PSD Construction Permit Application for Battery Recycling Facility Expansion

Prepared for:
EnviroFocus Technologies, LLC
Tampa, Florida

Prepared by:
ENVIRON International Corporation
Atlanta, Georgia

Date:
August 2008

Project or Version Number:
07-15422D

GOPHER RESOURCE
CORPORATION

VIA OVERNIGHT DELIVERY

August 12, 2008

RECEIVED
AUG 13 2008
BUREAU OF AIR REGULATION

Mr. David Read
Engineering Specialist II
Florida Department of Environmental Protection
Division of Air Resource Management
111 S. Magnolia Drive, Suite 23
Tallahassee, FL 32301

Re: Permit Fees for PSD Permit Application for Battery Recycling Facility Expansion
EnviroFocus Technologies, LLC, Tampa, Florida

Dear Mr. Read:

Enclosed is a check in the amount of $7,500 for the processing of the above-referenced permit application. If you have any questions regarding the application, please contact either Frank Burbach at 678-388-1642 or Russell Kemp at 678-388-1654.

Sincerely,

John Tapper
Chief Operating Officer

Cc: Russell Kemp, PE, ENVIRON International Corporation

3385 SOUTH HWY. 149 • EAGAN, MINNESOTA 55121 • 651.454.3310 • FAX 651.454.7926 • 800.354.7451

ENVIRON

August 7, 2008

Mr. David Read
Engineering Specialist I
Department of Environmental Protection
Division of Air Resource Management
111 S. Magnolia Drive, Suite 23
Tallahassee, FL 32301

Re: PSD Permit Application for Battery Recycling Facility Expansion
EnviroFocus Technologies, LLC, Tampa, Florida

Dear Mr. Read:

ENVIRON International Corporation herein submits four copies of a PSD construction permit application for the expansion of a battery recycling facility on behalf of EnviroFocus Technologies, LLC in Tampa, Florida. If you have any questions, please contact me at 678-388-1642.

Sincerely,

Frank J. Burbach, P.E.
Project Manager

Cc: John Widell, EnviroFocus Technologies, LLC
Steve Yates, Gopher Resource Corporation

PSD Construction Permit Application for Battery Recycling Facility Expansion

Prepared for:
EnviroFocus Technologies, LLC
Tampa, Florida

Prepared by:
ENVIRON International Corporation
Atlanta, Georgia

Date:
August 2008

Project or Version Number:
07-15422D

Contents

Section 1

1 Introduction

EnviroFocus Technologies, LLC (EnviroFocus) currently owns and operates a lead-acid battery recycling facility located at 1901 N. 66th Street in Tampa (Hillsborough County), Florida. **Figure 1-1** at the end of this section shows the site location relative to the surrounding community. The facility is authorized to operate under Title V Air Operation Permit No. 0570057-016-AV issued by the Hillsborough County Environmental Protection Commission (EPC) on March 16, 2007. Additionally, EPC issued Permit No. 0570057-018-AC on October 16, 2007 to authorize the construction of an enclosure and cartridge collector for the facility's blast furnace area and for an increase in the lead production limit from 26,500 ton/yr to 32,000 ton/yr. That project is currently underway.

The purpose of this application is to request approval for a new expansion project that will involve the installation and replacement of emission units necessary to allow the facility to reach a new lead production limit of 150,000 ton/yr. In order to minimize the impact of lead emissions, EnviroFocus proposes to install the Best Available Control Technology (BACT) on the emissions from all lead-emitting sources. Additionally, all of the lead-emitting processes will be enclosed in a building that will be ventilated to the atmosphere through a high-efficiency cartridge collector. This will not only reduce the lead emissions, but will also eliminate the emissions of lead at ground level from process upset conditions The following is a description of the battery recycling process, a description of the proposed project, and a summary of the air quality regulations that will applicable to the project.

1.1 Process Description

The facility recycles spent automotive and industrial lead-acid batteries, as well as other lead-bearing scrap materials to produce lead ingots. The spent batteries are received by truck and introduced to a hammer mill, commonly referred to as the Battery Breaker. The crushed components, which consist primarily of metallic lead, lead salts, and plastic are then separated into three material streams. The solid lead, which may contain small amounts of rubber and plastic, is transferred to the material charging storage area. The majority of the plastic is separated from the lead-bearing components, washed, and shipped offsite for recycling. The lead salts, consisting primarily of lead sulfate, are slurried with soda ash in a desulfurizing process to produce lead carbonate, which is filtered out and transferred to the material charging storage area.

In the facility's current configuration, the solid lead and desulfurized lead salts are charged to a Blast Furnace, along with other lead-bearing materials, to produce molten lead. The molten lead is tapped from the furnace into molds to form "buttons," which can be sold or transferred to the refining area. Emissions from the Blast Furnace are controlled by an afterburner and baghouse. The fugitive emissions from the tapping and charging of the furnace are controlled by a separate baghouse.

In the refining area, the lead from the Blast Furnace is currently charged into one of the facility's Refining Kettles with alloying agents and fluxes appropriate for the type of finished lead to be produced. The emissions from the refining process are captured by hoods on the kettles and vented to a baghouse. The Refining Kettles are heated indirectly by natural gas combustion, the emissions from which are vented separately from the refining emissions. The refined lead is tapped from the kettles and cast into ingots.

1.2 Project Overview

As described earlier, the project consists of the addition, modification, and replacement of equipment to increase the production capacity of the facility. The following is a list of the currently-permitted emission units at the facility and their respective control devices:

Table 1-1: Current Emissions Units

EU ID Number	Emission Units	Control Devices
None	Battery Breaker	None
001	Blast Furnace	Afterburner & 34,000 cfm Baghouse
004	Tapping & Charging	18,000 cfm Baghouse
011	(4) 75 ton Refining Kettles	28,000 cfm Baghouse
013	Refining Kettle Exhaust (combustion gases only)	None
015	Blast Furnace Enclosure	65,000 cfm Cartridge Collector (currently being installed)
008	Soda Ash Silo	Bin Vent Filter
009	Facility Grounds & Roadways	Wet Suppression

The project calls for the addition of a Feed Dryer, Reverb Furnace, and six new Refining Kettles. Four of the new Kettles will have a capacity of 100 tons and two will have a capacity of 150 tons. The four existing Kettles will be converted from 75 ton capacity to 100 ton capacity. The existing Battery Breaker will be replaced by a larger hammer mill with attendant scrubber; and the existing Soda Ash Silo will be replaced by a new soda ash handling system that will include one Soda Ash Receiving Silo and two Soda Ash Process Silos. A new Plastics Plant will be constructed to turn the recycled plastic from the battery casings into pellets.

In order to control the potentially increased emissions from the expansion, new baghouses with additional air flow capacity will be installed on the dryer, furnaces, and kettle emissions. The existing afterburner on the blast furnace will be replaced by a larger afterburner that allows for comingling of the emissions from the two furnaces to reduce carbon monoxide and volatile organic compound emissions and a new wet scrubber will be installed to remove sulfur dioxide

emissions from the furnaces. Finally, the entire building will be enclosed and placed under negative pressure by a new cartridge collector.

The table below lists the emission units that will comprise the facility in its final configuration. Where possible, emission unit ID numbers have been retained for replaced emission units. New ID numbers have been assigned to new emission units.

Table 1-2: Proposed Emissions Units

EU ID Number	Emission Units	Control Devices
021	Battery Breaker	Scrubber
022	Feed Dryer	18,000 acfm Baghouse
023	Reverb Furnace	Afterburner, 54,000 acfm Baghouse, and Scrubber
001	Blast Furnace	
004	Tapping & Charging	72,000 acfm Baghouse
011	(8) 100 ton Refining Kettles & (2) 150 ton Refining Kettles	
013	Refining Kettle Exhaust (combustion gases only)	None
024	Building Ventilation	195,000 acfm Cartridge Collector
008	Soda Ash Silo	Bin Vent Filter
025	Plastics Plant	None
026	(4) Plastic Pellet Silos	(4) Bin Vent Filters
027	Propane Vaporizer	None
009	Facility Grounds & Roadways	Vacuum Sweep, Wet Suppression

A plant layout is provided in **Figure 1-2** and a process flow diagram is provided in **Figure 1-3**. A more detailed description of each of these emission units and control devices is presented, along with emissions estimating methodology, in **Section 2** of this application

1.3 Key Regulatory Requirements

Based on the emissions increases resulting from the proposed changes, the project will be subject to the requirements of the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) for particulate matter, lead, and nitrogen oxides. A detailed explanation of PSD applicability is presented in **Section 3**. As required by the PSD regulations, an analysis of the Best Available Control Technology (BACT) for each emission unit that emits

these pollutants is included in **Section 4**. Also, the required air quality impact analysis (dispersion modeling) is included in **Section 5** and additional impact analysis is presented in **Section 6**.

In addition to the PSD regulations, the facility will be subject to the requirements of the federal New Source Performance Standard (NSPS) for Secondary Lead Smelters (40 CFR 60 Subpart L) and the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Lead Smelting (40 CFR 63 Subpart X). A description of the limits and compliance monitoring for these regulations is included in **Section 3**.

Section 2

2 Process Units, Control Equipment, and Emissions Estimates

As described in the previous section, the expansion will entail the modification of existing process units, the addition of new process units, and the addition of new control equipment. This section describes the changes and pollutant estimating methodology. A spreadsheet showing detailed calculations of the emissions from all sources can be found in **Appendix B**. It is important to note that it has been assumed, for the purposes of this application, that $PM_{2.5}$ (particulate matter having a diameter of 2.5 microns or less) is equal to PM_{10} (particulate matter having a diameter of 10 microns or less). This is consistent with guidance from USEPA dated October 21, 1997 regarding "Interim Implementation of New Source Review Requirements for $PM_{2.5}$." Finally, many of the emission factors used in this analysis were developed from stack testing performed in November 2007 at an existing lead-acid battery recycling plant in Eagan, Minnesota, which is similar in design to the one being proposed in this application. A copy of the analysis of the stack test results from that facility is included in **Appendix B**.

2.1 Battery Breaker

The existing hammer mill will be replaced by a larger unit capable of crushing up to 50 tons per hour of spent lead-acid batteries. The emissions from the battery breaking process consist primarily of sulfuric acid mist, particulate matter, and small amounts of lead. Envirofocus will install a new wet scrubber to control these pollutant emissions. The actual emissions were estimated based upon stack test results from a similar battery breaker scrubber at EnviroFocus's sister plant in Eagan, Minnesota. The potential emissions were based upon allowable limits.

2.2 Feed Dryer

The metallic lead and desulfurized lead salts from the Battery Breaker are conveyed to the Feed Dryer to remove most of the moisture prior to charging to the Reverb Furnace. Heat is provided by natural gas combustion as a primary fuel and propane as a backup fuel. The pollutants emitted from the Feed Dryer consist of particulate matter and lead from the feed material and combustion products from the burners.

The combustion product emissions were estimated based upon the dryer's total burner rating and the appropriate AP-42 emissions factors. The particulate matter and lead emissions will be controlled by a new baghouse. The potential particulate matter and lead emissions were based upon baghouse outlet concentrations of 0.005 gr/dscf and 1 mg/dscm, respectively (the proposed BACT limits) and the actual emissions were estimated based upon stack testing at the Eagan plant. The dryer exhaust gases will be combined with the gases from the fumaces in a new stack identified as the Process Stack.

2.3 Furnaces

There will be two furnaces after the expansion project is complete: a new Reverb Furnace and the existing Blast Furnace. Below is an explanation of the operation of the two furnaces and their emissions.

2.3.1 Reverb Furnace

The Reverb Furnace will receive dried lead and lead salts from the Feed Dryer. Heat will be provided primarily by natural gas combustion with propane as a back-up fuel. The Reverb Furnace will produce molten lead which will be conveyed through channels called launders to the Refining Kettles. As a byproduct, the Reverb Furnace will also produce a slag material containing recoverable amounts of lead. This slag will be conveyed to the Blast Furnace for lead recovery.

The Reverb Furnace will emit particulate matter, lead, and trace amounts of other metal Hazardous Air Pollutants (HAPs), such as antimony, arsenic, cadmium, and mercury, from the smelting process, combustion gases from the firing of natural gas. Additionally, some of the sulfur in the lead salts will be converted in the hot furnace environment into sulfur dioxide.

2.3.2 Blast Furnace

The Blast Furnace will receive the slag material from the Reverb Furnace. In addition, other lead-bearing scrap materials (primarily from battery production facilities) will be fed to the Blast Furnace. Metallurgical coke will be combined with the slag and acts as the fuel providing the heat needed for the smelting process. Recovered lead will be cast into buttons for sale or transport to the Refining Kettles, as needed. Emissions from the Blast Furnace will consist of particulate matter, lead, and trace metal HAPs from the smelting process and combustion products from the coke.

2.3.3 Furnace Control Devices

Gases from both furnaces will be ducted to a common Afterburner Chamber. The Afterburner will reduce the carbon monoxide and volatile organic compounds emitted by the furnaces using heat provided by the Reverb Furnace exhaust gases. The gases will then be passed through a baghouse to control particulate matter and lead emissions. Following the baghouse, the gases will pass through a wet scrubber to reduce the sulfur dioxide emissions before combining with the dryer exhaust in a new stack identified as the Process Stack.

The potential particulate matter and lead emissions from the Process Stack were estimated based upon baghouse outlet concentrations of 0.005 gr/dscf and 1 mg/dscm, respectively, which are the proposed BACT limits for these pollutants. The actual emissions were estimated based upon stack testing at the Eagan facility. Also, the actual emissions of metal HAPs were estimated based upon Eagan stack testing, while the potential metal HAPs emissions were conservatively assumed to be twice these tested values. In reality, the metal HAPs emissions

will likely be lower as the sulfur dioxide scrubber, which is not present at the Eagan plant, will remove some of the metal HAPs. The actual NOx emissions were based upon emission factors found in USEPA's FIRE database and the potential NOx emissions were based upon proposed BACT limits. The actual CO and SO_2 emissions estimates were based on stack testing at Eagan, while the potentials were set equal to the amount that would be allowed under proposed PSD-avoidance limits assuming all other units are operated at their potentials. These limits are discussed in further detail in **Section 3.1.1**. The actual VOC emissions estimates were based on stack tests at Eagan and the potential emissions were based upon the limit for collocated furnaces established in the Secondary Lead MACT Standards.

2.4 Refining Kettles & Furnace Fugitives

This group of emissions units consists of 10 Refining Kettles that receive and process lead from the furnaces, as well as hooding designed to capture fugitive emissions from the furnaces (slag and lead tapping hoods, a charging hood at the Blast furnaces, etc.).

2.5 Kettle Combustion Emissions

The Refining Kettles are indirectly fired (ie. the combustion products do not contact the process). Therefore, the stacks that exhaust these combustion products are identified separately from the Kettles' process emissions. The Kettle Combustion Stack emissions (both potential and actual) were estimated based on the maximum firing rate of the burners and the appropriate AP-42 emission factors.

2.5.1 Kettle Process Emissions & Furnace Fugitives

The Refining Kettles will be used to process lead from the furnaces by mixing in fluxing agents to remove certain impurities and by adding certain alloying agents to produce lead alloys that meet predetermined specifications. The pollutant emissions consist of particulate matter, lead, and trace metal HAPs, which will be controlled by a new baghouse (identified as the Hygiene Baghouse), as well as sulfur dioxide and nitrogen oxides, which are formed during the addition of sulfur and niter (sodium nitrate) to the kettles. The emissions from the kettles will be combined with fugitive emissions from the furnaces prior to introduction into the baghouse.

The potential particulate matter and lead emissions were estimated using the same proposed BACT limits that were used for the furnace baghouse (0.005 gr/dscf and 1 mg/dscm, respectively). The actual particulate matter and lead emissions were based upon Eagan stack testing. The actual metal HAPs were estimated based on Eagan stack test results, while the potential metal HAPs were assumed to be double these values. The sulfur dioxide and nitrogen oxides emissions were estimated based upon emission factors that take into account the amounts of sulfur and niter added to the kettles. These factors were derived from the results of stack tests performed at the Exide Technologies smelter in California and Sanders Lead in Alabama. Documentation of these factors is included in **Appendix B**. The gases from the Hygiene Baghouse will be emitted from the new Hygiene Stack.

2.6 Building Ventilation

In order to reduce the impact of lead emissions on the environment, and to meet the strict requirements of the Secondary Lead MACT Standard, EnviroFocus will enclose the entire facility and ventilate the air exhausted from the building through a large 195,000 acfm cartridge collector identified as the Torit Collector. This air flow will produce an inward draft velocity at all openings in the building of 250 feet per minute to prevent lead emissions from escaping uncontrolled. The filtered gases will be emitted from a new stack identified as the Torit Stack. The pollutants emitted from the Torit Stack consist of particulate matter and lead. The potential particulate matter and lead emissions were estimated based on outlet concentrations of 0.005 gr/dscf and 0.5 mg/dscm (the proposed BACT limits) and the actual emissions were estimated based on stack testing at Eagan.

2.7 Soda Ash System

The soda ash handling system consists of a small Soda Ash Receiving Silo for receiving soda ash by truck and two larger Soda Ash Process Silos for distributing the soda ash to the desulfurization process and the sulfur dioxide scrubber. Emissions from these silos consist of particulate matter, which will be controlled by bin vent filters (fabric filters) atop the silos that filter the air displaced from the silos as they are filled. Emissions were estimated using an assumed outlet concentration from the bin vent filters of 0.005 gr/dscf, which will also be proposed as the BACT limit for these devices.

