lb/hr;    2.81E-04 lb/hr x 8760 hr/yr x ton/2000 lb = 1.23E-03 TPY</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>The emission limit for this pollutant does not change.</b>		

Emissions Unit Information Section 1 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>OTHER</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>9.3 E-07 lb/MMBtu</b>		
4. Equivalent Allowable Emissions:	<b>0.0003</b> lb/hour	<b>0.0012</b> tons/year
5. Method of Compliance (limit to 60 characters): <b>Stack Test - Method 104 or 40 CFR Part 260, App. VIII</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 1.a. PPSC, Item XIV.A.1.(a)(10)</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>PB</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.133 lb/hour</b>	<b>0.58 tons/year</b>
4. Synthetically Limited? [ ] Yes [ <b>X</b> ] No		
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr		
6. Emission Factor: <b>0.49 mg/dscm @ 7% O2</b> Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code: [ <b>X</b> ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5		
8. Calculation of Emissions (limit to 600 characters): <b>0.00044 lb/MMBtu x 302.5 MMBtu/hr = 0.1331. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 1 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>0.49 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.133 lb/hour</b>	<b>0.58 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H114</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.019 lb/hour</b>	<b>0.08 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
[   ] 1    [   ] 2    [   ] 3    _____ to _____ tons/yr		
6. Emission Factor:		<b>70 ug/dscm @ 7% O2</b>
Reference: <b>See Comment</b>		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0    [   ] 1    [   ] 2    [   ] 3    [   ] 4    [   ] 5		
8. Calculation of Emissions (limit to 600 characters):		
<b><math>6.3 \times 10^{-5}</math> lb/MMBtu x 302.5 MMBtu/hr = 0.019 lb/hr. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<b>Emission Factor Reference: 62-296.416(3)(b); FDEP SIP for Subpart Cb</b>		

Emissions Unit Information Section 1 \_\_\_\_\_ of \_\_\_\_\_ 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>70 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.019</b> lb/hour	<b>0.08</b> tons/year
5. Method of Compliance (limit to 60 characters): <b>EPA Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>F.A.C. 62-296.416(3)(b); FDEP SIP for Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H106</b>		
2. Total Percent Efficiency of Control:		<b>95 %</b>
3. Potential Emissions:	<b>12.55 lb/hour</b>	<b>55 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		<b>29 ppmvd @ 7% O2</b>
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>36 tons/hr x 6.97 lb/ton x (1-0.95) = 12.55 lb/hr; 6.97 lb/ton = uncontrolled HCL from Table 2.1.8 AP-42</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Emission limit is the less stringent requirement of 95% removal or 29 ppmvd @ 7% O2.</b>		

Emissions Unit Information Section 1 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>29 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>12.55 lb/hour</b>	<b>55 tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb, less stringent requirement of 95% control efficiency or 29 ppmvd @ 7% O2.</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>DIOX</b>		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions:	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:                    0.00003 mg/dscm @ 7% O <sub>2</sub>		
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
2.7E-08 lb/MMBtu x 302.5 MMBtu = 8.2E-06 lb/hr. See Attachment A in Site Certification Modification Request		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
Potential Emissions = 8.2E-06 lb/hr and 3.6E-05 TPY. Emission Factor also 30 ng/dscm @ 7% O <sub>2</sub> .		

Emissions Unit Information Section 1 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>30 ng/dscm@7%O2</b>		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters): <b>40 CFR 60 Appendix A Method 23</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>Equivalent Allowable Emissions = 8.2E-06 lb/hr and 3.6E-05 TPY. 40 CFR 60 Subpart Cb.</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H027</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.011</b> lb/hour	<b>0.048</b> tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		0.04 mg/dscm @ 7% O <sub>2</sub>
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<b>3.6x10<sup>-5</sup> lb/MMBtu x 302.5 MMBtu/hr = 0.011 lb/hr. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 1 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>0.04 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.011 lb/hour</b>	<b>0.048 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>40 CFR 60 Appendix A Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitations:** Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: <b>VE10</b>
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions: <b>10</b> %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4.	Method of Compliance: <b>Method 9</b>
5.	Visible Emissions Comment (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>

**Visible Emissions Limitations:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions:      %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment (limit to 200 characters):

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor  1  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO2</b>
3. CMS Requirement: [ ] Rule [ <b>x</b> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8850</b> Serial Number: <b>3185</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor  2  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO2</b>
3. CMS Requirement: [ ] Rule [ <b>x</b> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8850</b> Serial Number: <b>3187</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	



**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 3 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>NOx</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8844</b> Serial Number: <b>36</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 4 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Milton Ray</b> Model Number: <b>3300</b> Serial Number: <b>N9L1978T</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**J. CONTINUOUS MONITOR INFORMATION**  
(Regulated Emissions Units Only)

**Continuous Monitoring System** Continuous Monitor 5 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8830</b> Serial Number: <b>269</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 6 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>O2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>STI</b> Model Number: <b>OX-0102R</b> Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 7 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>O2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>STI</b> Model Number: <b>OX-0102R</b> Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 8 of 8

1. Parameter Code: <b>VE</b>	2. Pollutant(s):
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>TECO</b> Model Number: <b>400</b> Serial Number: <b>400-29930-237</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [ ] ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [ ] ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [ ] ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [ ] ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	<input type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
	SO <sub>2</sub>	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
	NO <sub>2</sub>	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO <sub>2</sub>	lb/hour		tons/year
	NO <sub>2</sub>			tons/year
5.	PSD Comment (limit to 200 characters):			
	<b>Emissions of NOx related to this application will decrease.</b>			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION**  
**(Regulated Emissions Units Only)**

**Supplemental Requirements for All Applications**

1.	Process Flow Diagram	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
2.	Fuel Analysis or Specification	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
3.	Detailed Description of Control Equipment	<input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment B</u>	<input type="checkbox"/> Waiver Requested
		<input type="checkbox"/> Not Applicable	
4.	Description of Stack Sampling Facilities	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
5.	Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
		<input type="checkbox"/> Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
7.	Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
8.	Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
9.	Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

**A. TYPE OF EMISSIONS UNIT  
(Regulated and Unregulated Emissions Units)****Type of Emissions Unit Addressed in This Section**

1. Regulated or Unregulated Emissions Unit? Check one:

] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one:

] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

] 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.

] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.



**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)****Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <b>MSW - fired Boiler No. 2</b>		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown <b>002</b>		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ ] Yes [ <b>x</b> ] No	5. Emissions Unit Major Group SIC Code: <b>49</b>
6. Emissions Unit Comment (limit to 500 characters):		

**Emissions Unit Control Equipment Information**

**A.**

1. Description (limit to 200 characters):  <b>Spray dryer adsorber</b>
2. Control Device or Method Code: <b>67</b>

**B.**

1. Description (limit to 200 characters):  <b>Baghouse (fabric filter)</b>
2. Control Device or Method Code: <b>16</b>

**C.**

1. Description (limit to 200 characters):  <b>Selective Noncatalytic Reduction for NOx</b>
2. Control Device or Method Code: <b>107</b>

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Details**

1. Initial Startup Date:		
2. Long-term Reserve Shutdown Date:		
3. Package Unit: Manufacturer:	Model Number:	
4. Generator Nameplate Rating:	69 MW	
5. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

**Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate:	303	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Rate:	67,217	lb/hr
4. Maximum Production Rate:	185,000	lb/hr steam
5. Operating Capacity Comment (limit to 200 characters):		
<p><b>Generator Nameplate Rating = 68.5 (rounded to 69). Maximum Heat Input Rate = 302.5 (rounded to 303). Max Production Rate - 3 hour rolling average.</b></p>		

**Emissions Unit Operating Schedule**

1. Requested Maximum Operating Schedule:		
24	hours/day	days/week
52	weeks/yr	8,760 hours/yr

**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

A large, empty rectangular box with a black border, intended for the user to provide a Rule Applicability Analysis. The box is currently blank.

**List of Applicable Regulations** (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Table 4-1 in Site Certification modification request

**E. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: N.A.	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>One stack containing one flue for each of three boilers.</b>	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	<b>195</b> feet
7. Exit Diameter:	<b>7.5</b> feet
8. Exit Temperature:	<b>300</b> °F

9. Actual Volumetric Flow Rate:	<b>169,000</b> acfm
10. Percent Water Vapor:	<b>20.6</b> %
11. Maximum Dry Standard Flow Rate:	<b>92,530</b> dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates:	
Zone: <b>17</b>	East (km): <b>583.5</b> North (km): <b>2907.5</b>
14. Emission Point Comment (limit to 200 characters):	
	<b>Exit temperature, actual volumetric flow rate, percent water vapor, and maximum dry standard flow rate represent average values measured at the fabric filter outlet.</b>

**F. SEGMENT (PROCESS/FUEL) INFORMATION**  
**(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):  <b>Municipal Solid Waste (emissions related to tons MSW fired in boiler) - SCC Electric Utility Boiler - Solid Waste</b>	
2. Source Classification Code (SCC):  <b>101012</b>	
3. SCC Units:  <b>Tons</b>	
4. Maximum Hourly Rate:  <b>36</b>	5. Maximum Annual Rate:  <b>314,995</b>
6. Estimated Annual Activity Factor:  <b>1</b>	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):  <b>Fuel for boiler is as defined in Section 2.3 of Site Certification Modification Request.</b>	