2.8 Plastics Processing

As previously described, the plastics from the battery casings will be transferred from the Battery Breaker to the Plastics Plant for recovery. The plastic recovery process also includes four Plastic Pellet Silos for holding the recovered product prior to shipping. Below is a brief description of the Plastics Plant and Plastic Pellet Silos, and their emissions.

2.8.1 Plastics Plant

The Plastics Plant will receive large plastic chips from the Battery Breaker. The plastic chips will first be reduced in size in a small wet hammer mill. Next, the chips will be melted and extruded into water to form plastic pellets. The pellets will be dried in a spin dryer and transferred pneumatically to one of the Plastic Pellet Silos. The emissions from the Plastics Plant consist of small amounts of PM and VOC that are emitted to the interior of the building. Emissions were estimated based on emission factors presented in a technical article entitled "Development of Emission Factors for Polypropylene Processing" that was published in AWMA magazine in 1999. A copy of the article is included in **Appendix B**.

2.8.2 Plastic Pellet Silos

EnviroFocus plans to install a total of four Plastic Pellet Silos for off-loading to truck and railcar. Two of the silos will be dedicated to truck loading and two for railcar loading. The silos will emit

minor amounts of particulate matter when they are being filled. The particulate matter will be controlled by bin vent filters atop the silos. The emissions were estimated based upon an assumed outlet concentration of 0.005 gr/dscf. This factor will be proposed as BACT for these emissions units.

2.9 Propane Vaporizer

As described above, natural gas will be used as the primary fuel for many of the processes, such as the furnaces and dryer. However, the site will maintain a propane tank to use in the event of natural gas curtailment. The propane tank operation will require the use of a propane vaporizer that includes a 1.2 mmBtu/hr burner. The emissions from the burner were estimated based upon appropriate AP-42 emission factors for propane combustion.

2.10 Emergency Generator

The facility will install a diesel-fired emergency generator with an anticipated capacity of 500 kW. The generator will only be used when power is not available from the local utility. The emissions from the generator were estimated based upon vendor specifications. The maximum hours of operation are not expected to exceed 500 hours per year. Therefore, the potential emissions were based on this annual operating level per EPA guidance.

2.11 Slurry Heaters

The plant will use a soda ash slurry injection system in the furnace gases as needed to supplement the sulfur dioxide removal performance of the scrubber. Soda ash may also be used as a backup reagent to the caustic ordinarily used in the scrubber. The soda ash slurry will be heated by two natural gas fired 0.75 mmBtu/hr burners. Heating the slurry will improve the soda ash dissolve time. The emissions from the heaters were estimated using appropriate AP-42 emission factors.

2.12 Roadway Fugitives

Vehicular traffic movement on plant roads and in parking areas will produce fugitive emissions of particulate matter and lead. The emissions were estimated based upon emissions formulas presented in Section 13 of AP-42. These formulas take into account the number and types of vehicles that move around the plant and the patterns they routinely follow.

The fugitive emissions from paved areas at the plant will be controlled by a variety of work practice standards, including vacuum sweeping and wet suppression. Also, as required by the Secondary Lead MACT, the building will have wheel wash stations to remove lead contamination from vehicles prior to exiting the building.

2.13 Facility-wide Totals

Below is a table showing the total estimated emissions for each of the pollutants from the proposed facility. Based on these totals, the facility will be classified as a major source under the Prevention of Significant Deterioration (PSD) regulations and the Title V Major Source Operating Permit Program. The regulatory requirements of these programs are discussed in more detail in the next section.

Table 2-1: Facility-wide Emissions

Pollutant	Expected Actual		Potential Emissions	
	lb/hr	tons/yr	lb/hr	tons/yr
PM10	10.45	45.63	14.79	64.65
VOC	0.58	2.50	3.65	15.96
NOx	41.38	140.01	55.63	203.87
CO	195.97	855.48	208.87	912.08
SO_2	177.69	771.75	204.98	891.52
Pb	0.25	1.12	0.93	4.06
Antimony	0.001	0.005	0.020	0.009
Arsenic	0.036	0.159	0.072	0.317
Cadmium	0.004	0.016	0.007	0.033
Mercury	0.001	0.002	0.004	0.018
HCl	0.05	0.22	0.05	0.22
H2SO4 (not HAP)	1.08	4.73	1.48	6.49
Carbon Disulfide	0.65	2.85	1.13	4.97
Total HAPs	0.96	4.19	2.16	9.44

Section 3

3 Regulatory Analysis

This section outlines the various federal and state regulations that will be applicable to the facility after the project is complete. All of the limits described below are also included in the appropriate sections of the application forms in **Appendix A**.

3.1 Federal Regulations

The facility is subject to several federal rules, which establish permitting requirements and allowable emission limits.

3.1.1 Prevention of Significant Deterioration

The plant site is located in Hillsborough County, which is in attainment with all National Ambient Air Quality Standards (NAAQS). Additionally, the plant's current potential emissions are such that the facility is categorized as a "major source" under the Prevention of Significant Deterioration (PSD) rules, as set forth in 40 CFR 52.21. Consequently, any pollutants for which the "net emissions increase" resulting from this project exceeds the "major modification" thresholds specified in the PSD rules must undergo the permit review requirements for Best Available Control Technology (BACT) and ambient air quality impact analysis.

The table below shows the facility's current actual emissions level (determined as the highest 24-month average in the last 10 years and the post-expansion potential emissions). The baseline values were previously reviewed and agreed upon by representatives of the Hillsborough County Environmental Protection Commission (EPC). A spreadsheet showing the details of these estimates is included in **Appendix B**. The difference, which is defined as the "net emissions increase," for each pollutant is shown in comparison with its respective "major modification" threshold. As shown, the net emissions increases of particulate matter, lead, and nitrogen oxides are in excess of the thresholds. Therefore, this application includes an analysis of BACT (**Section 4.0**) and an ambient air quality impact analysis (**Section 5.0**) for each of these pollutants.

Table 3-1: PSD Applicability Analysis

Pollutant	Baseline Actual Emissions (tons/year)	Future Potential Emissions (tons/year)	Net Emissions Increase (tons/year)	Significance Thresholds (tons/year)	PSD Triggered?
Particulate Matter ($PM/PM_{10}/PM_{2.5}$)	23.8	64.7	40.8	15	**Yes**
Oxides of Nitrogen (NO_x)	34.7	203.9	169.2	40	**Yes**

Table 3-1: PSD Applicability Analysis

Pollutant	Baseline Actual Emissions (tons/year)	Future Potential Emissions (tons/year)	Net Emissions Increase (tons/year)	Significance Thresholds (tons/year)	PSD Triggered?
Sulfur Dioxide (SO_2)	852.5	891.5*	39.0	40	No
Carbon Monoxide (CO)	813.1	912.1*	99.0	100	No
Volatile Organic Compounds (VOC)	60.0	16.0	-44.0	40	No
Lead and lead compounds (Pb)	1.22	4.06	2.84	0.6	**Yes**
Sulfuric Acid Mist (H_2SO_4)	4.43	6.49	2.06	7	No
Mercury (Hg)	0.012	0.018	0.008	0.1	No
Carbon Disulfide (CS_2)	29.41	4.97	-24.44	10	No

* With Avoidance Limits – see below

It is important to note that the future potential emissions of sulfur dioxide and carbon monoxide are based on PSD-avoidance limits. More specifically, EnviroFocus is requesting facility-wide limits on sulfur dioxide and carbon monoxide emissions of 891.5 ton/yr and 912.1 ton/yr, respectively. Compliance with these limits will be demonstrated on a rolling-12-month-total basis. The sulfur dioxide and carbon monoxide emissions from the furnaces and dryer will be determined using continuous emissions monitoring systems on the process stack. The sulfur dioxide emissions from refining will be determined by recording the amount of sulfur used in the kettles and multiplying times the appropriate emission factor. The sulfur dioxide and carbon monoxide from the remaining sources, which are all combustion sources, will be determined by recording their fuel usage and multiplying by the appropriate emission factor.

3.1.2 New Source Performance Standards

The emissions from the furnaces and refining kettles are subject to the federal New Source Performance Standards (NSPS) for Secondary Lead Smelters (40 CFR 60 Subpart L). This NSPS establishes an emission limit of 0.022 gr/dscf on particulate matter from furnaces. It also establishes visible emissions limits of 20% opacity on furnaces and 10% on refining kettles. EnviroFocus is proposing to install baghouses on the furnaces and kettles capable of meeting a

proposed BACT limit of 0.005 gr/dscf, which is well below the standard specified in the NSPS and will result in visible emissions well below the opacity limits.

The emergency generator will be subject to the NSPS for Compression Ignition (CI) Internal Combustion Engines (40 CFR 60 Subpart IIII). This standard requires the owners and operators of diesel engines to purchase engines certified by the manufacturer to meet specified emission limits. EnviroFocus will purchase a certified engine as required by the rule.

3.1.3 National Emission Standards for Hazardous Air Pollutants

The facility is also subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting (40 CFR 63 Subpart X). This rule establishes a limit of 2.0 mg/dscm on lead emissions from the furnaces. This limit establishes the Maximum Achievable Control Technology (MACT) for all metal HAPs using lead as a surrogate. The rule also establishes MACT for organic HAPS by establishing limits on total hydrocarbons (THC) from the furnaces depending on their operating status. More specifically, the THC limit is 20 ppm when both furnaces are operating, but increases to 360 ppm when the Blast Furnace is operating by itself. The baghouse planned for the furnaces will be capable of meeting a proposed BACT lead emission limit of 1.0 mg/dscm, which is half the NESHAP limit. Additionally, this baghouse will be required by the NESHAP to have leak-detection monitors and to be stack tested to ensure compliance. Finally, the furnace gases will be comingled in an Afterburner Chamber that has sufficient temperature and residence time to meet the THC limits.

The NESHAP also contains a limit of 2.0 mg/dscm on lead from process fugitive sources (furnace charging and tapping, refining kettle processes). The baghouse proposed for these sources (the Hygiene Baghouse) will be capable of meeting a lower BACT limit of only 1.0 mg/dscm. In addition, the rule specifies capture requirements in the form of hood face velocities for these emissions units or enclosure in a building that is ventilated through a control device meeting an emission limit of 2.0 mg/dscm. EnviroFocus is proposing to use the enclosure option ventilated to a cartridge collector (Torit Collector) and is proposing a BACT limit on the emissions from the building ventilation of only 0.5 mg/dscm, which is only a quarter of the limit allowed by the NESHAP.

Finally, the NESHAP establishes work practice standards for fugitive sources, such as roadways and material storage and handling to minimize emissions from these activities. Envirofocus will comply with these requirements by enclosing the material storage and handling areas in a building ventilated to a cartridge collector as previously described, and vacuum sweeping of paved areas around the plant. Vacuum sweeping will be performed three times per day as required by the rule. Fugitive dust from the paved areas will also be controlled by wet suppression.

Although there is a NESHAP established for IC Engines (40 CFR 63 Subpart ZZZZ), it will not be applicable to the emergency generator, because the facility in not a major source of Hazardous Air Pollutants.

3.1.4 Title V Major Source Operating Permit Program

The facility is classified as a "major source" under the Operating Permits provisions of Title V of the Clean Air Act Amendments of 1990 as established in 40 CFR Part 70. This rule requires the facility to have a Title V operating permit, which it does, and to submit an application to modify the Title V permit within one year of commencing operation after the expansion. EnviroFocus will submit the application as required following completion of the project.

3.2 State Regulations

The State of Florida maintains several rules which limit the emissions from the operations at EnviroFocus. The following is a list of the applicable state rules and a brief summary of each rule:

3.2.1 62-296.320(4), FAC

This rule establishes general particulate matter emissions standards. Part (a) limits the particulate matter emissions from industrial processes to a level dependent upon the process's weight rate. The rule establishes two formulas that are used to determine the allowable emission rate depending upon whether the process weight rate is above or below 30 tons per hour. For example, the particulate matter emissions from the Feed Dryer, operating at its maximum processing rate of 40 tons per hour, are limited according to the following formula:

$$\text{Emission Limit} = 17.31 \times (40 \text{ tph})^{0.16} = 31.23 \text{ lb/hr}$$

The baghouse planned for the Feed Dryer will be capable of meeting a proposed BACT limit of 0.005 gr/dscf, which given its air flow is equivalent to only 0.50 lb/hr. Similarly, for all of the proposed PM-emitting sources that are subject to this rule will be controlled by devices that are subject to more stringent BACT requirements.

Part (b) of the rule limits the visible emissions from particulate matter sources to 20 percent opacity. The particulate controls planned for the EnviroFocus facility will easily comply with the opacity standard.

Part (c) establishes work practice standards to minimize fugitive particulate matter emissions. Examples given in the rule include paving and wet suppression. EnviroFocus will be employing a wet suppression system on all paved areas to meet this requirement.

3.2.2 62-296.603, FAC

This rule establishes lead emission limits and opacity standards for specific lead smelting operations. For example, Part (1)(a) limits the emissions from blast furnaces to 0.010 gr/dscf of lead and 3% opacity. The rule also includes limits for blast furnace charging and tapping, refining kettles, and battery cracking operations. The control devices planned at EnviroFocus will be capable of complying with a lower BACT limit of 1.0 mg/dscm (0.00044gr/dscf). Compliance will be demonstrated by initial stack testing.

3.2.3 62-296.700 & 62-296.712, FAC

These two rules establish the particulate matter RACT requirements for the facility. The first rule, 62-296.700, requires all emission units that emit greater than 1 ton per year to employ Reasonably Available Control Technology (RACT) for particulate matter emissions. The second rule, 62-296.712, establishes PM RACT for Miscellaneous Manufacturing Process Operations as 0.03 gr/dscf and 5 percent opacity. These limits will apply to the emissions from the Battery Breaker Stack, Process Stack, Hygiene Stack, and Torit Stack. All of these stacks will have more stringent particulate matter emission limits due to the BACT requirements described in the next section.

Section 4

4 Best Available Control Technology (BACT) Analysis

The proposed project will trigger the requirements of the federal PSD program (40 CFR 52.21) for NOx, PM, and lead emissions. Consequently, all proposed sources of these pollutants will be required to employ control equipment that constitutes the Best Available Control Technologies (BACT) as defined in the rule. For the purposes of this evaluation, EnviroFocus intends to fulfill the BACT requirements for PM2.5 by meeting PM10 BACT requirements, as described in USEPA guidance.

The process of determining the appropriate level of control to meet BACT has been established by USEPA as a "top-down" approach consisting of the following steps

- Identify all control options (using available information sources such as EPA's RACT/BACT/LAER Clearinghouse (RBLC))
- Eliminate any control options that are technically infeasible
- Sort remaining controls options by efficiency (highest to lowest)
- Perform cost effectiveness analysis (expressed in terms of dollars per ton of pollutant removed) on each control option starting with most efficient control option
- Select BACT as most efficient option that is both technically and economically feasible (include a numerical emission limit that is achievable through the use of the selected control option)

For many of the units at the proposed EnviroFocus facility, this process was simplified by the fact that the most efficient control options are already needed to comply with the NSPS and NESHAP limits. In these cases, technical and economic feasibility can be assumed. Below is a discussion of the proposed BACT controls and emission limits for each unit that emits NOx, PM, or Lead.

4.1 Battery Breaker

The Battery Breaker produces both particulate matter and lead emissions. Most of the particulate matter is in the form of acid mist from the sulfuric acid in the battery.

4.1.1 Particulate Matter

Due to the wet nature of the emissions from the Battery Breaker, the only control option that is technically feasible is a wet scrubber. A wet scrubber will also provide control for any lead emissions that are present. Therefore, EnviroFocus proposes to install a wet scrubber as BACT for this process. Additionally, EnviroFocus proposes a limit of 0.005 gr/dscf based on the results of testing of the Battery Breaker Scrubber at EnviroFocus' sister plant in Eagan, Minnesota.

4.1.2 Lead

As mentioned above, the only technically feasible control option for the Battery Breaker emissions is a wet scrubber. Therefore, EnviroFocus proposes to install a wet scrubber as BACT for this process. Additionally, EnviroFocus proposes a limit of 1.0 mg/dscm based on the results of testing of the Battery Breaker Scrubber at EnviroFocus' sister plant in Eagan, Minnesota. This is half the lead emission limit that was determined to be the Maximum Achievable Control Technology (MACT) for new sources in the Secondary Lead NESHAP (40 CFR 63 Subpart X). A limit of 1.0 mg/dscm is considered exemplary in the NESHAP and meeting this limit is afforded less frequent testing requirements.

4.2 Feed Dryer

The Feed Dryer will contribute to the emissions of particulate matter, lead, and nitrogen oxides. Therefore, the Feed Dryer is subject to BACT analysis for these pollutants. It is important to note that the emissions from the Feed Dryer are combined with the emissions from the furnace in a combined stack. Therefore, the emission limits are applicable to the combined emissions.

4.2.1 Particulate Matter

The most efficient control option available for particulate emissions from the dryer is a baghouse. EnviroFocus will be obligated to install a baghouse in order to meet the NESHAP and state emission limit requirements. Therefore, Envirofocus proposes this control option as BACT for this emissions unit. EnviroFocus also proposes a numerical limit of 0.005 gr/dscf for all of the sources, including the furnaces, that emit through the combined Process Stack. This is less than a quarter of the NSPS limit of 0.022 gr/dscf. Justification for this emissions limit is presented in the BACT sections for the furnaces.

4.2.2 Lead

EnviroFocus also proposes that the baghouse serve as BACT for the lead emissions. The BACT lead emission limit is proposed to be 1 mg/dscm for all sources emitting from the combined Process Stack. This limit is only half of the MACT standard established in the NESHAP. Justification for this limit is included in the BACT sections for the furnaces.

4.2.3 Nitrogen Oxides

The majority of the NOx emitted from the combined Process Stack will be contributed by the furnaces due to their higher temperatures and the effect of the afterburner. A review of the RBLC reveals no instances of Feed Dryer emissions being controlled for NOx. Therefore, EnviroFocus proposes to use "good combustion practices" as NOx BACT for the Feed Dryer. For the purposes of determining an appropriate NOx BACT limit for the Dryer's contribution to the Process Stack gases, Envirofocus proposes to use the AP-42 factor (0.21 lb/mmBtu) for propane combustion (the backup fuel), which is slightly higher than the factor for natural gas combustion, to determine the dryer's contribution. Using this method, the maximum NOx

emission rate from the dryer is 2.10 lb/hr, as shown in the Emission Inventory (**Appendix B**). The NOx emissions from the furnaces will have separately-defined BACT limits described below. Because the exhaust from the dryer is combined with the exhaust from the furnaces, EnviroFocus proposes to establish a combined BACT limit for all three units and to demonstrate compliance by operating a continuous monitoring system (CEMS) on the stack. Also, due to naturally occurring fluctuations in NOx, EnviroFocus requests that compliance with the limit be determined on a rolling-30-day-average basis.

4.3 Reverb Furnace

The Reverb Furnace will contribute to the PM, Lead, and NOx emissions from the Process Stack and is, therefore, subject to BACT.

4.3.1 Particulate Matter

A review of the RBLC revealed two previous BACT determinations for particulate matter emissions from lead smelting furnaces. A copy of all RBLC determinations for this industry is included for reference in **Appendix D**. The first determination was made in 1988 at Sanders Lead Company in Alabama. The determination called for the use of a baghouse to control particulate matter emissions and established a numerical limit of 0.01 gr/dscf. The second determination, made in 1989 at Doe Run Company in Missouri, included both a reverb furnace and blast furnace. A scrubber was determined to be BACT for the blast furnace and a baghouse was determined to be BACT for the reverb furnace. The determination included numerical emission limits of 24.4 ton/yr and 60.6 ton/yr on the blast furnace and reverb furnace, respectively. For comparison purposes, it was noted that the production capacity of the Doe Run plant was 60,000 tons per year (less than half the capacity of the EnviroFocus plant).

As was stated earlier, EnviroFocus' Reverb Furnace will be subject to NSPS, NESHAP, and state emission limits that necessitate the installation of a baghouse. Therefore, EnviroFocus proposes to use a baghouse as BACT for the Reverb Furnace. As described in the Feed Dryer section, Envirofocus proposes a limit of 0.005 gr/dscf as BACT for all gases emitted from the Process Stack. This is well below the BACT limit established at Sanders Lead and is equivalent to only 8.45 ton/yr, well below the annual BACT limits established for Doe Run Company. As mentioned previously, it is also less than a quarter of the NSPS limit.

4.3.2 Lead

The RBLC contains three determinations for lead emissions from lead smelting furnaces. The first determination, mentioned in the previous section, was made in 1988 at Sanders Lead and called for a baghouse to be used as BACT. The numerical limit established for lead BACT was 0.005 gr/dscf. The second determination, also mentioned above, was made at Doe Run Company in Missouri, and called for a scrubber on the blast furnace and a baghouse on the reverb furnace. The lead BACT limits were set at 8.3 ton/yr and 12.6 ton/yr. The third determination was made at Interstate Lead Company in Alabama. This determination required

the use of a baghouse (fabric filter) and building enclosure. The emission limit was set at 0.0001 gr/dscf. However, the facility was shut down shortly afterward and the feasibility of this limit was never verified.

EnviroFocus proposes to use the planned furnace baghouse as BACT for lead emissions from the Reverb Furnace. As described in the Feed Dryer section, the proposed lead BACT emission limit for all sources that emit from the Process Stack would be 1 mg/dscm (0.00044 gr/dscf). This limit is well below the BACT limit established for Sanders Lead and is equivalent to only 0.74 ton/yr for all sources emitting from the Process Stack (well below the Doe Run annual limits). Although it is higher than the determination made for Interstate Lead Company, their limit was never proven in practice. Also, the BACT limit being proposed is only half of the limit established as MACT in the Secondary Lead NESHAP.

4.3.3 Nitrogen Oxides

Most of the NOx emitted from the Process Stack will be produced by the furnaces rather than the dryer due to the higher temperatures involved. Most of the furnace NOx is "thermal NOx" produced by air in the presence of high temperatures, rather than evolving from nitrogen in fuels or raw materials. Therefore the investigation into potential control options was limited to add-on controls and combustion controls rather than fuel or raw material substitutions.

A review of EPA's RACT/BACT/LAER Clearinghouse (RBLC) shows no NOx BACT determinations for furnaces at lead smelters. A survey of the industry only revealed one instance of an add-on control technology being employed for NOx reduction at a lead smelting furnace. This control technology, referred to as "LoTOx", is being used at the Quemetco facility in City of Industry, California. The technology consists of the introduction of ozone into the furnace gases ahead of a wet scrubber. The ozone reacts with nitrogen oxides in the gases to form N_2O_3 and N_2O_5, which are water soluble and can be collected by the scrubber. However, it was installed to meet the requirements of Lowest Achievable Emissions Rate (LAER) requirements, which are more stringent than BACT requirements. An interview with plant representatives, revealed that the operation of the unit was considerably more expensive than BACT typically requires, approximately half a million dollars per year, in addition to the capital recovery cost. Initially, prior to it being required by LAER, the plant considered adopting the controls to produce NOx credits, but the project could not be supported by the value of the NOx credits that would result from its use. Additionally, since its adoption, the plant has discovered that the removal efficiency is much poorer than originally anticipated and requires that the reverb furnace be operated in a reducing environment, which slows the process rate. Due to the experimental status of this technology and its inherently high cost, LoTOX was considered to be not technically nor economically feasible for this application.

There are two other add-on controls that are traditionally identified as control options for nitrogen oxides emissions: selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR). SCR is generally considered the most efficient control option yielding control efficiencies as high as 70 to 95%. This technology involves the injection of ammonia or

urea into the gas stream in the presence of a catalyst to reduce NOx. However, the catalysts used in this control technology are especially susceptible to "poisoning" by the types of metal fume present in smelting furnace emissions. Therefore, this control option is not considered technically feasible.

SNCR is similar to SCR except that no catalyst is present and the temperature range needed for proper operation is higher. SNCR has been shown to achieve 30 to 50% NOx reduction in boiler exhaust gas streams. However, boiler exhaust gases are more consistent in temperature, air flow, and NOx concentration than metallurgical furnaces. The use of SNCR on a lead smelting furnace would require the use of excessive ammonia or urea in order to accommodate the fluctuating conditions while achieving any reasonable control efficiency. These conditions would inevitably lead to considerable "slip" of the reagent into the gases emitted to the atmosphere and the resulting control efficiency would be lower than what is achieved in boilers as a consequence. The reagent would also interfere with the operation of the downstream sulfur dioxide scrubber. For these reasons, SNCR is considered not technically feasible.

As discussed previously, most of the NOx produced in a lead smelting furnace comes from the air passing through the hot furnace environment (thermal NOx). Consequently, the most effective control of NOx emissions from the furnace consists of various combustion control practices. The two most effective options are low NOx burners and furnace draft control. The term low-NOx refers to burners configured to minimize the formation of "thermal NOx" by using flame patterns that eliminate "hot spots" and/or by substituting oxygen for air to minimize the nitrogen available for thermal NOx formation. Furnace draft control refers to minimizing air infiltration through the various openings, such as tap and slag holes, so that there is less air available for conversion to NOx. Additionally, this has the added benefit of reducing the amount of fuel combustion needed to melt the feed stock, thereby minimizing the emission of all products of combustion.

Given the above explanation regarding the effectiveness of using low-NOx burners and controlling furnace draft, EnviroFocus proposes as BACT to use air/oxy/fuel burners, which substitute oxygen for some of the air used by the burners, and furnace draft control. There are no AP-42 emission factors for NOx emissions from lead smelting, but stack testing performed at a similar furnace at the Eagan Plant indicates that the NOx emissions from the Reverb Furnace can be limited to 0.60 lb/ton material charged. Therefore, EnviroFocus proposes this limit as NOx BACT for the Reverb Furnace. As described in the Dryer section, EnviroFocus proposes to install a CEMS on the Process Stack to demonstrate compliance with a limit representing the total BACT limit for the dryer and furnaces combined.

4.4 Blast Furnace

The Blast Furnace will contribute to the PM, Lead, and NOx emissions from the Process Stack and is, therefore, subject to BACT for these pollutants. Most of the discussion related to the Reverb Furnace applies to the Blast Furnace.

4.4.1 Particulate Matter

The Blast Furnace will also be subject to NSPS, NESHAP, and state emission limits that necessitate the installation of a baghouse. EnviroFocus therefore proposes a baghouse as BACT. As described in the Feed Dryer and Reverb Furnace sections above, Envirofocus proposes a limit of 0.005 gr/dscf as BACT for all gases emitted from the Process Stack.

4.4.2 Lead

EnviroFocus proposes that the baghouse also serve as BACT for lead emissions from the Blast Furnace. As described in the Feed Dryer and Reverb Furnace sections above, the proposed lead BACT emission limit would be 1 mg/dscm.

4.4.3 Nitrogen Oxides

As previously discussed, most of the NOx emitted from the Process Stack is a result of thermal NOx formation in the furnaces. The Blast Furnace uses coke mixed with the feed stock as its fuel, so low-NOx burners are not an option. Additionally, as described previously, there are no add-on controls for NOx that are considered technically feasible for the furnaces. Therefore, EnviroFocus proposes as NOx BACT to employ good furnace draft control to minimize NOx emissions. In the absence of AP-42 emission factors for NOx emissions from lead smelting, EnviroFocus has reviewed the results of stack testing performed on a similar furnace at the Eagan Plant to determine an appropriate emission limit. Based on this information, EnviroFocus proposes a NOx BACT limit of 0.40 lb/ton material charged for the Blast Furnace. Given the limits proposed for the dryer and both furnaces, the equivalent NOx limit at the Process Stack is 29.1 pounds per hour. As previously discussed, EnviroFocus proposes to demonstrate compliance with this combined limit using a CEMS on a 30-day-rolling-average basis.

4.5 Refining Kettles & Furnace Fugitives

The Refining Kettles & Furnace Fugitives will emit particulate matter, lead, and nitrogen oxides and will be subject to BACT for these pollutants.

4.5.1 Particulate Matter

These sources will also be subject to NSPS, NESHAP, and state emission limits that necessitate the installation of a baghouse. EnviroFocus therefore proposes a baghouse as BACT. Envirofocus proposes an emission limit of 0.005 gr/dscf as BACT for all gases emitted from the baghouse controlling these sources (Hygiene Baghouse). This is the same value used for the Process Stack, which is less than a quarter of the NSPS limit.

4.5.2 Lead

EnviroFocus proposes that the Hygiene Baghouse also serve as BACT for lead emissions from the Refining Kettles and Furnace Fugitives. The proposed lead BACT emission limit is 1 mg/dscm (half of the MACT limit).

4.5.3 Nitrogen Oxides

The nitrogen oxides produced by this group of emission units is primarily generated by the use of niter (sodium nitrate) in the Refining Kettles. No control equipment has been found to be technically feasible for the control of these emissions due to their intermittent nature and no raw material substitutes are available. Therefore, EnviroFocus proposes that "no controls" be deemed BACT for NOx emissions from the Refining Kettles. Additionally, the kettles are indirectly fired by natural gas burners (ie. the combustion gases are stacked separately from the process emissions). There were no BACT determinations for kettle burners in the RBLC. Given the relatively low level of NOx emissions from these units (0.2 lb/hr maximum for each kettle), EnviroFocus proposes that "good combustion practices" be deemed as BACT for the burners on the Refining Kettles, as well.

4.6 Building Ventilation

The Building Ventilation includes particulate and lead emissions from a variety of fugitive sources inside the building. Therefore, it will be subject to the requirements of BACT for these pollutants.

4.6.1 Particulate Matter

The NESHAP for Secondary Lead Smelters establishes a lead emission limit on all air emitted from a smelter building that necessitates the use of a dust collector. In this case, EnviroFocus has elected to use a high-efficiency Torit cartridge collector. EnviroFocus proposes to use this collector as BACT for PM. The proposed PM emission limit is the same as the Process Stack and Hygiene Stack limit (0.005 gr/dscf).

4.6.2 Lead

EnviroFocus also proposes that the cartridge collector be deemed as BACT for lead emissions. EnviroFocus proposes a limit of 0.5 mg/dscm. This is lower than the lead BACT limit for the Process Stack and Hygiene Stack due to the lower lead in particulate matter concentration typical of this source.

4.7 Soda Ash System

The Soda Ash Receiving Silo and the two Soda Ash Process Silos will emit particulate matter and will be subject to BACT.

4.7.1 Particulate Matter

All three silos will be outfitted with fabric filters, typically referred to as bin vent filters. These high energy control devices are proposed to be BACT for PM emissions from these emissions units. EnviroFocus proposes a BACT emission limit of 0.01 gr/dscf based on information for the supplier. This is only a 1/3 of the allowable RACT concentration limit published in Rule 296.712, FAC.

4.8 Plastics Processing

The Plastics Processing, which consists of the Plastics Plant and four Plastic Pellets Silos, produces PM limits and is therefore subject to BACT.

4.8.1 Particulate Matter

The Plastics Plant itself produces a minor amount of particulate matter emissions (0.53 ton/yr) that are emitted fugitively to the interior of the building. Therefore, EnviroFocus proposes that "no controls" be deemed to be PM BACT for this emission unit. The Plastic Pellet Silos will be fitted with bin vent filters similar to those used on the Soda Ash Silos. EnviroFocus proposes that these control devices be considered BACT for the silos. EnviroFocus also proposes a PM limit for the silos of 0.001 gr/dscf. This is lower than the proposed PM BACT limit on other sources, as the process (plastic pellet storage) produces less particulate matter.

4.9 Propane Vaporizer

The Propane Vaporizer produces nitrogen oxides, one of the pollutants for which PSD has been triggered. Therefore it is subject to BACT analysis.

4.9.1 Nitrogen Oxides

The NOx emissions from the Propane Vaporizer are very minor (0.04 lb/hr) and are only emitted when the source is operated for natural gas curtailment. Therefore, EnviroFocus proposes that "good combustion practices" be deemed as BACT for this emissions unit.

4.10 Emergency Generator

The Emergency Generator will produce particulate matter and nitrogen oxides, two of the pollutants for which PSD has been triggered. Therefore it is subject to BACT analysis.

4.10.1 Particulate Matter

The anticipated PM emissions from the Emergency Generator are very minor (0.008 tons/yr) due to its infrequent operation. However, it will be subject to a PM emissions limit established in the NSPS for CI engines (40 CFR Part 60 Subpart IIII) depending upon its model year. Therefore, EnviroFocus proposes that this limit be deemed as BACT for this unit.

4.10.2 Nitrogen Oxides

The anticipated NOx emissions from the Emergency Generator are very minor (2.41 tons/yr) due to its infrequent operation. However, it will be subject to a NOx emissions limit established in the NSPS for CI engines (40 CFR Part 60 Subpart IIII) depending upon its model year. Therefore, EnviroFocus proposes that this limit be deemed as BACT for this unit.

4.11 Soda Ash Slurry Heaters

The Soda Ash Slurry Heaters will produce nitrogen oxides, one of the pollutants for which PSD has been triggered. Therefore they are subject to BACT analysis.

4.11.1 Nitrogen Oxides

The NOx emissions from the Soda Ash Slurry Heaters are very minor (0.15 lb/hr) and are only emitted when the source is operated for supplemental sulfur dioxide removal. Therefore, EnviroFocus proposes that "good combustion practices" be deemed as BACT for these emissions units.

4.12 Roadway Fugitives

The paved areas at the plant site will produce fugitive emissions of particulate matter and lead. Therefore, it is subject to BACT analysis.

4.12.1 Particulate Matter

The NESHAP for Secondary Lead contains several work practice standards, such as pavement cleaning and wheel wash stations. Additionally, in order to insure compliance with the lead NAAQS, the plant has historically used a pavement wetting system to minimize fugitive dust emissions. EnviroFocus proposes that these work practice standards be deemed BACT for particulate matter.

4.12.2 Lead

EnviroFocus proposes the same work practice standards mentioned above as BACT for lead emissions from paved areas. The estimated maximum lead emission rate using these controls is 0.178 ton/yr.

Table 4-1 below summarizes the proposed BACT control methods, emissions limits, and compliance demonstration methods.