**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): <b>Natural gas (emissions related to million cubic feet of gas fired in boiler) - SCC Electric Utility Boiler - Natural Gas</b>	
2. Source Classification Code (SCC): <b>1011006</b>	
3. SCC Units: <b>Million cubic feet</b>	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): <b>Annual Capacity (Activity) Factor is less than 10% for start-up burners (PSD-FL-122)</b>	

**G. EMISSIONS UNIT POLLUTANTS  
(Regulated and Unregulated Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	067	016	EL
PM10	016		EL
NOx	107		EL
CO			EL
H021	016		EL
PB	016		EL
H114	016	067	EL
H106	067	016	EL
DIOX	067	016	EL
H027	016		EL

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>SO2</b>	
2. Total Percent Efficiency of Control:	<b>75 %</b>
3. Potential Emissions:	<b>35.1 lb/hour                      153.7 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor:	<b>29 ppmvd @ 7% O2</b>  Reference: <b>40 CFR 60 Subpart Cb</b>
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>36 tons/hr x 3.9 lb/ton x (1-0.75) = 35.1 lb/hr; 3.9 lb/ton = uncontrolled SO2 from Table 2.1.8 AP-42</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Emission limit is the less stringent requirement of 75% removal or 29 ppmvd @ 7% O2.</b>	

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>29 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>35.1 lb/hour</b>	<b>153.7 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Stack Test Method 6C</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb specifies the less stringent requirement of 75% removal or 29 ppmvd @ 7% O2.</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>PM10</b>	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	<b>7.35 lb/hour</b> <b>32.2 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor: <b>27 mg/dscm @ 7% O2</b>  Reference: 40 CFR 60 Subpart Cb	
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>0.0243 lb/MMBtu x 302.5 MMBtu/hr = 7.35 lb/hr; See Attachment A in Site Certification modification Request</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):          	

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>27 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>7.35 lb/hour</b>	<b>32.2 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Stack Test - Method 5</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: NOx		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	106.5 lb/hour	466.4 tons/year
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr	
6. Emission Factor:	205 ppmvd @ 7% O2	
	Reference: 40 CFR 60 Subpart Cb	
7. Emissions Method Code:	<input checked="" type="checkbox"/> 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5	
8. Calculation of Emissions (limit to 600 characters):	0.352 lb/MMBtu x 302.5 MMBtu/hr = 106.5 lb/hr. See Attachment A in Site Certification Modification Request.	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>205 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>106.5 lb/hour</b>	<b>466.4 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>CEM</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**Pollutant Detail Information:**

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>31.8 lb/hour</b>	<b>139.1 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
[ <input type="checkbox"/> ] 1    [ <input type="checkbox"/> ] 2    [ <input type="checkbox"/> ] 3    _____ to _____ tons/yr		
6. Emission Factor:		100 ppm@7% O <sub>2</sub> , dry
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
[ <input checked="" type="checkbox"/> ] 0    [ <input type="checkbox"/> ] 1    [ <input type="checkbox"/> ] 2    [ <input type="checkbox"/> ] 3    [ <input type="checkbox"/> ] 4    [ <input type="checkbox"/> ] 5		
8. Calculation of Emissions (limit to 600 characters):		
0.105 lb/MMBtu x 302.5 MMBtu/hr = 31.8 lb/hr;    31.8 lb/hr x 8760 hr/yr x ton/2000 lb = 139.1 TPY		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 2 of 3  
**Allowable Emissions (Pollutant identified on front page)**

**A.**

1. Basis for Allowable Emissions Code: <b>OTHER</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>100 ppm@ 7% O2, dry</b>		
4. Equivalent Allowable Emissions:	<b>31.8 lb/hour</b>	<b>139.1 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>CEMS; 4-hour block average</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR Part 60; Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H021</b>	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	<b>0.0003</b> lb/hour <b>0.0012</b> tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor:	<b>9.3 E-07</b> lb/MMBtu
Reference: <b>Permit Limit</b>	
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>9.3E-07 lb/MMBtu x 302.5 MMBtu/hr = 2.81E-04lb/hr;    2.81E-04lb/hr x 8760 hr/yr x ton/2000 lb = 1.23E-03 TPY</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>The emission limit for this pollutant does not change.</b>	

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>OTHER</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>9.3 E-07 lb/MMBtu</b>		
4. Equivalent Allowable Emissions:	<b>0.0003 lb/hour</b>	<b>0.0012 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Stack Test - Method 104 or 40 CFR Part 260, App. VIII</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 1.a. PPSC, Item XIV.A.1.(a)(10)</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>PB</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.133</b> lb/hour	<b>0.58</b> tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		0.49 mg/dscm @ 7% O <sub>2</sub>
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>0.00044 lb/MMBtu x 302.5MMBtu/hr = 0.1331. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):          		

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>0.49 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.133 lb/hour</b>	<b>0.58 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H114</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.019 lb/hour</b>	<b>0.08 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
[ <input type="checkbox"/> ]1    [ <input type="checkbox"/> ]2    [ <input type="checkbox"/> ]3    _____ to _____ tons/yr		
6. Emission Factor:		<b>70 ug/dscm @ 7% O2</b>
Reference: See Comment		
7. Emissions Method Code:		
[ <input checked="" type="checkbox"/> ]0    [ <input type="checkbox"/> ]1    [ <input type="checkbox"/> ]2    [ <input type="checkbox"/> ]3    [ <input type="checkbox"/> ]4    [ <input type="checkbox"/> ]5		
8. Calculation of Emissions (limit to 600 characters):		
<b><math>6.3 \times 10^{-5} \text{ lb/MMBtu} \times 302.5 \text{ MMBtu/hr} = 0.019 \text{ lb/hr}</math>. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<b>Emission Factor Reference: 62-296.416(3)(b); FDEP SIP for Subpart Cb</b>		

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>70 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.019 lb/hour</b>	<b>0.08 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>F.A.C. 62-296.416(3)(b); FDEP SIP for Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H106</b>		
2. Total Percent Efficiency of Control:		<b>95 %</b>
3. Potential Emissions:	<b>12.55 lb/hour</b>	<b>55 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		<b>29 ppmvd @ 7% O2</b>
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<b>36 tons/hr x 6.97 lb/ton x (1-0.95) = 12.55 lb/hr; 6.97 lb/ton = uncontrolled HCL from Table 2.1.8 AP-42</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<b>Emission limit is the less stringent requirement of 95% removal or 29 ppmvd @ 7% O2.</b>		

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>29 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>12.55 lb/hour</b>	<b>55 tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb, less stringent requirement of 95% control efficiency or 29 ppmvd @ 7% O2.</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>DIOX</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:                    0.00003 mg/dscm @ 7% O <sub>2</sub>		
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<b>2.7E-08 lb/MMBtu x 302.5 MMBtu = 8.2E-06 lb/hr. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<b>Potential Emissions = 8.2E-06 lb/hr and 3.6E-05 TPY. Emission Factor also 30 ng/dscm @ 7% O<sub>2</sub>.</b>		

Emissions Unit Information Section 2 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>30 ng/dscm@7%O2</b>		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters): <b>40 CFR 60 Appendix A Method 23</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>Equivalent Allowable Emissions = 8.2E-06 lb/hr and 3.5E-05 TPY. 40 CFR 60 Subpart Cb.</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: H027		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	0.011 lb/hour	0.048 tons/year
4. Synthetically Limited? [ ] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: [ ]1 [ ]2 [ ]3 _____ to _____ tons/yr		
6. Emission Factor: 0.04 mg/dscm @ 7% O2 Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code: [X]0 [ ]1 [ ]2 [ ]3 [ ]4 [ ]5		
8. Calculation of Emissions (limit to 600 characters): <b>3.6x10<sup>-5</sup> lb/MMBtu x 302.5 MMBtu/hr = 0.011 lb/hr. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 2 of 3  
**Allowable Emissions (Pollutant identified on front page)**

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>0.04 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.011 lb/hour</b>	<b>0.048 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>40 CFR 60 Appendix A Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitations:** Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: <b>VE10</b>
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions: <b>10</b> %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4.	Method of Compliance: <b>Method 9</b>
5.	Visible Emissions Comment (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>

**Visible Emissions Limitations:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions:      %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment (limit to 200 characters):

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor  1  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO2</b>
3. CMS Requirement: [ <input type="checkbox"/> ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8850</b> Serial Number: <b>3185</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor  2  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO2</b>
3. CMS Requirement: [ <input type="checkbox"/> ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8850</b> Serial Number: <b>3187</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	



**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor  3  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>NOx</b>
3. CMS Requirement: [ <input type="checkbox"/> ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8844</b> Serial Number: <b>36</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor  4  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO2</b>
3. CMS Requirement: [ <input type="checkbox"/> ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Milton Ray</b> Model Number: <b>3300</b> Serial Number: <b>N9L1978T</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 5 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8830</b> Serial Number: <b>269</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 6 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>O2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>STI</b> Model Number: <b>OX-0102R</b> Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 7 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>O2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>STI</b> Model Number: <b>OX-0102R</b> Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 8 of 8