Table 4-1: Proposed BACT				
Emissions Unit	**Pollutant**	**Control Method**	**Emissions Limit**	**Compliance Method**
Battery Breaker	$PM/PM_{10}/PM_{2.5}$ (incl. H_2SO_4)	Wet Scrubber	0.005 gr/dscf	Annual Methods 5&8 & Parametric Mon.
	Lead	Wet Scrubber	1.0 mg/dscm	Annual Method 12 & Parametric Mon.
Feed Dryer	$PM/PM_{10}/PM_{2.5}$	Baghouse	0.005 gr/dscf	Annual Method 5 & Leak Detection
	Lead	Baghouse	1.0 mg/dscm	Annual Method 12 & Leak Detection
	NOx	Good Combustion	0.21 lb/mmBtu (2.1 lb/hr)	CEM 30-day avg. at combined stack
Reverb Furnace	$PM/PM_{10}/PM_{2.5}$	Baghouse	0.005 gr/dscf	Annual Method 5 & Leak Detection
	Lead	Baghouse	1.0 mg/dscm	Annual Method 12 & Leak Detection
	NOx	Air/Oxy/Fuel Burners & Furnace Draft Control	0.60 lb/ton feed (24.0 lb/hr)	CEM 30-day avg. at combined stack
Blast Furnace	$PM/PM_{10}/PM_{2.5}$	Baghouse	0.005 gr/dscf	Annual Method 5 & Leak Detection
	Lead	Baghouse	1.0 mg/dscm	Annual Method 12 & Leak Detection
	NOx	Furnace Draft Control	0.40 lb/ton feed (3.0 lb/hr)	CEM 30-day avg. at combined stack
Refining Kettles & Furnace Fugitives	$PM/PM_{10}/PM_{2.5}$	Baghouse	0.005 gr/dscf	Annual Method 5 & Leak Detection
	Lead	Baghouse	1.0 mg/dscm	Annual Method 12 & Leak Detection
	NOx	Good Combustion	None	Proper O&M
Building Ventilation	$PM/PM_{10}/PM_{2.5}$	Cartridge Collector	0.005 gr/dscf	Annual Method 5 & Leak Detection
	Lead	Cartridge Collector	0.5 mg/dscm	Annual Method 12 & Leak Detection
Soda Ash Silos	$PM/PM_{10}/PM_{2.5}$	Bin Vent Filters	0.005 gr/dscf	Initial Method 9 & Proper O&M
Plastic Plant	$PM/PM_{10}/PM_{2.5}$	No Control	None	None

Table 4-1: Proposed BACT				
Emissions Unit	**Pollutant**	**Control Method**	**Emissions Limit**	**Compliance Method**
Plastic Pellet Silos	$PM/PM_{10}/PM_{2.5}$	Bin Vent Filters	0.001 gr/dscf	Initial Method 9 & Proper Operation
Propane Vaporizer	NOx	Good Combustion	None	Proper O&M
Emergency Generator	$PM/PM_{10}/PM_{2.5}$	Combustion Design	NSPS dependent on model year	Certificate from Manufacturer
	NOx	Combustion Design	NSPS dependent on model year	Certificate from Manufacturer
Slurry Heater	NOx	Good Combustion	None	Proper O&M
Plant Roadways	$PM/PM_{10}/PM_{2.5}$	Vacuum/Wetting	None	Standard Operating Procedures
	Lead	Vacuum/Wetting	None	Standard Operating Procedures

Section 5

5 Air Quality Impact Analysis

This ambient air quality impact analysis was prepared to comply with the PSD program dispersion modeling requirements. The modeling requirements of the PSD program were triggered for this project for the potential emissions of PM_{10}, lead, and nitrogen dioxide (NO_2).

The ambient air quality analysis demonstrates that the proposed project will not significantly impact local air quality by either jeopardizing the attainment of the applicable national and state Ambient Air Quality Standards (AAQS) or by exceeding the allowable PSD increments. Dispersion modeling was used to demonstrate compliance with the applicable AAQSs, considering the impacts from any neighboring facilities on the proposed source's area of significant impact and accounting for the contribution of non-modeled sources, such as area and mobile sources, as represented by background monitored concentrations. Dispersion modeling was also used to demonstrate that the proposed source's maximum potential emissions would not consume more than the allowable increment, in conjunction with any neighboring sources. Compliance with the allowable PSD increment ensures that the proposed source will not unacceptably degrade local air quality "down" to the applicable AAQS.

Below is a detailed explanation of the methodology used in this analysis and a presentation of the results. All figures referenced in this section can be found in **Appendix C**. The tables are included, along with a printout and CD of the modeling files in **Appendix H**.

5.1 Ambient Air Quality Analysis Methodology

5.1.1 General Facility Location

The facility is located at 1901 N. 66th Street in Tampa (Hillsborough County), Florida. **Figure 1-1** depicts the location of the facility and the surrounding region.

5.1.2 Proposed Project

The ENVIROFOCUS facility is proposing to upgrade its lead smelting operations. The proposed project consists of the addition of a Feed Dryer, Reverb Furnace, and six new Refining Kettles. The existing Battery Breaker will be replaced by a larger hammer mill with attendant scrubber; and the existing Soda Ash Silo will be replaced by a new soda ash handling system that will include one Soda Ash Receiving Silo and two Soda Ash Process Silos. A new Plastics Plant will be constructed to turn the recycled plastic from the battery casings into pellets. All of these significant sources and other minor sources are included in the dispersion modeling analysis using emission estimates described in **Section 2** and presented in detail in **Appendix B.**

5.1.3 Outline of PSD Ambient Air Quality Analysis

The ambient air quality impact analyses required under the PSD program are typically performed in two steps. First, the net emission increases from the proposed project are modeled to determine if the net increase in emissions from the project alone have a significant impact on air quality for any pollutant under evaluation. The dispersion model used for the PSD analysis was AERMOD, following USEPA guidance, as discussed further in Section 5.2.1. The significant impact thresholds are defined in the PSD program (see **Table 5-1**). This analysis determines the significant impact area (SIA) for each pollutant.

If the impact on air quality resulting from the proposed emissions of a pollutant is significant, then a full impact analysis of the proposed project's emissions of that pollutant is required. A full impact analysis consists of an AAQS compliance analysis and a PSD increment consumption analysis. **Table 5-2** summarizes the applicable AAQS and the allowable PSD increments.

In demonstrating compliance with the applicable AAQS, the analysis consists of estimating the ambient air quality impact resulting from the proposed project's maximum potential emissions in conjunction with the potential impacts of neighboring sources and with area sources contributing to the background concentration. In demonstrating compliance with the allowable PSD increment, a comparison is made between the modeled impacts resulting from the proposed project, along with any other increment-consuming sources that could impact the SIA, with the allowable increment established in the PSD regulations for that pollutant.

5.2 Dispersion Modeling

Following is a description of the modeling methodology used in this impact analysis. The methods proposed are in accordance with the protocol submitted to Florida DEP on May 14, 2008 and subsequent correspondence with Florida DEP. Copies of the protocol cover letter and key correspondence are included in **Appendix G**.

5.2.1 Model Selection

Dispersion modeling was used to predict the ambient air concentrations in the vicinity of the facility resulting from the project. For conducting the PSD air quality analysis, the USEPA-preferred model AERMOD (Version 07026) was used. This model incorporates air dispersion based on planetary boundary layer turbulence using meteorological data at the surface and elevated atmospheric strata, as well ground surface conditions information. AERMOD is appropriate for use in estimating ground-level short-term ambient air concentrations resulting from non-reactive buoyant emissions from sources located in simple and complex terrain.

5.2.2 Model Control Options

The AERMOD model was executed for the PSD air quality analysis using standard regulatory default options:

- Use the elevated terrain algorithms requiring input of terrain height data;
- Use stack-tip downwash (except for building downwash cases);
- Use the calms processing routines;
- Use the missing data processing routines.

5.2.3 Modeled Sources

Figure 5-2 depicts the layout of the modeled sources. Point sources are used to represent sources with identifiable emission points that have either thermal buoyancy or momentum. **Table 5-3** lists modeling parameters of point sources. .

Volume sources are used to represent sources that emanate from a diffuse volume of space, such as fugitive and mobile sources. Fugitives from the plastics plant were modeled as a volume source with the height of the building and a lateral dimension of 40 meters, from which the initial vertical and horizontal dimensions of the volume source were derived and summarized in **Table 5-4**.

Since shipping is conducted with18-wheeler trucks, maximum vehicle width and height for the state of Florida[1] were used to estimate the dimensions of volume sources that represent the fugitive emissions from the truck traffic on paved roads, based on the methodology described in the Texas Natural Resource Conservation Commission's guidelines[2], as presented in **Table 5-5**. **Table 5-6** summarizes the source parameters of the individual volume sources.

5.2.4 Meteorological Data

5.2.4.1 Data Selection

AERMOD requires a meteorological input file to characterize the transport and dispersion of pollutants in the atmosphere. Surface and upper air meteorological data inputs as well as surface parameter data describing the land use and surface characteristics near the site are first processed using AERMET, the meteorological preprocessor to AERMOD. The output file generated by AERMET is the meteorological input file required by AERMOD.

For air dispersion modeling purposes, USEPA recommends using a minimum of one year of on-site meteorological data or five years of nearby meteorological data. For this dispersion modeling, nearby meteorological data from the most recent five years available (2001-2005) were used in AERMET processing.

1 Florida Department of Transportation. 2006. Commercial Motor Vehicle Manual.
2 Texas Natural Resource Conservation Commission. 1999. Air Quality Modeling Guidelines. February.

The hourly surface data and daily upper air data from the closest National Weather Service (NWS) station was obtained in the SAMSON and the FSL format respectively. This station is located at the Tampa Airport in Tampa, Florida (Latitude 27.7°N / Longitude 82.4°W), as shown in **Figure 5-3**.

USEPA has established criteria for the use of meteorological data for modeling purposes in *Meteorological Monitoring Guidance for Regulatory Modeling Applications.* This guidance states that meteorological data should be 90% complete on a quarterly basis before any substitutions are made. The 90% completeness requirement was assessed for each required meteorological variable separately as well for the joint recovery of surface wind speed, wind direction, ambient temperature, sky cover, and ceiling height. FDEP indicated that 2001, 2002, 2003, 2004, and 2005 are the most recent five years with meteorological data that satisfy the 90% completeness requirement. The completeness of the surface meteorological parameters for each quarter is summarized in **Table 5-7**.

5.2.4.2 Surface Characteristics

Prior to running AERMET, it is necessary to specify the surface characteristics around the application site. As suggested by EPA Region IV[3], the most recent 2001 land use data from USGS is most appropriate for the modeling period of 2001 through 2005, because the land use data should provide the surface characteristics that existed during the monitoring period of the meteorological data. The surface parameter values of the 2001 land use data categories are summarized in **Table 5-8** and are based on AERSURFACE, the USEPA tool that processes the1996 land cover data to determine the surface characteristics for use in AERMET.

According to the most recent AERMOD Implementation Guide[4], the effective Bowen ratio and albedo should be determined by averaging the surface characteristics across a representative domain without any direction or distance dependency. The recommended default domain is a 10-km by 10-km region. **Figures 5-4** and **5-5** shows the Bowen ratio and albedo domain centered on the meteorological station and EnviroFocus, respectively.

The AERMOD Implementation Guide also recommends that the determination of the surface roughness length should be based on an inverse distance weighted geometric mean for a default upwind distance of 1 kilometer. **Figures 5-6 and 5-7** shows the surface roughness domain centered on the meteorological station and EnviroFocus, respectively. Twelve 30-degree land-use sectors would be set up around EnviroFocus and the surface meteorological site.

Surface parameters (surface roughness, albedo, and Bowen ratio) would be specified using the average of summer and autumn as per FDEP's recommendation. In addition, the surface

3 Email from Stan Krivo on February 20, 2008.

4 United States Environmental Protection Agency (USEPA). 2008. AERMOD Implementation Guide. January 9.

moisture condition was determined by comparing precipitation for 2001 through 2005 to the 30-year climatological record (see **Table 5-9**).

An analysis was conducted comparing the surface characteristics measured at Tampa Airport with those around the EnviroFocus facility. This comparison is used to determine whether it would be appropriate to use meteorological data collected at Tampa Airport to represent conditions at the EnviroFocus facility. As shown in **Table 5-10**, the percent difference between the average surface parameters around the facility and around the data collection site are higher than 10%. Although the higher surface roughness around EnviroFocus would most likely result in increased turbulence and increased dispersion, at the request of FDEP, a sensitivity analysis was performed during the evaluation of the SIA. As discussed later in **Section 5.3.3**, the surface characteristics around the Tampa Airport resulted in larger SIAs and the meteorological data processed with those parameter values are used in the remaining air quality impact analysis.

5.2.4.3 AERMOD Meteorological Data File Generation

For each year, surface and upper air data files were combined using version 06341 of AERMET to develop the required model-ready meteorological data files. AERMET processes the data in three stages. The first stage extracts meteorological data from archive data files and processes the data through various quality assessment checks. The second stage merges all data available for 24-hour periods and stores these data together in a single file. The third stage reads the merged meteorological data and estimates the necessary boundary layer parameters for use by AERMOD. Following USEPA's guidance, the upper air data was subject to preliminary quality control by employing the MODIFY keyword, which makes three adjustments to the sounding data: first, it deletes mandatory levels from the sounding; second, it sets non-zero wind directions to zero if the wind speed is zero; third, it replaces missing ambient and dew point temperatures with interpolated values. For each year, AERMET generates two files for AERMOD: a file of hourly boundary layer parameter estimates and a file of multiple-level observations of wind speed and direction, temperature, and the standard deviation of the fluctuating components of wind.

5.2.4.4 Meteorological Data Trends

The five years of model-ready surface and profile meteorological data files were used to create windroses in Lakes Environmental's WRPlot View (see **Figure 5-8**).

5.2.5 Land Use Classification

Auer's[5] method of classifying land-use as either rural or urban was used to analyze the region in which the facility is located. This method calls for analysis of the land use within a three-kilometer radius around a facility to determine if the majority of the land can be classified as either rural (i.e. undeveloped) or urban. If more than fifty percent of the three-kilometer area consists of Auer land-use industrial, commercial or residential land types, then urban dispersion coefficients are used in modeling; otherwise, rural dispersion coefficients are used. Based on the analysis of the three-kilometer radius area surrounding the facility, this area is categorized as rural. As shown in **Figure 5-9,** the "rural" land use constitutes a majority of the three-kilometer radius area around the proposed facility; hence, the facility is categorized as a rural area. This is a conservative assumption, because according to the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee[6], regardless of the location of the meteorological data collection site, the urban option in the AERMOD dispersion model should be used if a proposed emissions unit is sited in an urban area, such as the Tampa metropolitan statistical area, and the rural dispersion coefficients tend to result in higher impacts than the urban coefficients.

5.2.6 Terrain Data

Terrain elevations are incorporated into the modeling using version 06341 of AERMAP, AERMOD's terrain preprocessor. For this modeling exercise, terrain data is extracted from 7.5-minute Digital Elevation Model (DEM) files with a 30-meter grid spacing that were produced by the United States Geological Society (USGS).

5.2.7 Building Downwash

Building downwash algorithms incorporated into the AERMOD model account for the effects of the aerodynamic wakes and eddies produced by plant buildings and structures on plume dispersion. Building downwash is the effect of nearby structures on the flow of emissions from their respective sources.

In the dispersion modeling prepared for PSD compliance, the AERMOD model uses the USEPA-approved Plume Rise Model Enhancements (PRIME) algorithm to determine the direction-specific building downwash parameters. PRIME calculates fields of turbulence intensity, wind speed and slopes of the mean streamlines as a function of projected building shape. Using a numerical plume rise model, PRIME determines the change in plume centerline location and the rate of plume dispersion with downwind distance. Concentrations are predicted in both the near and far wake regions, with the plume mass captured by the near wake treated separately from the uncaptured primary plume, and reemitted to the far wake as a

5 Auer, Jr., A.H. "Correlation of Land Use and Cover with Meteorological Anomalies". Journal of Applied Meteorology, 17:636-643, 1978.

6 United States Environmental Protection Agency (USEPA). 2008. AERMOD Implementation Guide. January 9.

volume source. **Figure 5-2** shows the locations of buildings at the facility. **Table 5-11** presents the model parameters for the structures.

For the PSD significance modeling, a Cartesian grid was used, with receptor points spaced every 200 meters. For the AAQS and PSD increment modeling, the following sets of receptor grids were placed within the significance area:

- 50-meter spacing, extending from the fenceline to 0.5 kilometer
- 100-meter spacing, extending from 0.5 to 1.5 kilometers
- 250-meter spacing, extending from 1.5 to 3 kilometers
- 500-meter spacing, extending from 3 to 5 kilometers

In addition to the Cartesian grids of receptors, the dispersion modeling for the PSD evaluation included discrete receptor points, spaced every 50 meters, along the facility fenceline.

5.3 PSD Significance Analysis

The significance modeling determined the extent of the full impact analysis required for compliance with the PSD program. The results of the significance modeling established whether the proposed project's net emissions increases would result in a significant off-site air quality impact. If the off-site air quality impact is significant, then a full impact analysis, comprising an AAQS evaluation and a PSD increment analysis, is triggered.

5.3.1 Modeled Off-Site Impacts

In the significance modeling, the furthest point at which the facility's proposed emissions would have a significant impact was found. As described above, a fine Cartesian grid spaced every 200 meters was used to identify the furthest point. The distance to the furthest point of significant impact determined the radius of the pollutant's area of significant impact[7]. This area was then used as the receptor coverage area in the subsequent full impact analysis.

5.3.2 Pre-construction and Post-construction Monitoring

The State of Florida maintains a state-wide ambient air monitoring network in which particulates and other criteria pollutants are monitored. This network provides adequate coverage of the region in which the source is located. Two lead monitors (Site ID 120571066 and 120571073) are located in the vicinity of the facility (see **Figure 5-1**). The coverage of this network is sufficient to provide for adequate pre-construction monitoring of the proposed source area as

7 For a pollutant such as PM_{10} which has two averaging periods, the averaging period with the greatest radius sets the size of the area of significant impact for all averaging periods in the full impact analysis.

required by the PSD rules and for the purpose of establishing pre-project ambient concentrations in the region. Similarly, the existing state ambient monitoring network will provide ongoing assessment of post-construction impacts. No additional post-construction monitoring beyond that provided by the state network will be necessary.

5.3.3 Area of Significant Impact

The modeled off-site impacts for each pollutant for which evaluation under the PSD program was triggered (lead and NO_2, PM_{10},) were compared to the significant impact thresholds (**see Table 5-12**).

For lead, the significant impacts extended up to 2.7 kilometers away using the meteorological data processed with the surface characteristics around Tampa Airport, and 2.4 kilometers away using the meteorological data processed with the surface characteristics around the EnviroFocus facility. **Figure 5-10** depicts the significant area of impact for lead.

For NO_2, the significant impacts extended up to 1.2 and 1.1 kilometers away, using the two sets of meteorological data. **Figure 5-11** depicts the significant area of impact for NO_2.

For PM_{10}, there were significant off-site impacts for both the 24-hour and annual averaging periods. The maximum radius of impact (resulting from the 24-hour modeling) is 1.2 and 1.3 kilometers, respectively. **Figure 5-12** depicts the area of significant impact for PM_{10}.

Since for all the pollutants and their averaging time, the surface characteristics around the Tampa Airport resulted in the larger SIA and the meteorological data processed with those parameter values were used in the PSD full impact analysis.

5.4 PSD Full Impact Analysis

A full impact analysis is required for lead, NO_2, and PM_{10} because at least one off-site receptor (beyond the fenceline) was estimated to have a significant concentration. The full impact analysis for the PSD program demonstrates that attainment of the AAQS would not be threatened or significantly impacted by the proposed source's emissions, and that the proposed source would not degrade the existing air quality by more than the allowable PSD increment.

5.4.1 AAQS Analysis

The annual averaged PM_{10} AAQS was revoked by the U.S. EPA effective December 17, 2006. This application includes analysis of the annual averaged PM_{10} AAQS impact of the proposed facility for completeness and since the annual averaged PM_{10} standard has not yet been removed from Florida's rules.

The AAQS analysis consists of an evaluation of the impact of the proposed source's emissions in conjunction with the impact of any neighboring sources. For PM_{10}, the highest sixth highest 24-hour modeled concentration at each receptor within the area of significant impact was added

to the background PM_{10} 24-hour concentration. The total concentration was then compared to the PM_{10} 24-hour AAQS. Similarly, the maximum annual PM_{10} concentration resulting from the proposed source's emissions and any neighboring sources was added to the background PM_{10} annual concentration. The total concentration was then compared to the PM_{10} annual AAQS. Similar procedures were followed to assess compliance with the AAQS for lead and NO_2 .

"Neighboring" sources in the vicinity of the proposed source, as defined under the PSD program, include any nearby sources within the area of significant impact and any sources outside this area but within 50 kilometers of the area which could have a significant impact on receptors within the area of significant impact.

Background monitoring data was used to represent the potential impact that local area and mobile sources could have on the area of significant impact. The monitoring data was obtained from the USEPA Air Quality System[8], and are summarized in **Table 5-13.** Two sets of lead monitoring data were presented. One of the lead monitors, Site ID 120571075, is located at 6700 Whiteway Drive, Tampa, approximately 10 kilometers away from the EnviroFocus facility. According to the USEPA Air Quality System, the monitor's location type is "urban and center city"; therefore, it would be appropriate to capture the background impact from the area and mobile sources. However, Florida DEP personnel informed us that this particular monitor is "not for regulatory use" and instructed to use another lead monitor, Site ID 120571073, located adjacent to the EnviroFocus facility, recognizing that the use of monitoring data from this location would essentially double-count the impacts from the existing operations of the EnviroFocus facility. By agreement with Florida DEP personnel, this monitor was used in this analysis.

All facilities with emissions of lead, NO_2, PM and PM_{10} within 50 kilometers of the significant impact area were identified by the FDEP and their annual potential emissions, annual allowable emissions, hourly potential emissions, and hourly allowable emissions were provided[9]. If an emission unit has both a PM10 limit and a PM limit, the lower limit is used. If an emission unit has no PM_{10} limit but an annual PM limit, the PM_{10} limit is conservatively assumed to be the same as the PM limit.

Table 5-14 summarizes the facilities with their respective annual potential emissions. The annual potential emissions are estimated as the minimum among the annual potential emissions, the annual allowable emissions, the annual emissions based on the hourly potential emissions, and the annual emissions based on the hourly allowable emissions.

8 Downloaded from http://www.epa.gov/ttn/airs/airsaqs/detaildata/downloadaqsdata.htm (June 9, 2008).
9 Email from Yi Zhu at the FDEP on June 2, 2008.

To identify those sources that could have a potentially significant impact on a pollutant's SIA, the "20-D" screening rule[10] was used. Sources located further from the edge of the SIA than the "threshold distance" (Q/20) are unlikely to have a significant impact on the SIAs, and can be excluded from the full impact analysis for the annual (long-term) averaging period. Sources that are further from the proposed facility than the threshold distance are unlikely to have a significant impact on the SIA and can be excluded from the full impact analysis for short-term averaging periods (such as 24-hour). **Table 5-14** summarizes the results of the 20-D screening of neighboring facilities for the NO_2 and PM_{10} AAQS inventory. All lead sources within 50 kilometers of the significant impact area will be included in the AAQS modeling.

Figures 5-13 to 5-15 depict the facilities considered for inclusion in the AAQS modeling inventory for lead, NO_2 and PM_{10}, respectively. The emission sources and their locations and stack parameters are summarized for these three pollutants in **Tables 5-15**, **5-16**, and **5-18**, respectively.

5.4.2 PSD Increment Consumption Analysis

A PSD increment analysis consists of modeling the change in the ambient air concentration within the area of significant impact that would result from the proposed source's emissions, along with all the net increases and decreases in emissions since a baseline date. In addition to preserving the compliance status of the region with the AAQS, the PSD program was also implemented to ensure that minimal degradation of the air quality in an attainment region would result from new industrial sources. This goal is attained by requiring an analysis of the total change in air quality from a baseline date. The change in air quality is then compared to the maximum allowable change or increment. For assessing compliance with the PM_{10} 24-hour allowable PSD increment, the highest second-high PM_{10} concentration at each receptor was used. For assessing compliance with the NO_2 and PM_{10} annual allowable PSD increments, the maximum concentration at each receptor was considered.

Although it is a very conservative assumption, all of the sources identified for the AAQS analysis were considered as potential increment-affecting sources for the purposes of this analysis. The FDEP provided the actual NOx emissions for the baseline year 1988 and two years from 2005 to 2007. This analysis incorporates the change in actual NOx emissions between 1988 and the maximum during 2005 to 2007. Since the actual or potential PM_{10} emissions from the baseline year 1975 are not readily available from the FDEP, the current potential emissions were modeled to compare with the allowable PSD increment of NO_2. The emission sources and their incremental emissions are summarized for these two pollutants in **Tables 5-17** and **5-18**, respectively.

---

10 The 20-D rule is a USEPA rule-of-thumb measure in which sources with emission (in tons per year) that are less than 20 times the distance (in kilometers) to the edge of the area of impact are eliminated from further evaluation because they are unlikely to have a significant impact on receptors within the area of impact. [See letter from Mr. Alan Schuler to Mr. Wayne Elson, June 19, 1997]

5.4.3 Summary of Results of the Full Impact Analysis

The lead quarterly AAQS compliance analyses showed that there are no potential exceedances of the AAQS. **Table 5-19** summarizes these results. It is important to note that modeling for the lead AAQS shows compliance even with the use of "background" monitoring data from a nearby monitor that captures the impact from the existing EnviroFocus operations. Additionally, the data from two monitors at a nearly identical plant in Eagan, Minnesota were reviewed and showed average quarterly impacts of only 0.31 and 0.20 $\mu g/m^3$ over the past three years. **Table 5-22** shows the quarterly averages from the Eagan monitors and **Figure 5-16** shows their locations with respect to the facility. The impacts near this Tampa facility are likely to be lower, where wet suppression will be applied to the paved surfaces. The Eagan facility is not able to use wet suppression due to the colder climate.

The PM_{10} annual AAQS analysis concluded that there are no potential exceedances within the area of significant impact. The PM_{10} 24-hour AAQS analysis showed that there are no potential exceedances of the AAQS. **Table 5-21** summarizes these results.

The PM_{10} annual increment consumption analysis showed compliance with the maximum allowable PSD increment. The PM_{10} 24-hour increment consumption analysis also showed compliance with the maximum allowable PSD increment. **Table 5-21** summarizes these results.

The NOx modeling results were converted to NO_2 using a NO_2/NOx ratio of 0.75, as described in EPA's Guideline on Air Quality Models at 40 CFR Part 51 Appendix W, Section 6.2.3. The NO_2 annual AAQS compliance analysis showed that there are no potential exceedances of the AAQS. **Table 5-20** summarizes these results. The NO_2 annual PSD increment analysis concluded that the proposed facility would comply with the maximum allowable increment. **Table 5-20** summarizes these results.

5.5 Ozone Impact Analysis

The proposed facility will not emit ozone as a pollutant directly to the atmosphere. The facility does, however, emit volatile organic compounds (VOCs) and nitrogen oxides (NOx) which can undergo chemical reactions in the atmosphere some distance downwind to form ground-level ozone. Assessment of the facility's potential impact to ambient ozone concentrations in the region is, therefore, not performed by direct dispersion modeling. Rather, assessing the facility's potential ozone impacts is based upon consideration of the relative magnitude of the facility's emissions of VOCs and NOx.

Emissions of NOx and especially VOC from the proposed EnviroFocus facility would be a small fraction of the total emissions of these pollutants in the region. Emissions from the proposed facility, therefore, would not be expected to interfere with the continued attainment of the NAAQS in the vicinity of the facility.

Section 6

6 Additional Impacts Analysis

The PSD regulations require that impacts upon visibility, soils and vegetation, and growth and secondary impacts be assessed as part of the application process.

6.1 Visibility

The U.S. Fish and Wildlife Service (FWS) was contacted regarding visibility impact on the only nearby Class I area, the Chassahowitzka National Wildlife Refuge and Wilderness Area. Based on the magnitude of emissions and the distance from the source, FWS determined that visibility impact analysis would not be necessary. A copy of the correspondence from FWS is presented in **Appendix D**.

6.2 Soil and Vegetation

The air quality analysis presented in **Section 5** demonstrated that ambient air impacts from the proposed facility will be below the applicable National Ambient Air Quality Standards (NAAQS) for particulate matter, lead, and nitrogen oxides. That analysis included impacts from the proposed facility and neighboring facilities deemed to have the potential to significantly impact in the same areas. The NAAQS levels are set on the basis of protection of human health as well as prevention of damage to crops, vegetation, and livestock. Because the projected impacts from this facility have been demonstrated not to threaten compliance with the relevant NAAQS concentrations, EnviroFocus believes that the project will not adversely affect nearby soils or vegetation.

6.3 Growth and Secondary Impacts

The proposed project will increase the production capacity of the facility; however, the impact on the workforce will be minimal and is not expected to lead to growth in the surrounding population. It is expected that the bulk of this workforce will be provided from within the existing regional population. EnviroFocus does not foresee an increase in the number of housing units in the area as a result of either the construction or operation of this facility.

The project will increase truck traffic to accommodate the increased raw materials (spent batteries) and product (lead ingot). EnviroFocus is working with municipal and county authorities to provide for traffic flow improvements, such as rerouting of truck traffic.

For both of these reasons, growth and secondary air quality impacts from the proposed facility are expected by EnviroFocus to be inconsequential.

Appendix A:
Application Forms

Please Note: **The Emissions Unit Information sections of this application are printed double-sided.**

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **EnviroFocus Technologies, LLC**	
2. Site Name: **EnviroFocus Technologies, LLC**	
3. Facility Identification Number: **0570057**	
4. Facility Location... Street Address or Other Locator: **1901 N. 66th Street** City: **Tampa** County: **Hillsborough** Zip Code: **33619**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Steve Yates**
2. Application Contact Mailing Address... Organization/Firm: **Gopher Resource Corporation** Street Address: **3385 Highway 149** City: **Eagan** State: **MN** Zip Code: **55121**
3. Application Contact Telephone Numbers... Telephone: **(651) 405 - 2213** ext. Fax:
4. Application Contact Email Address: **syates@gopherresource.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 8/13/08	3. PSD Number (if applicable): 404
2. Project Number(s): 0570057-020-AC	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

- [x] Air construction permit.
- [ ] Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- [ ] Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- [ ] Initial Title V air operation permit.
- [ ] Title V air operation permit revision.
- [ ] Title V air operation permit renewal.
- [ ] Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- [ ] Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- [ ] Air construction permit and Title V permit revision, incorporating the proposed project.
- [ ] Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- [ ] I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application seeks an air construction permit for the expansion of an existing lead-acid battery recycling facility. Expansion of the production capacity of the facility will be accomplished by the installation of a reverb furnace, associated feed dryer, and additional refining kettles. This modification to the facility will be subject to PSD review for NO_X, PM_{10}, and lead.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
021	Battery Breaker	AC1A	$7,500
022	Feed Dryer	AC1A	$7,500
023	Reverb Furnace	AC1A	$7,500
001	Blast Furnace	AC1A	$7,500
011	Refining Kettles & Furnace Fugitives	AC1A	$7,500
013	Refining Kettle Combustion Gases	AC1A	$7,500
024	Building Ventilation	AC1A	$7,500
008	Soda Ash Receiving Silo	AC1A	$7,500
025	Soda Ash Process Silos	AC1A	$7,500
026	Plastics Plant	AC1A	$7,500
027	Plastic Pellet Silos (Truck)	AC1A	$7,500
028	Plastic Pellet Silos (Rail)	AC1A	$7,500
029	Propane Vaporizer	AC1A	$7,500
030	Emergency Generator	AC1A	$7,500
031	Soda Ash Slurry Heater	AC1A	$7,500
009	Facility Grounds & Roadways	AC1A	$7,500

Application Processing Fee

Check one: [x] Attached - Amount: $ 7,500 [ ] Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
   John Tapper, Chief Operating Officer
2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **EnviroFocus Technologies, LLC**
   Street Address: **1901 N. 66th Street**
   City: **Tampa** State: **Florida** Zip Code: **33619**
3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(651) 405 - 2203** ext. Fax: **(651) 454 - 7926**
4. Owner/Authorized Representative Email Address: **jtapper@gopherresource.com**
5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. 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 and all other requirements identified in this application to which the facility is subject. 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 the facility or any permitted emissions unit.

Signature 8/6/08 Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
NA (Construction Permit Application)

3. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

☐ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
Organization/Firm:
Street Address:
City: State: Zip Code:

4. Application Responsible Official Telephone Numbers...
Telephone: ( ) - ext. Fax: ( ) -

5. Application Responsible Official Email Address:

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

_____ _____
Signature Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Russell S. Kemp, P.E.**
   Registration Number: **56355**

3. Professional Engineer Mailing Address...
   Organization/Firm: **ENVIRON International Corp.**
   Street Address: **1600 Parkwood Circle, Suite 310**
   City: **Atlanta** State: **Georgia** Zip Code: **30339**

3. Professional Engineer Telephone Numbers...
   Telephone: **(678) 388 - 1654** ext. Fax: **(770) 874 - 5011**

4. Professional Engineer Email Address: **rkemp@environcorp.com**

5. Professional Engineer 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.

(3) If the purpose of this application is to obtain a Title V 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 plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, 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.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal 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.

Signature: Russell S. Kemp — Date: 8/5/08

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

3. Facility UTM Coordinates... Zone **17** East (km) **364.1** North (km) **3093.7**		3. Facility Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **33**	6. Facility SIC(s): **3341**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Larry Eagan**
2. Facility Contact Mailing Address... Organization/Firm: **EnviroFocus Technologies, LLC** Street Address: **1901 N. 66th Street** City: **Tampa** State: **Florida** Zip Code: **33619**
3. Facility Contact Telephone Numbers: Telephone: **(813) 744 - 5004** ext. Fax: **(813) 620 - 3505**
4. Facility Contact Email Address: **larry.eagan@efttampa.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name: **John Tapper**
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: **EnviroFocus Technologies, LLC** Street Address: **1901 N. 66th Street** City: **Tampa** State: **Florida** Zip Code: **33619**
3. Facility Primary Responsible Official Telephone Numbers... Telephone: **(651) 405 - 2203** ext. Fax: **(651) 454 - 7926**
4. Facility Primary Responsible Official Email Address: **jtapper@gopherresource.com**

A. GENERAL FACILITY INFORMATION (CONTINUED)

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

A. GENERAL FACILITY INFORMATION (CONTINUED)

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	**B**	**N**
PM10	**B**	**N**
PM2.5	**B**	**N**
VOC	**B**	**N**
NOX	**A**	**N**
CO	**A**	**Y**
SO2	**A**	**Y**
PB	**A**	**N**
SAM	**B**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
CO	**Y**			**912.1**	**ESCPSD**
SO2	**Y**			**891.5**	**ESCPSD**

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

See accompanying application document.