1. Parameter Code: <b>VE</b>	2. Pollutant(s):
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>TECO</b> Model Number: <b>400</b> Serial Number: <b>400-29930-237</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- [ x ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [ ] [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [ ] [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [ ] [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [ ] [ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:		
	PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E <input type="checkbox"/> Unknown
	SO <sub>2</sub>	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E <input type="checkbox"/> Unknown
	NO <sub>2</sub>	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E <input type="checkbox"/> Unknown
4.	Baseline Emissions:		
	PM	lb/hour	tons/year
	SO <sub>2</sub>	lb/hour	tons/year
	NO <sub>2</sub>		tons/year
5.	PSD Comment (limit to 200 characters):		
	<b>Emissions of NOx related to this application will decrease.</b>		

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements for All Applications**

1.	Process Flow Diagram	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
2.	Fuel Analysis or Specification	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
3.	Detailed Description of Control Equipment	<input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment B</b>	<input type="checkbox"/> Waiver Requested
		<input type="checkbox"/> Not Applicable	
4.	Description of Stack Sampling Facilities	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
5.	Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
		<input type="checkbox"/> Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
7.	Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
8.	Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
9.	Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

**A. TYPE OF EMISSIONS UNIT  
(Regulated and Unregulated Emissions Units)****Type of Emissions Unit Addressed in This Section**

1. Regulated or Unregulated Emissions Unit? Check one:

] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one:

] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

] 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.

] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.



**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)****Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): <b>MSW - fired Boiler No. 3</b>		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown <b>003</b>		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ ] Yes [ <b>x</b> ] No	5. Emissions Unit Major Group SIC Code: <b>49</b>
6. Emissions Unit Comment (limit to 500 characters):		

**Emissions Unit Control Equipment Information**

**A.**

1. Description (limit to 200 characters):  <b>Spray dryer adsorber</b>
2. Control Device or Method Code: <b>67</b>

**B.**

1. Description (limit to 200 characters):  <b>Baghouse (fabric filter)</b>
2. Control Device or Method Code: <b>16</b>

**C.**

1. Description (limit to 200 characters):  <b>Selective Noncatalytic Reduction for NOx</b>
2. Control Device or Method Code: <b>107</b>

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Details**

1. Initial Startup Date:		
2. Long-term Reserve Shutdown Date:		
3. Package Unit: Manufacturer:	Model Number:	
4. Generator Nameplate Rating:	69 MW	
5. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**Emissions Unit Operating Capacity**

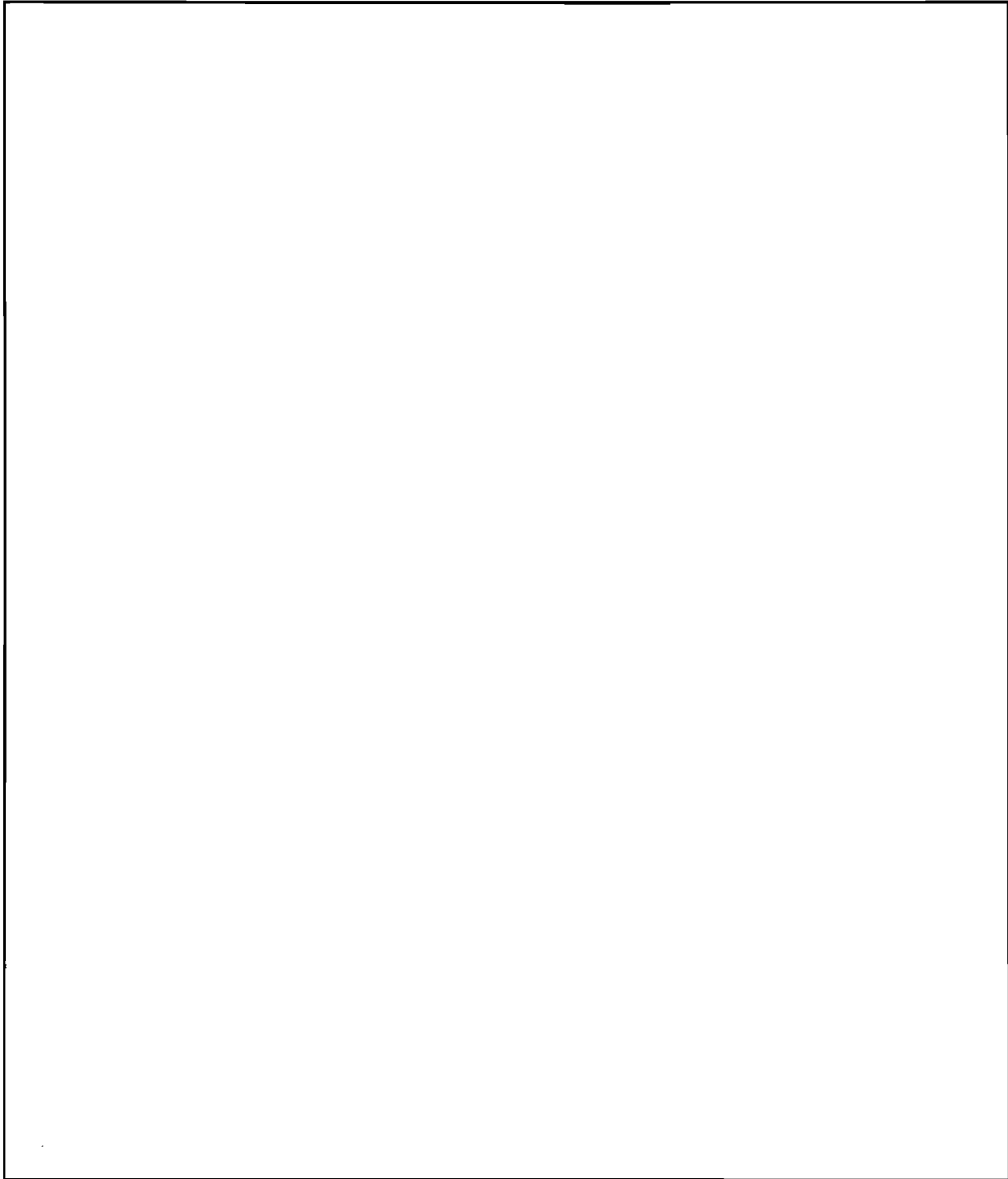
1. Maximum Heat Input Rate:	303	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Rate:	67,217	lb/hr
4. Maximum Production Rate:	185,000	lb/hr steam
5. Operating Capacity Comment (limit to 200 characters):		
Generator Nameplate Rating = 68.5 (rounded to 69). Maximum Heat Input Rate = 302.5 (rounded to 303). Max Production Rate - 3 hour rolling average.		

**Emissions Unit Operating Schedule**

1. Requested Maximum Operating Schedule:		
	24 hours/day	days/week
	52 weeks/yr	8,760 hours/yr

**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)



**List of Applicable Regulations** (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Table 4-1 in Site Certification modification request

**E. EMISSION POINT (STACK/VENT) INFORMATION**  
**(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: N.A.	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  <b>One stack containing one flue for each of three boilers.</b>	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	<b>195</b> feet
7. Exit Diameter:	<b>7.5</b> feet
8. Exit Temperature:	<b>300</b> °F

9. Actual Volumetric Flow Rate:	<b>169,000</b> acfm
10. Percent Water Vapor:	<b>20.6</b> %
11. Maximum Dry Standard Flow Rate:	<b>92,530</b> dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates:	
Zone: <b>17</b>	East (km): <b>583.5</b> North (km): <b>2907.5</b>
14. Emission Point Comment (limit to 200 characters):	
	<b>Exit temperature, actual volumetric flow rate, percent water vapor, and maximum dry standard flow rate represent average values measured at the fabric filter outlet.</b>

**F. SEGMENT (PROCESS/FUEL) INFORMATION**  
**(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):  <b>Municipal Solid Waste (emissions related to tons MSW fired in boiler) - SCC Electric Utility Boiler - Solid Waste</b>	
2. Source Classification Code (SCC):  <b>101012</b>	
3. SCC Units:  <b>Tons</b>	
4. Maximum Hourly Rate:  <b>36</b>	5. Maximum Annual Rate:  <b>314,995</b>
6. Estimated Annual Activity Factor:  <b>1</b>	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):  <b>Fuel for boiler is as defined in Section 2.3 of Site Certification Modification Request.</b>	



**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): <b>Natural gas (emissions related to million cubic feet of gas fired in boiler) - SCC Electric Utility Boiler - Natural Gas</b>	
2. Source Classification Code (SCC): <b>1011006</b>	
3. SCC Units: <b>Million cubic feet</b>	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): <b>Annual Capacity (Activity) Factor is less than 10% for start-up burners (PSD-FL-122)</b>	

**G. EMISSIONS UNIT POLLUTANTS  
(Regulated and Unregulated Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	067	016	EL
PM10	016		EL
NOx	107		EL
CO			EL
H021	016		EL
PB	016		EL
H114	016	067	EL
H106	067	016	EL
DIOX	067	016	EL
H027	016		EL

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>SO2</b>	
2. Total Percent Efficiency of Control:	<b>75 %</b>
3. Potential Emissions:	<b>35.1 lb/hour                      153.7 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/yr	
6. Emission Factor: <b>29 ppmvd @ 7% O2</b>  Reference: <b>40 CFR 60 Subpart Cb</b>	
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>36 tons/hr x 3.9 lb/ton x (1-0.75) = 35.1 lb/hr; 3.9 lb/ton = uncontrolled SO2 from Table 2.1.8 AP-42</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Emission limit is the less stringent requirement of 75% removal or 29 ppmvd @ 7% O2.</b>	