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date:_____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-3** [ ] Previously Submitted, Date:_____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID:_____ [X] Previously Submitted, Date: **12/2006**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   [ ] Attached, Document ID:_____ [X] Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   [X] Attached, Document ID: **Section 2.0**
3. Rule Applicability Analysis:
   [X] Attached, Document ID: **Section 3.0**
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.):
   [ ] Attached, Document ID:_____ [X] Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification:
   [ ] Attached, Document ID:_____ [X] Not Applicable **(specific Emissions Unit)**
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   [X] Attached, Document ID: **Section 5.0** [ ] Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   [X] Attached, Document ID: **Section 5.0** [ ] Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   [X] Attached, Document ID: **Section 5.0** [ ] Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   [X] Attached, Document ID: **Section 6.0** [ ] Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    [ ] Attached, Document ID:_____ [X] Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (revision application)
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:_____
   ☐ Not Applicable (revision application with no change in applicable requirements)
3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☐ Attached, Document ID:_____
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☐ Not Applicable
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:_____ ☐ Not Applicable
6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID:_____ ☐ Not Applicable

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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 have 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.

2. Description of Emissions Unit Addressed in this Section:

Battery Breaker

3. Emissions Unit Identification Number: **021**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Replaces existing unit.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
Wet impingement scrubber for the control of lead, PM, and sulfuric acid mist emissions.

2. Control Device or Method Code(s): **002**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **50 ton/hr spent batteries**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **RMPC Scrubber Stack**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **90** feet	7. Exit Diameter: **3.5** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **25,700** acfm	10. Water Vapor: negligible %
11. Maximum Dry Standard Flow Rate: **25,700** dscfm	12. Nonstack Emission Point Height: **NA** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Mechanical crushing of spent lead-acid batteries and separation of component by various physical and hydrodynamic means.**		
2. Source Classification Code (SCC): **30400410**	3. SCC Units: **Tons processed**	
4. Maximum Hourly Rate: **50**	5. Maximum Annual Rate: **438,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**002**		**EL**
PB	**002**		**EL**
SO2	**002**		**EL**
SAM	**002**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **95%**
3. Potential Emissions: **1.1** lb/hour **4.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **1.1** lb/hour **4.8** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **95%**
3. Potential Emissions: **0.096** lb/hour **0.42** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1 mg/dscm** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **1 mg/dscm**	4. Equivalent Allowable Emissions: **0.096** lb/hour **0.42** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **2 mg/dscm**	4. Equivalent Allowable Emissions: **0.19** lb/hour **0.83** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **NESHAP – 40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **0**
3. Potential Emissions: **0.48** lb/hour **2.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **5 mg/dscm** Reference: **Proposed PSD avoidance limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.48 lb/hr**	4. Equivalent Allowable Emissions: **0.48** lb/hour **2.1** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed PSD Avoidance limit**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control: **95%**
3. Potential Emissions: **1.1** lb/hour **4.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **5 mg/dscm** Reference: **Proposed PSD Avoidance Limit**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **5 mg/dscm**	4. Equivalent Allowable Emissions: **1.1** lb/hour **4.8** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed PSD Avoidance limit**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: **3 %** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.603, FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of ___

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **1**

1. Parameter Code: **PRS**	2. Pollutant(s): **NA**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number:	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **NESHAP – 40 CFR 63, Subpart X**	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **Water Flow Rate**	2. Pollutant(s): **NA**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number:	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **NESHAP – 40 CFR 63, Subpart X**	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [x] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [x] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [x] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
   [ ] Copy Attached, Document ID:
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Feed Dryer

3. Emissions Unit Identification Number: **022**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

The emissions from this unit are ducted to the same stack as the reverb furnace and blast furnace.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

The emissions from the Feed Dryer are controlled by the Dryer Baghouse and then combined with the emissions from the Reverb Furnace and Blast Furnace in the Process Stack.

Dryer Baghouse Specifications:

18,000 acfm
12,000 dscfm
225 deg. F
16% Moisture

3 Modules with 106 bags each = 318 bags total
Filter Area = 318 bags x 30.36 sf/bag= 9,654 sq. ft.
Gore on Gore material
Shaker type cleaning system

2. Control Device or Method Code(s): **017**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **40 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **10** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Process Stack**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **023 – Reverb Furnace** **001 – Blast Furnace**		
5. Discharge Type Code: **V**	6. Stack Height: **130** feet	7. Exit Diameter: **5.0** feet
8. Exit Temperature: **150** °F	9. Actual Volumetric Flow Rate: **58,900** acfm	10. Water Vapor: **12** %
11. Maximum Dry Standard Flow Rate: **45,000** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **This stack combines the emissions from the dryer (11,700 dscfm) and the furnaces (33,350 dscfm).**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type): **Material Drying**		
2. Source Classification Code (SCC): **30400419**	3. SCC Units: **Ton material charged**	
4. Maximum Hourly Rate: **40**	5. Maximum Annual Rate: **338,400**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **10200602**	3. SCC Units: **MMCF**	
4. Maximum Hourly Rate: **0.010**	5. Maximum Annual Rate: **87.60**	6. Estimated Annual Activity Factor: NA
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **1000**
10. Segment Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type): **Propane Combustion**		
2. Source Classification Code (SCC): **10201002**	3. SCC Units: **1000 gallons**	
4. Maximum Hourly Rate: **0.109**	5. Maximum Annual Rate: **957**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **15 gr/100 cf**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **91.5**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**017**		**EL**
PB	**017**		**EL**
NOX			**EL**
CO			**EL**
SO2			**EL**
VOC			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.50** lb/hour **2.20**tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Feed Dryer's contribution to the total PM emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **0.50** lb/hour **2.20** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **3.01** lb/hour **13.18** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.044** lb/hour **0.193** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1 mg/dscm** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment: **This accounts for the Feed Dryer's contribution to the total lead emissions from the Process Stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **1 mg/dscm**	4. Equivalent Allowable Emissions: **0.044** lb/hour **0.193** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **2 mg/dscm**	4. Equivalent Allowable Emissions: **0.088** lb/hour **0.386** tons/year
5. Method of Compliance: **Stack Test**	
6. Allowable Emissions Comment (Description of Operating Method): **NESHAP – 40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **2.10** lb/hour **9.20** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.21 lb/mmBtu** Reference: **AP-42 Table 1.5-1 (BACT)**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment: **This accounts for the dryer's contribution to the total NOx emissions from the process stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.21 lb/mmBtu**	4. Equivalent Allowable Emissions: **2.10** lb/hour **9.20** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.84** lb/hour **3.68** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.084 lb/mmBtu** Reference: **AP-42 Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment: **This accounts for the dryer's contribution to the total CO emissions from the process stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **204.7 lb/hr**	4. Equivalent Allowable Emissions: **204.7** lb/hour **896.5** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **This limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, and Blast Furnace.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **90**
3. Potential Emissions: **0.02** lb/hour **0.07** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0165 lb/mmBtu** Reference: **AP-42 Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the dryer's contribution to the total SO2 emissions from the process stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **194.3** lb/hr	4. Equivalent Allowable Emissions: **194.3** lb/hour **851.2** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **This emission limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, and Blast Furnace.**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.06** lb/hour **0.24** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0055 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment: **This accounts for the dryer's contribution to the total VOC emissions from the process stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: NA	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: **3 %** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.603, FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: **EM**	2. Pollutant(s): **NOX, CO, SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Proposed NOX, CO, and SO2 CEMS on combined process stack.**	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: **Bag Leak Detection**	2. Pollutant(s): **PM & PB**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Bag Leak Detection required on Dryer Baghouse per 40 CFR 63 Subpart X.**	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **Section 4.0** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:_
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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 have 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.

2. Description of Emissions Unit Addressed in this Section:

Reverb Furnace

3. Emissions Unit Identification Number: **023**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

The emissions from this unit are ducted to the same stack as the Feed Dryer and Blast Furnace.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

The emissions from the Reverb Furnace are combined with the gases from the Blast Furnace in an Afterburner. The gases from the Afterburner are subsequently passed through a baghouse for PM and lead control, then through a wet scrubber for sulfur dioxide control.

Process Baghouse Specifications:

54,000 acfm
33,350 dscfm
350 deg. F
6% Moisture

9 Modules with 106 bags each = 954 bags total
Filter Area = 954 bags x 30.36 sf/bag= 28,963 sq. ft.
Gore on Gore material
Shaker type cleaning system

Sulfur Dioxide Scrubber Specifications:

Inlet Air Flow = 54,000 acfm at 350 deg. F, 6% moisture
Outlet Air Flow = 42,800 acfm at 125 deg. F, 11% moisture
Blowdown = 101 gal/min
Make-up = 113 gal/min
Caustic Usage = 264 gal/hr

2. Control Device or Method Code(s): **112/016/130**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **40 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **23.0** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Process Stack**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **022 Feed Dryer** **001 Blast Furnace**		
5. Discharge Type Code: **V**	6. Stack Height: **90** feet	7. Exit Diameter: **5.0** feet
8. Exit Temperature: **130** °F	9. Actual Volumetric Flow Rate: **58,900** acfm	10. Water Vapor: **12** %
11. Maximum Dry Standard Flow Rate: **45,000** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **This stack combines gases from the Feed Dryer (11,700 scfm) and the furnaces (33,300 scfm). The Reverb Furnace contributes approx. 16,650 scfm (50%) of the furnace gases.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type): **Reverberatory Furnace**		
2. Source Classification Code (SCC): **30400402**	3. SCC Units: **Tons material charged**	
4. Maximum Hourly Rate: **40**	5. Maximum Annual Rate: **262,800**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **10200602**	3. SCC Units: **MMCF**	
4. Maximum Hourly Rate: **0.023**	5. Maximum Annual Rate: **201.5**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **1000**
10. Segment Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type): **Propane Combustion**		
2. Source Classification Code (SCC): **10201002**	3. SCC Units: **1000 gallons**	
4. Maximum Hourly Rate: **0.251**	5. Maximum Annual Rate: **2,200**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **15 gr/100 cf**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **91.5**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**016**		**EL**
PB	**016**		**EL**
NOX			**EL**
CO	**112**		**EL**
SO2	**130**		**EL**
VOC	**112**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.50** lb/hour **2.19** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Reverb Furnace's contribution to the total PM emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **0.50** lb/hour **2.19** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.022 gr/dscf**	4. Equivalent Allowable Emissions: **2.20** lb/hour **9.62** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 60 Subpart L**	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **3.00** lb/hour **13.12** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.044** lb/hour **0.19** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1 mg/dscm** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Reverb Furnace's contribution to the total lead emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **1 mg/dscm**	4. Equivalent Allowable Emissions: **0.044** lb/hour **0.19** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **2 mg/dscm**	4. Equivalent Allowable Emissions: **0.09** lb/hour **0.38** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **NESHAP – 40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.010 gr/dscf (23 mg/dscm)**	4. Equivalent Allowable Emissions: **1.00** lb/hour **4.37** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.603 FAC**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **24.00** lb/hour **105.12** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.60 lb/ton of feed** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment: **This accounts for the Reverb Furnace's contribution to the total NOx emissions from the Process Stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.60 lb/ton**	4. Equivalent Allowable Emissions: **24.00** lb/hour **105.12** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.93** lb/hour **8.46** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.084 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Reverb Furnace's contribution to the total CO emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **204.7 lb/hr**	4. Equivalent Allowable Emissions: **204.7** lb/hour **896.5** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **This limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, and Blast Furnace.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **95 (desulfurization & scrubber)**
3. Potential Emissions: **160.0** lb/hour **700.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **80 lb/ton** Reference: **EPA Factor Information Retrieval System (FIRE)**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Reverb Furnace's contribution to the total SO2 emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **194.3 lb/hr**	4. Equivalent Allowable Emissions: **194.3** lb/hour **851.2** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **This emission limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, and Blast Furnace.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **80**
3. Potential Emissions: **1.67** lb/hour **7.31** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **20 ppmv @ 4% CO2** Reference: **NESHAP – 40 CFR 63 Subpart X**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Reverb Furnace's contribution to the total VOC emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **20 ppmv @ 4% CO2**	4. Equivalent Allowable Emissions: **1.67** lb/hour **7.31** tons/year
5. Method of Compliance: **Stack Test and Afterburner Temperature Monitoring**	
6. Allowable Emissions Comment (Description of Operating Method): **NESHAP – 40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: **3%** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.603, FAC**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **40 CFR 60 Subpart L**	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **3**

1. Parameter Code: **EM**	2. Pollutant(s): **NOX, CO, & SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Proposed NOX, CO, & SO2 CEMS on combined process stack**	

Continuous Monitoring System: Continuous Monitor **2** of **3**

1. Parameter Code: **Bag Leak Detection**	2. Pollutant(s): **PM & PB**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Bag Leak Detection required on Furnace Baghouse per 40 CFR 63 Subpart X.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **TEMP**	2. Pollutant(s): **CO & VOC**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: Upon Construction	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Afterburner temperature monitor required by 40 CFR 63 Subpart X.**	

Continuous Monitoring System: Continuous Monitor __of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
   [ ] Copy Attached, Document ID:_
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Blast Furnace

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

The emissions from this unit are ducted to the same stack as the Feed Dryer and Reverb Furnace.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

The emissions from the Blast Furnace are combined with the gases from the Reverb Furnace in an Afterburner. The gases from the Afterburner are subsequently passed through a baghouse for PM and lead control, then through a wet scrubber for sulfur dioxide control.

Process Baghouse Specifications:

54,000 acfm
33,350 dscfm
350 deg. F
6% Moisture

9 Modules with 106 bags each = 954 bags total
Filter Area = 954 bags x 30.36 sf/bag= 28,963 sq. ft.
Gore on Gore material
Shaker type cleaning system

Sulfur Dioxide Scrubber Specifications:

Inlet Air Flow = 54,000 acfm at 350 deg. F, 6% moisture
Outlet Air Flow = 42,800 acfm at 125 deg. F, 11% moisture
Blowdown = 101 gal/min
Make-up = 113 gal/min
Caustic Usage = 264 gal/hr

2. Control Device or Method Code(s): **112/016/130**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **7.5 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Process Stack**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **022 Feed Dryer** **023 Reverb Furnace**		
5. Discharge Type Code: **V**	6. Stack Height: **130** feet	7. Exit Diameter: **5.0** feet
8. Exit Temperature: **130** °F	9. Actual Volumetric Flow Rate: **58,900** acfm	10. Water Vapor: **12** %
11. Maximum Dry Standard Flow Rate: **45,000** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **This stack combines gases from the Feed Dryer (11,700 scfm) and the furnaces (33,300 scfm). The Reverb Furnace contributes approx. 11,650 scfm (50%) of the furnace gases.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Blast Furnace**		
2. Source Classification Code (SCC): **30400403**	3. SCC Units: **Tons material charged**	
4. Maximum Hourly Rate: **7.5**	5. Maximum Annual Rate: **65,700**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**016**		**EL**
PB	**016**		**EL**
NOX			**EL**
CO	**112**		**EL**
SO2	**130**		**EL**
VOC	**112**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.50** lb/hour **2.19** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Blast Furnace's contribution to the total PM emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **0.50** lb/hour **2.19** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.022 gr/dscf**	4. Equivalent Allowable Emissions: **2.19** lb/hour **9.62** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

Allowable Emissions Allowable Emissions **3** of **3**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **3.00** lb/hour **13.12** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.04** lb/hour **0.19** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1 mg/dscm** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Blast Furnace's contribution to the total lead emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **3**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **1 mg/dscm**	4. Equivalent Allowable Emissions: **0.04** lb/hour **0.19** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT limit**	

Allowable Emissions Allowable Emissions **2** of **3**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **2 mg/dscm**	4. Equivalent Allowable Emissions: **0.09** lb/hour **0.38** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **NESHAP – 40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions **3** of **3**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.010 gr/dscf (23 mg/dscm)**	4. Equivalent Allowable Emissions: **1.00** lb/hour **4.37** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.603 FAC**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **3.00** lb/hour **13.14** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.40 lb/ton** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: See Attached Emissions Inventory	
11. Potential, Fugitive, and Actual Emissions Comment: **This accounts for the Blast Furnace's contribution to the total NOx emissions from the Process Stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.40 lb/ton**	4. Equivalent Allowable Emissions: **3.00** lb/hour **13.14** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **203.7** lb/hour **892.2** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **48 lb/ton** Reference: **E.F. based on test of similar source**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Blast Furnace's contribution to the total CO emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **204.7 lb/hr**	4. Equivalent Allowable Emissions: **204.7** lb/hour **896.5** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **This limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, and Blast Furnace.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **95 (desulfurization & scrubber)**
3. Potential Emissions: **30.0** lb/hour **131.4** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **80 lb/ton** Reference: **EPA Factor Information Retrieval System (FIRE)**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Blast Furnace's contribution to the total SO2 emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **194.3 lb/hr**	4. Equivalent Allowable Emissions: **194.3** lb/hour **851.2** tons/year
5. Method of Compliance: **Continuous Emissions Monitoring System**	
6. Allowable Emissions Comment (Description of Operating Method): **This emission limit applies to the combined emissions from the Feed Dryer, Reverb Furnace, and Blast Furnace.**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.40** lb/hour **6.15** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **20 ppmv @ 4% CO2** Reference: **NESHAP – 40 CFR 63 Subpart X**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:
This accounts for the Blast Furnace's contribution to the total VOC emissions from the Process Stack.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **20 ppmv @ 4% CO2**	4. Equivalent Allowable Emissions: **1.40** lb/hour **6.15** tons/year
5. Method of Compliance: **Stack Test and Afterburner Temperature Monitoring**	
6. Allowable Emissions Comment (Description of Operating Method): **NESHAP – 40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: **3%** Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.603, FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **3**

1. Parameter Code: **EM**	2. Pollutant(s): **NOX, CO, & SO2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Proposed NOX, CO, and SO2 CEMS on combined process stack.**	

Continuous Monitoring System: Continuous Monitor **2** of **3**

1. Parameter Code: **Bag Leak Detection**	2. Pollutant(s): **PM & PB**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: **Upon Construction**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Bag Leak Detection required on Furnace Baghouse per 40 CFR 63 Subpart X.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **TEMP**	2. Pollutant(s): **CO & VOC**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date: Upon Construction	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Afterburner temperature monitor required by 40 CFR 63 Subpart X.**	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   - [ ] Certificate of Representation (EPA Form No. 7610-1)
     [ ] Copy Attached, Document ID:
   - [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
     [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   - [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   - [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   - [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   - [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   - [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   - [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Refining Kettles & Furnace Fugitives (Hygiene Ventilation)

3. Emissions Unit Identification Number: **011**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This unit includes process emissions from the Refining Kettles and fugitive emissions from the Reverb Furnace and Blast Furnace.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

The process emissions from the Refining Kettles and the fugitive emissions from the Reverb Furnace and Blast Furnace are controlled by the Hygiene Baghouse.

Hygiene Baghouse Specifications:

72,000 acfm
62,500 dscfm
150 deg. F
Negligible Moisture

12 Modules with 106 bags each = 1,272 bags total
Filter Area = 1,272 bags x 30.36 sf/bag= 38,618 sq. ft.
Gore on Polyester material
Shaker type cleaning system

2. Control Device or Method Code(s): **017**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **25 ton/hr (refining)**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **NA** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Hygiene Stack**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **011, 023 (fugitives), and 001 (fugitives)**		
5. Discharge Type Code: **V**	6. Stack Height: **130** feet	7. Exit Diameter: **5.0** feet
8. Exit Temperature: **150** °F	9. Actual Volumetric Flow Rate: **72,000** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **62,500** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Lead Refining**		
2. Source Classification Code (SCC): **30400426**	3. SCC Units: **Tons of lead refined**	
4. Maximum Hourly Rate: **20**	5. Maximum Annual Rate: **175,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**017**		**EL**
PB	**017**		**EL**
NOX			**EL**
CO			**EL**
SO2			**EL**
VOC			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **2.68** lb/hour **11.74** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **2.68** lb/hour **11.74** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **16.07** lb/hour **70.39** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.23** lb/hour **1.03** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **1 mg/dscm** Reference: **Proposed BACT Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **1 mg/dscm**	4. Equivalent Allowable Emissions: **0.23** lb/hour **1.03** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **2 mg/dscm**	4. Equivalent Allowable Emissions: **0.46** lb/hour **2.06** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.0011 gr/dscf***	4. Equivalent Allowable Emissions: **0.59** lb/hour **2.58** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.603 FAC [*Air-flow-weighted average of furnace fugitive limit (0.002 gr/dscf) and kettle limit (0.0002 gr/dscf)]**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **14.33** lb/hour **62.76** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.24 lb/lb niter** Reference: **Derived from stack tests**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.24 lb/lb niter**	4. Equivalent Allowable Emissions: **14.33** lb/hour **62.76** tons/year
5. Method of Compliance: **Stack Testing**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **7.94** lb/hour **34.78** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.133 lb/lb sulfur** Reference: **Derived from stack tests**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **ESCPSD**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **7.94 lb/hr**	4. Equivalent Allowable Emissions: **7.94** lb/hour **34.78** tons/year
5. Method of Compliance: **Stack Testing**	
6. Allowable Emissions Comment (Description of Operating Method): **PSD Avoidance Limit**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: **3** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.603. FAC**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **40 CFR 60 Subpart L**	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: **Bag Leak Detection**	2. Pollutant(s): **PM & PB**
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number:	Serial Number:
5. Installation Date: **Prior to startup**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Bag Leak Detection required by 40 CFR 63 Subpart X**	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
      [ ] Copy Attached, Document ID:
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Refining Kettle Combustion Gases

3. Emissions Unit Identification Number: **013**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This emission unit consists of 10 oxy/fuel burners used to heat the Refining Kettles. The burners can fire natural gas or propane. The combustion gases are routed to three Kettle Stacks. The process emissions from the kettles are separate from these products of combustion.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   None

2. Control Device or Method Code(s): **NA**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**	
2. Maximum Production Rate: **NA**	
3. Maximum Heat Input Rate: **40** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Kettle Stacks 1, 2, 3**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **013**		
5. Discharge Type Code: **V**	6. Stack Height: **60** feet	7. Exit Diameter: 1-1.4 & 2-2.0 feet
8. Exit Temperature: **450** °F	9. Actual Volumetric Flow Rate: **1-1,000 & 2-2,000** acfm	10. Water Vapor: **Negl.** %
11. Maximum Dry Standard Flow Rate: **1-580 & 2-1,160** dscfm	12. Nonstack Emission Point Height: **NA** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **There are three kettle stacks. One of the stacks exhausts the burners for two of the kettles and the other two stacks exhaust the burners for four kettles each.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Natural gas combustion**		
2. Source Classification Code (SCC): **10200602**	3. SCC Units: **MMCF**	
4. Maximum Hourly Rate: **0.040**	5. Maximum Annual Rate: **350**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **1000**
10. Segment Comment: **Primary fuel**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Propane combustion**		
2. Source Classification Code (SCC): **10201002**	3. SCC Units: **1000 gallons**	
4. Maximum Hourly Rate: **0.437**	5. Maximum Annual Rate: **3,828**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **15 gr/100 cf**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **91.5**
10. Segment Comment: **Backup fuel**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5			**NS**
PB			**NS**
NOX			**NS**
CO			**NS**
SO2			**NS**
VOC			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.30** lb/hour **1.33** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0076 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.02** lb/hour **0.09** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0005 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **2.00** lb/hour **8.76** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 lb/mmBtu** Reference: **AP-42, Table 1.4-2 (low-NOx)**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **3.36** lb/hour **14.72** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.084 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.66** lb/hour **2.89** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0165 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.22** lb/hour **0.96** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0055 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320, FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
      [ ] Copy Attached, Document ID:
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Building Ventilation

3. Emissions Unit Identification Number: **024**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This emission unit consists of general building ventilation that includes process fugitive emissions from a variety of sources. The PM and lead emission are controlled by a Torit cartridge collector.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

PM and lead from the building are controlled by a cartridge collector.

Torit Cartridge Collector Specifications:

195,000 acfm
195,000 dscfm
Ambient Temperature
Negligible Moisture

3 Modules with 96 cartridges each = 288 bags total
Pulse-jet cleaning system

2. Control Device or Method Code(s): **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	 days/week hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Torit Stack**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **120** feet	7. Exit Diameter: **8.0** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **195,000** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **195,000** dscfm	12. Nonstack Emission Point Height: **NA** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type): **NA**		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**018**		**EL**
PB	**018**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **8.36** lb/hour **36.60** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **Proposed BACT**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **2.68** lb/hour **11.74** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **16.07** lb/hour **70.39** tons/year
5. Method of Compliance: **Stack Test and Bag Leak Detection System**	
6. Allowable Emissions Comment (Description of Operating Method): **62-296.712 FAC**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.37** lb/hour **1.60** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.5 mg/dscm** Reference: **Proposed BACT Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.5 mg/dscm**	4. Equivalent Allowable Emissions: **0.37** lb/hour **1.60** tons/year
5. Method of Compliance: **Stack Testing and Bag Leak Detection**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **2 mg/dscm**	4. Equivalent Allowable Emissions: **1.46** lb/hour **6.40** tons/year
5. Method of Compliance: **Same as above**	
6. Allowable Emissions Comment (Description of Operating Method): **40 CFR 63 Subpart X**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

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

1. Visible Emissions Subtype: **VE03**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **3** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.603, FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of ___

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: **Bag Leak Detection**	2. Pollutant(s): **PM & PB**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **TBD** Model Number:	Serial Number:
5. Installation Date: **Prior to startup**	6. Performance Specification Test Date: **NA**
7. Continuous Monitor Comment: **Required by 40 CFR 63 Subpart X**	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
      [ ] Copy Attached, Document ID:
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Soda Ash Receiving Silo

3. Emissions Unit Identification Number: **008**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Silo receives soda ash pneumatically from trucks.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

PM emissions are controlled by a bin vent filter atop the silo.

2. Control Device or Method Code(s): **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **50 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	
Maximum process rate = maximum fill rate	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E15**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **W**	6. Stack Height: **35** feet	7. Exit Diameter: **1.3** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **650** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **650** dscfm	12. Nonstack Emission Point Height: **NA** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Raw Material Transfer & Storage**		
2. Source Classification Code (SCC): **30400420**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **50**	5. Maximum Annual Rate: **5,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**018**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.03** lb/hour **0.12** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **Proposed BACT Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **0.03** lb/hour **0.12** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **17.31 x P $^{0.16}$**	4. Equivalent Allowable Emissions: **32.4** lb/hour **16.20** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.320(a), FAC**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(b), FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
      [ ] Copy Attached, Document ID:
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Soda Ash Process Silos

3. Emissions Unit Identification Number: **025**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This Emissions Unit represents 2 silos.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

PM emissions are controlled by bin vent filters atop the silos.

2. Control Device or Method Code(s): **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **50 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum process rate = maximum fill rate**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E9 & E10**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **W**	6. Stack Height: **70** feet	7. Exit Diameter: **1.3** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **650** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **650** dscfm	12. Nonstack Emission Point Height: **NA** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Raw Material Transfer & Storage**		
2. Source Classification Code (SCC): **30400421**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **50**	5. Maximum Annual Rate: **5000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**018**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.03** lb/hour **0.12** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.005 gr/dscf** Reference: **Proposed BACT Limit**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.005 gr/dscf**	4. Equivalent Allowable Emissions: **0.03** lb/hour **0.12** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **17.31 x P $^{0.16}$**	4. Equivalent Allowable Emissions: **32.4** lb/hour **16.2** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.320(a), FAC**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(b), FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **Section 4.0** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:_
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Plastics Plant

3. Emissions Unit Identification Number: **025**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Plastic from Battery Breaker is extruded into pellets and dried centrifugally. Emissions are to interior of building.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   None

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **1.75 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **NA**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **F**	6. Stack Height: **NA** feet	7. Exit Diameter: **NA** feet
8. Exit Temperature: **NA** °F	9. Actual Volumetric Flow Rate: **NA** acfm	10. Water Vapor: **NA** %
11. Maximum Dry Standard Flow Rate: **NA** dscfm	12. Nonstack Emission Point Height: **NA** feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Fugitive emissions to interior of building.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Recovery of Plastic from Batteries**		
2. Source Classification Code (SCC): **30400499**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **1.75**	5. Maximum Annual Rate: **12,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5			**NS**
VOC			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **None**
3. Potential Emissions: **0.12** lb/hour **0.53** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **34.5 lb/mmlb Plastic** Reference: **AWMA Journal**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **None**
3. Potential Emissions: **0.28** lb/hour **1.23** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **80.3 lb/mmlb Plastic** Reference: **AWMA Journal**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation __ of ___

1. Visible Emissions Subtype: **None**	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
   [ ] Copy Attached, Document ID:_
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Plastic Pellet Silos (Truck)

3. Emissions Unit Identification Number: **026**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This Emissions Unit represents 2 silos.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   PM emissions are controlled by bin vent filters atop the silos.

2. Control Device or Method Code(s): **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **1.75 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum process rate = fill rate**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E13 & E14**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **W**	6. Stack Height: **68.5** feet	7. Exit Diameter: **1.2** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **1,750** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **1,750** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Plastic Pellet Transfer & Storage**		
2. Source Classification Code (SCC): **30400499**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **1.75**	5. Maximum Annual Rate: **12,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**018**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.02** lb/hour **0.07** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.001 gr/dscf** Reference: **Vendor Guarantee**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.001 gr/dscf**	4. Equivalent Allowable Emissions: **0.02** lb/hour **0.07** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **3.59 x P $^{0.62}$**	4. Equivalent Allowable Emissions: **5.08** lb/hour **22.2** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.320(a), FAC**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(b), FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Figure 1-2** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Section 2.0** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **12/2006**
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **Section 4.0** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Plastic Pellet Silos (Rail)

3. Emissions Unit Identification Number: **027**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This Emissions Unit represents 2 silos.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   PM emissions are controlled by bin vent filters atop the silos.

2. Control Device or Method Code(s): **018**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **1.75 ton/hr**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum process rate = fill rate**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E9 & E10**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **W**	6. Stack Height: **68.5** feet	7. Exit Diameter: **1.2** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **1,750** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **1,750** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Plastic Pellet Transfer & Storage**		
2. Source Classification Code (SCC): **30400499**	3. SCC Units: **Tons**	
4. Maximum Hourly Rate: **1.75**	5. Maximum Annual Rate: **12,000**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **NA**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5	**018**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.02** lb/hour **0.07** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.001 gr/dscf** Reference: **Vendor Guarantee**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.001 gr/dscf**	4. Equivalent Allowable Emissions: **0.02** lb/hour **0.07** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **3.59 x P $^{0.62}$**	4. Equivalent Allowable Emissions: **5.08** lb/hour **22.2** tons/year
5. Method of Compliance: **VE Checks**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.320(a), FAC**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
      [ ] Copy Attached, Document ID:_
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Propane Vaporizer

3. Emissions Unit Identification Number: **028**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   None

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **1.2** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52**weeks/year	 **7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Only operates during natural gas outages.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E18**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **W**	6. Stack Height: **9.0** feet	7. Exit Diameter: **0.67** feet
8. Exit Temperature: **600** °F	9. Actual Volumetric Flow Rate: **500** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **250** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Propane Combustion**		
2. Source Classification Code (SCC): **10201002**	3. SCC Units: **1000 Gallons**	
4. Maximum Hourly Rate: **0.013**	5. Maximum Annual Rate: **115**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **91.5**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5			**NS**
NOX			**NS**
CO			**NS**
SO2			**NS**
VOC			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.01** lb/hour **0.03** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0066 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.25** lb/hour **1.10** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.21 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.04** lb/hour **0.19** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0532 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.02** lb/hour **0.09** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0165 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: **NA**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.01** lb/hour **0.03** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0055 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.320(b), FAC**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of ___

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **Section 4.0** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Emergency Generator

3. Emissions Unit Identification Number: **029**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: **500 kW** MW

11. Emissions Unit Comment:

Diesel-fired Generator

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   None

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **500 kW**	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **500** hours/year
6. Operating Capacity/Schedule Comment: **Emergency use only. Maximum annual operation estimated to be 500 hours.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E12**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **11.2** feet	7. Exit Diameter: **0.67** feet
8. Exit Temperature: **941** °F	9. Actual Volumetric Flow Rate: **3845** acfm	10. Water Vapor: **negligible** %
11. Maximum Dry Standard Flow Rate: **1455** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Internal Combustion – Distillate Oil**		
2. Source Classification Code (SCC): **20100102**	3. SCC Units: **1000 Gallons**	
4. Maximum Hourly Rate: **0.036**	5. Maximum Annual Rate: **18.0**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **0.5%**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **91.5**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5			**NS**
NOX			**NS**
CO			**NS**
SO2			**NS**
VOC			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.03** lb/hour **0.01** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.03 lb/hr** Reference: **Vendor Specification**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **9.63** lb/hour **2.41** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **9.63 lb/hr** Reference: **Vendor Specifications**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.67** lb/hour **0.07** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.67 lb/hr** Reference: **Vendor Specifications**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **1.52** lb/hour **0.38** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.002 lb/Hp-hr** Reference: **AP-42, Table 3.3-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.01** lb/hour **0.003** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 lb/hr** Reference: **Vendor Specifications**	7. Emissions Method Code: **5**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **None**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **Section 4.0** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:_
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Soda Ash Slurry Heater

3. Emissions Unit Identification Number: **030**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

This unit consists of two natural gas fired burners that heat soda ash slurry for use in control of sulfur dioxide in furnace gases.