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>29 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>35.1</b> lb/hour	<b>153.7</b> tons/year
5. Method of Compliance (limit to 60 characters): <b>Stack Test Method 6C</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb specifies the less stringent requirement of 75% removal or 29 ppmvd @ 7% O2.</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>PM10</b>	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	<b>7.35 lb/hour</b> <b>32.2 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor: <b>27 mg/dscm @ 7% O2</b>  Reference: 40 CFR 60 Subpart Cb	
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>0.0243 lb/MMBtu x 302.5 MMBtu/hr = 7.35 lb/hr; See Attachment A in Site Certification modification Request</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):          	

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>27 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>7.35 lb/hour</b>	<b>32.2 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Stack Test - Method 5</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>NOx</b>		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions:	<b>106.5</b> lb/hour	<b>466.4</b> tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor: <b>205 ppmvd @ 7% O2</b>		
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<p><b>0.352 lb/MMBtu x 302.5 MMBtu/hr = 106.5 lb/hr. See Attachment A in Site Certification Modification Request.</b></p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>205 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>106.5 lb/hour</b>	<b>466.4 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>CEM</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>31.8 lb/hour</b>	<b>139.1 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
[   ] 1    [   ] 2    [   ] 3    _____ to _____ tons/yr		
6. Emission Factor:		100 ppm@7% O2, dry
Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:		
[ <input checked="" type="checkbox"/> ] 0    [   ] 1    [   ] 2    [   ] 3    [   ] 4    [   ] 5		
8. Calculation of Emissions (limit to 600 characters):		
0.105 lb/MMBtu x 302.5 MMBtu/hr = 31.8 lb/hr;    31.8 lb/hr x 8760 hr/yr x ton/2000 lb = 139.1 TPY		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>OTHER</b>
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: <b>100 ppm@ 7% O2, dry</b>
4. Equivalent Allowable Emissions: <b>31.8</b> lb/hour <b>139.1</b> tons/year
5. Method of Compliance (limit to 60 characters): <b>CEMS; 4-hour block average</b>
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR Part 60; Subpart Cb</b>

**B.**

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: H021		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	0.0003 lb/hour	0.0012 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		9.3 E-07 lb/MMBtu
Reference: Permit Limit		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
$9.3E-07 \text{ lb/MMBtu} \times 302.5 \text{ MMBtu/hr} = 2.81E-04 \text{ lb/hr}; \quad 2.81E-04 \text{ lb/hr} \times 8760 \text{ hr/yr} \times$ $\text{ton}/2000 \text{ lb} = 1.23E-03 \text{ TPY}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<b>The emission limit for this pollutant does not change.</b>		

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>OTHER</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>9.3 E-07 lb/MMBtu</b>		
4. Equivalent Allowable Emissions:	<b>0.0003</b> lb/hour	<b>0.0012</b> tons/year
5. Method of Compliance (limit to 60 characters): <b>Stack Test - Method 104 or 40 CFR Part 260, App. VIII</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 1.a. PPSC, Item XIV.A.1.(a)(10)</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>PB</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.133 lb/hour</b>	<b>0.58 tons/year</b>
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	[ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr	
6. Emission Factor:	<b>0.49 mg/dscm @ 7% O2</b> Reference: 40 CFR 60 Subpart Cb	
7. Emissions Method Code:	<input checked="" type="checkbox"/> 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5	
8. Calculation of Emissions (limit to 600 characters):	<b>0.00044 lb/MMBtu x 302.5 MMBtu/hr = 0.1331. See Attachment A in Site Certification Modification Request</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>0.49 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.133 lb/hour</b>	<b>0.58 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H114</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	<b>0.019</b> lb/hour	<b>0.08</b> tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:		<b>70 ug/dscm @ 7% O2</b>
Reference: <b>See Comment</b>		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<b><math>6.3 \times 10^{-5}</math> lb/MMBtu x 302.5 MMBtu/hr = 0.019 lb/hr. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<b>Emission Factor Reference: 62-296.416(3)(b); FDEP SIP for Subpart Cb</b>		

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>70 mg/dscm @ 7% O<sub>2</sub></b>		
4. Equivalent Allowable Emissions:	<b>0.019 lb/hour</b>	<b>0.08 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>F.A.C. 62-296.416(3)(b); FDEP SIP for Subpart Cb</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H106</b>	
2. Total Percent Efficiency of Control:	<b>95 %</b>
3. Potential Emissions:	<b>12.55 lb/hour                      55 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor:	<b>29 ppmvd @ 7% O2</b>  Reference: 40 CFR 60 Subpart Cb
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>36 tons/hr x 6.97 lb/ton x (1-0.95) = 12.55 lb/hr; 6.97 lb/ton = uncontrolled HCL from Table 2.1.8 AP-42</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Emission limit is the less stringent requirement of 95% removal or 29 ppmvd @ 7% O2.</b>	