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   None

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **1.50** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 **7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **2 Burners rated 0.75 mmBtu/hr each.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **E11**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **NA**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**		
5. Discharge Type Code: **V**	6. Stack Height: **11.2** feet	7. Exit Diameter: **0.67** feet
8. Exit Temperature: **300** °F	9. Actual Volumetric Flow Rate: **1600** acfm	10. Water Vapor: **negligible** %
11. Maximum Dry Standard Flow Rate: **1115** dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **See Attached Emissions Inventory**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Natural Gas Combustion**		
2. Source Classification Code (SCC): **10200602**	3. SCC Units: **MMCF**	
4. Maximum Hourly Rate: **0.0015**	5. Maximum Annual Rate: **13.1**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **NA**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **1000**
10. Segment Comment: **Primary fuel**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Propane Combustion**		
2. Source Classification Code (SCC): **10201002**	3. SCC Units: **1000 Gallons**	
4. Maximum Hourly Rate: 0.016	5. Maximum Annual Rate: **144**	6. Estimated Annual Activity Factor: **NA**
7. Maximum % Sulfur: **15 gr/100 cu ft**	8. Maximum % Ash: **NA**	9. Million Btu per SCC Unit: **91.5**
10. Segment Comment: **Backup fuel**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM/PM10/PM2.5			**NS**
NOX			**NS**
CO			**NS**
SO2			**NS**
VOC			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.01** lb/hour **0.05** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0076 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.32** lb/hour **1.38** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.100 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.13** lb/hour **0.55** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.084 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.02** lb/hour **0.11** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0165 lb/mmBtu** Reference: **AP-42, Table 1.5-1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **See Attached Emissions Inventory**	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: **None**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.01** lb/hour **0.04** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0055 lb/mmBtu** Reference: **AP-42, Table 1.4-2**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: **NA**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **NA**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **Section 4.0** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: _____
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ 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.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (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.

2. Description of Emissions Unit Addressed in this Section:

Facility Grounds & Roadways

3. Emissions Unit Identification Number: **009**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**10/2008**	**7/2009**	**33**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

A. GENERAL EMISSIONS UNIT INFORMATION (CONTINUED)

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

PM & Lead Emissions from paved surfaces will be controlled by a combination of vacuum sweeping and wet suppression.

2. Control Device or Method Code(s): **061**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **NA**
2. Maximum Production Rate:
3. Maximum Heat Input Rate: million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year hours/year
6. Operating Capacity/Schedule Comment:

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **NA**	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type): **NA**		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM (TSP)			**WP**
PM10/PM2.5			**WP**
PB			**WP**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM (TSP)**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.76** lb/hour **3.32** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **AP-42 Equation** Reference: **AP-42, Section 13.2.1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **3.32 ton/yr**	4. Equivalent Allowable Emissions: **0.76** lb/hour **3.32** tons/year
5. Method of Compliance: **Work Practice Standards**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM10/PM2.5**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.15** lb/hour **0.65** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **AP-42 Equation** Reference: **AP-42, Section 13.2.1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.65 ton/yr**	4. Equivalent Allowable Emissions: **0.15** lb/hour **0.65** tons/year
5. Method of Compliance: **Work Practice Standards**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of ___

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.041** lb/hour **0.178** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **AP-42 Equation** Reference: **AP-42, Section 13.2.1**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

See Attached Emissions Inventory

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.178 ton/yr**	4. Equivalent Allowable Emissions: **0.041** lb/hour **0.178** tons/year
5. Method of Compliance: **Work Practice Standards**	
6. Allowable Emissions Comment (Description of Operating Method): **Proposed BACT Limit**	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation __ of ___

1. Visible Emissions Subtype: NA	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: **NA**	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Figure 1-2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Section 2.0** [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [X] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **12/2006**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [X] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   [X] Attached, Document ID: **Section 4.0** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   [ ] Attached, Document ID: _____ [X] Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   [ ] Attached, Document ID:_____ [X] Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [ ] Attached, Document ID: _____
2. Compliance Assurance Monitoring
   [ ] Attached, Document ID: _____ [ ] Not Applicable
3. Alternative Methods of Operation
   [ ] Attached, Document ID: _____ [ ] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   [ ] Attached, Document ID: _____ [ ] Not Applicable
5. Acid Rain Part Application
   [ ] Certificate of Representation (EPA Form No. 7610-1)
      [ ] Copy Attached, Document ID:
   [ ] Acid Rain Part (Form No. 62-210.900(1)(a))
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      [ ] Attached, Document ID:_____ [ ] Previously Submitted, Date:_____
   [ ] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements Comment

Appendix B
Emissions Inventory

EMISSION INVENTORY
EnviroFocus Technologies, LLC
Tampa, Florida

Table

Table 1
Soda Ash Silo Bin Vents (3)
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Soda Ash Silo Bin Vents (3)

	Units	Stack ID			
Short-Term Activity Level 1:		Stack Height	70.00	feet	only 35' for truck-loaded silo
Long-Term Activity Level 1:		Stack Flow	650	acfm	
		Stack Diameter	16	inches	Vertical stack WITH RAIN CAP
Short-Term Activity Level 2:		Stack Temperature	amb	deg F	

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limit Level lb/hr	Limit Level tons/yr
PM10	0.005	gr/dscf	eng. Estimate	0.03	0.12	0.005	gr/dscf	BACT	0.03	0.12
VOC										
NOx										
CO										
SO2										
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Table 2
Plastics Bin
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: **Plastics Bin**

Note: Four Bins, but only one has flow at any one time

	Units			
		Stack ID		
Short-Term Activity Level 1:		Stack Height	68.5	feet
Long-Term Activity Level 1:		Stack Flow	1,750	acfm
		Stack Diameter	14	inches
Short-Term Activity Level 2:		Stack Temperature	amb	deg F

Vertical stack WITH RAIN CAP

Pollutant	**EF**	**EF Units**	**Reference**	**Expected Actual lb/hr**	**Expected Actual tons/yr**	**Limit**	**Units**	**Notes**	**Limit Level lb/hr**	**Limit Level tons/yr**
PM10	0.001	gr/dscf	eng. Estimate	0.02	0.07	0.001	gr/dscf	BACT	0.02	0.07
VOC										
NOx										
CO										
SO2										
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Table 3
Breaker Scrubber
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Breaker Scrubber

	Units			
Short-Term Activity Level 1:		**Stack ID**		
Long-Term Activity Level 1:		Stack Height	90	feet
		Stack Flow	25,700	acfm
		Stack Diameter	42	inches
Short-Term Activity Level 2:		Stack Temperature	amb	deg F
Long-Term Activity Level 2:				

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limit Level lb/hr	Limit Level tons/yr
PM10	0.0035	gr/dscf	Eagan stack testing	0.771	3.377	0.005	gr/dscf	BACT	1.101	4.82
VOC										
NOx										
CO										
SO2	4.1	mg/dscm	Eagan stack testing	0.395	1.729	5	mg/dscm	PSD avoidance	0.481	2.108
Pb	0.71	mg/dscm	Eagan stack testing	0.068	0.299	1	mg/dscm	BACT as 0.5 MACT	0.096	0.42
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)	0.84	mg/dscm	Eagan stack testing	0.081	0.354	5	mg/dscm	Estimated sum SO2+H2SO4	0.481	2.11
Carbon Disulfide										
Total HAPs				**0.068**	**0.299**				**0.096**	**0.422**

Table 4
Feed Dryer
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Feed Dryer

		Units				
Short-Term Activity Level 1:	10.00	MMBTU/hr	**Stack ID**			
Long-Term Activity Level 1:			Stack Height		feet	see Combined Stack
			Stack Flow	18,000	acfm	
			Stack Flow	15,900	scfm	
Short-Term Activity Level 2:	40.00	tons/hr	Stack Diameter		inches	
Long-Term Activity Level 2:	30.00	tons/hr	Stack Temperature	140	deg F	

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10										
VOC	0.0055	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.06	0.24				0.06	0.24
NOx	0.21	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	2.10	9.20				2.10	9.20
CO	0.084	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.84	3.68					
SO2	0.0165	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.17	0.72					
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Table 5
Reverb Furnace
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Reverb Furnace

		Units				
			Stack ID			
Short-Term Activity Level 1:	23.00	MMBTU/hr (oxy/air/fuel)	Stack Height		feet	see Combined Stack
Long-Term Activity Level 1:			Stack Flow	23,750	scfm	
			Stack Diameter		inches	
Short-Term Activity Level 2:	40.00	tons/hr total charged	Stack Temperature		deg F	
Long-Term Activity Level 2:	30.00	tons/hr total charged				

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10										
VOC	9	ppmv	estimated performance	1.46	6.41	10.26	ppmv	CT of 20ppmv corrected to 4%(	1.67	7.31
NOx	0.3	lb/ton	metal charged. FIRE database	12.00	52.56	0.6	lb/ton	Proposed BACT Limit	24.00	105.12
CO	0.084	lb/MMBTU	AP42 Table 1.4-2 (NG)	1.93	8.46					
SO2										
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Table 6
Blast Furnace
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Blast Furnace

		Units				
Short-Term Activity Level 1:	4.2	tons/hr, blast metal output	**Stack ID**			
Long-Term Activity Level 1:	3.1	tons/hr, blast metal output	Stack Height		feet	see Combined Stack
			Stack Flow	20,000	scfm	
			Stack Diameter		inches	
Short-Term Activity Level 2:	7.50	tons/hr, total charge	Stack Temperature		deg F	
Long-Term Activity Level 2:	6.25	tons/hr, total charge				

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10										
VOC	9	ppmv	estimated performance	1.23	5.40	10.26	ppmv	CT of 20ppmv corrected to 4%(	1.40	6.15
NOx	0.1	lb/ton	metal charged. FIRE database	0.75	3.29	0.4	lb/ton	Proposed BACT Limit	3.00	13.14
CO	45	lb/ton prod	expectation - Eagan performance	189.00	827.82					
SO2										
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Table 7
Process Exhaust
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Process Exhaust

		Units	**Stack ID**			
Short-Term Activity Level 1:	4.20	tons/hr Blast metal output	Stack Height		feet	see Combined Stack
Long-Term Activity Level 1:			Stack Flow	50,190	acfm	
			Stack Flow	43,751	scfm	
Short-Term Activity Level 2:	16.67	tons/hr Reverb metal output	Stack Diameter		inches	
Long-Term Activity Level 2:			Stack Temperature	148.00	deg F	

Pollutant	**EF**	**EF Units**	**Reference**	**Expected Actual lb/hr**	**Expected Actual tons/yr**	**Limit Level**	**Units**	**Notes**	**Limiting Level lb/hr**	**Limiting Level tons/yr**
PM10										
VOC								Reverb + Blast	3.07	13.46
NOx	NA	NA	Reverb Furnace + Blast Furnace	12.75	55.85			Reverb + Blast	27.00	118.26
CO	NA	NA	Reverb Furnace + Blast Furnace	190.93	836.28					
SO2	8	lb/ton	Est. desulf & scrubber effectiveness	166.96	731.28					
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl	0.0024	lb/ton	From East Penn, NESHAP BID	0.05	0.22				0.05	0.22
H2SO4 (not a HAP)	NA	NA	1/2 Eagan Testing (unscrubbed)	1.00	4.38			1/2 Eagan Testing (unscrubbed)	1.00	4.38
Carbon Disulfide	NA	NA	Eagan Testing, (1/2 nondetect)	0.65	2.85	0.27	lb/ton	FIRE database (blast factor)	1.13	4.97
Total HAPs				**0.700**	**3.066**				**1.184**	**5.186**

Note: The SO2 emission factor is derived from AP-42 Table 12.11-2 (80 lb/ton) and the scrubber efficiency of 90%

Table 8
Hygiene Baghouse & Stack
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Hygiene Baghouse & Stack

		Units
Short-Term Activity Level 1:	20	ton/hr refinery production
Long-Term Activity Level 1:	16.67	
Short-Term Activity Level 2:	59.7	lb/hr refinery niter usage
Short-Term Activity Level 2:	58.33	lb/hr refinery sulfur usage

Stack ID

Stack Height	130	feet
Stack Flow	72,000	acfm
Stack Flow	62,557	scfm
Stack Diameter	60	inches
Stack Temperature	150	deg F

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.005	gr/dscf		2.68	11.74	0.005	gr/dscf	BACT	2.68	11.74
VOC	15	ppmv	estimated performance	0.00	0.00	20	ppmv	MACT	0.00	0.00
NOx	0.24	lb/lb niter	derived factor	14.33	62.76	0.24	lb/lb niter	derived factor	14.33	62.76
CO										
SO2	0.133	lb/lb sulfur	derived factor	7.94	34.78	0.133	lb/lb sulfur	derived factor	7.94	34.78
Pb	0.263	mg/dscm	Eagan testing	0.06	0.27	1	mg/dscm	BACT as 0.5 MACT	0.23	1.03
Antimony	0.0015	mg/dscm	Eagan testing	3.52E-04	1.54E-03	0.003	mg/dscm	2 x Eagan testing	7.03E-04	3.08E-03
Arsenic	0.0893	mg/dscm	Eagan testing	2.09E-02	9.17E-02	0.1786	mg/dscm	2 x Eagan testing	4.19E-02	1.83E-01
Cadmium	0.0025	mg/dscm	Eagan testing	5.86E-04	2.57E-03	0.005	mg/dscm	2 x Eagan testing	1.17E-03	5.13E-03
Mercury	1.10E-03	mg/dscm	Eagan testing	2.58E-04	1.13E-03	1.10E-03	mg/dscm	2 x Eagan testing	2.58E-04	1.13E-03
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.084**	**0.367**				**0.278**	**1.219**

Notes 95% UCL for lead is 0.80 mg/dscm (see UCL Calc's tab)

Table 9
Combined Process Stack
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Combined Process Stack

		Units					
			Stack ID				
Short-Term Activity Level 1:	4.2	tons/hr Blast production rate	Stack Height	130	feet	Moisture Content	12.00 %
Long-Term Activity Level 1:			Stack Flow	58,886	acfm		
			Stack Flow	45,024	scfm		
Short-Term Activity Level 2:			Stack Diameter	60	inches		
Long-Term Activity Level 2:			Stack Temperature	150.00	deg F		

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit Level	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.005	gr/dscf	estimate	1.93	8.45	0.005	gr/dscf	BACT	1.93	8.45
VOC			Dryer + Process	0.06	0.24			Dryer + Process	3.13	13.70
NOx			Dryer + Process	14.85	65.04			Dryer + Process	29.10	127.46
CO			Dryer + Process	191.77	839.96			PSD Avoidance Limit	204.67	896.45
SO2			Dryer + Process	167.13	732.01			PSD Avoidance Limit	194.33	851.17
Pb	0.263	mg/dscm	Eagan testing	0.04	0.19	1	mg/dscm	BACT as 0.5 MACT	0.17	0.74
Antimony	0.00150	mg/dscm	Eagan testing	2.53E-04	1.11E-03	0.003	mg/dscm	2 x Eagan testing	5.06E-04	2.22E-03
Arsenic	0.08930	mg/dscm	Eagan testing	1.51E-02	6.60E-02	0.1786	mg/dscm	2 x Eagan testing	3.01E-02	1.32E-01
Cadmium	0.00250	mg/dscm	Eagan testing	4.22E-04	1.85E-03	0.005	mg/dscm	2 x Eagan testing	8.43E-04	3.69E-03
Mercury	0.0011	mg/dscm	Eagan testing	1.86E-04	8.13E-04	0.00091	lb/ton	NESHAP BID, blast factor	3.82E-03	1.67E-02
HCl				0.05	0.22				0.05	0.22
H2SO4 (not a HAP)			1/2 Eagan testing (unscrubbed)	1.00	4.38			1/2 Eagan Testing (unscrubbed	1.00	4.38
Carbon Disulfide				0.65	2.85				1.13	4.97
Total HAPs				**0.760**	**3.330**				**1.388**	**6.080**

Notes: 95% UCL for lead is 0.80 mg/dscm (see UCL Calc's tab)

Table 10
Building Ventilation Torit Stack
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Building Ventilation Torit Stack

	Units			
Short-Term Activity Level 1:		**Stack ID**		
Long-Term Activity Level 1:		Stack Height	120	feet
		Stack Flow	195,000	acfm
		Stack Diameter	96	inches
Short-Term Activity Level 2:		Stack Temperature	amb	deg F
Long-Term Activity Level 2:				

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit Level	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.0026	gr/dscf	Eagan testing	4.35	19.03	0.005	gr/dscf	BACT	8.36	36.60
VOC										
NOx										
CO										
SO2										
Pb	0.026	mg/dscm	Eagan testing	0.02	0.08	0.5	mg/dscm	BACT as 0.25 MACT	0.37	1.60
Antimony	0.00062	mg/dscm	Eagan testing	4.53E-04	1.98E-03	0.00124	mg/dscm	2 x Eagan testing	9.06E-04	3.97E-03
Arsenic	0.00034	mg/dscm	Eagan testing	2.48E-04	1.09E-03	0.00068	mg/dscm	2 x Eagan testing	4.97E-04	2.18E-03
Cadmium	0.00374	mg/dscm	Eagan testing	2.73E-03	1.20E-02	0.00748	mg/dscm	2 x Eagan testing	5.46E-03	2.39E-02
Mercury	0.00009	mg/dscm	Eagan testing	6.57E-05	2.88E-04	0.00018	mg/dscm	2 x Eagan