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>29 ppmvd @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>12.55 lb/hour</b>	<b>55 tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb, less stringent requirement of 95% control efficiency or 29 ppmvd @ 7% O2.</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>DIOX</b>		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr		
6. Emission Factor:                    0.00003 mg/dscm @ 7% O <sub>2</sub>  Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>2.7E-08 lb/MMBtu x 302.6 MMBtu = 8.2E-06 lb/hr. See Attachment A in Site Certification Modification Request</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Potential Emissions = 8.2E-06 lb/hr and 3.6E-05 TPY. Emission Factor also 30 ng/dscm @ 7% O<sub>2</sub>.</b>		

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>30 ng/dscm@7%O2</b>		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters): <b>40 CFR 60 Appendix A Method 23</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>Equivalent Allowable Emissions = 8.2E-06 lb/hr and 3.6E-05 TPY. 40 CFR 60 Subpart Cb.</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**

1. Pollutant Emitted: <b>H027</b>	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	<b>0.011 lb/hour                      0.048 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:  <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3    _____ to _____ tons/yr	
6. Emission Factor:                      0.04 mg/dscm @ 7% O2  Reference: 40 CFR 60 Subpart Cb	
7. Emissions Method Code:  <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>3.6x10<sup>-5</sup> lb/MMBtu x 302.5 MMBtu/hr = 0.011 lb/hr. See Attachment A in Site Certification Modification Request</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):          	

Emissions Unit Information Section 3 of 3  
Allowable Emissions (Pollutant identified on front page)

**A.**

1. Basis for Allowable Emissions Code: <b>RULE</b>		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: <b>0.04 mg/dscm @ 7% O2</b>		
4. Equivalent Allowable Emissions:	<b>0.011 lb/hour</b>	<b>0.048 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>40 CFR 60 Appendix A Method 29</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitations:** Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: <b>VE10</b>
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions: <b>10</b> %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4.	Method of Compliance: <b>Method 9</b>
5.	Visible Emissions Comment (limit to 200 characters): <b>40 CFR 60 Subpart Cb</b>

**Visible Emissions Limitations:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions:      %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment (limit to 200 characters):

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 1 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8850</b> Serial Number: <b>3185</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 2 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>SO2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8850</b> Serial Number: <b>3187</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	



**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 3 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>NOx</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8844</b> Serial Number: <b>36</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 4 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Milton Ray</b> Model Number: <b>3300</b> Serial Number: <b>N9L1978T</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor  5  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO</b>
3. CMS Requirement: [ ] Rule [ <b>x</b> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>Monitor Labs</b> Model Number: <b>8830</b> Serial Number: <b>269</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor  6  of  8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>O2</b>
3. CMS Requirement: [ ] Rule [ <b>x</b> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>STI</b> Model Number: <b>OX-0102R</b> Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

**Continuous Monitoring System** Continuous Monitor 7 of 8

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>O2</b>
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>STI</b> Model Number: <b>OX-0102R</b> Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**Continuous Monitoring System** Continuous Monitor 8 of 8

1. Parameter Code: <b>VE</b>	2. Pollutant(s):
3. CMS Requirement: [ ] Rule [ <input checked="" type="checkbox"/> ] Other	
4. Monitor Information: Monitor Manufacturer: <b>TECO</b> Model Number: <b>400</b> Serial Number: <b>400-29930-237</b>	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): <b>PSD-FL-105, Part I, Specific Condition 9.a.</b>	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	<input checked="" type="checkbox"/> ] C	[ ] E	[ ] Unknown
	SO <sub>2</sub>	<input checked="" type="checkbox"/> ] C	[ ] E	[ ] Unknown
	NO <sub>2</sub>	<input checked="" type="checkbox"/> ] C	[ ] E	[ ] Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO <sub>2</sub>	lb/hour		tons/year
	NO <sub>2</sub>			tons/year
5.	PSD Comment (limit to 200 characters):			
	<b>Emissions of NO<sub>x</sub> related to this application will decrease.</b>			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements for All Applications**

1.	Process Flow Diagram	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
2.	Fuel Analysis or Specification	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
3.	Detailed Description of Control Equipment	<input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment B</u>	<input type="checkbox"/> Waiver Requested
		<input type="checkbox"/> Not Applicable	
4.	Description of Stack Sampling Facilities	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
5.	Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
		<input type="checkbox"/> Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
7.	Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
8.	Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
9.	Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable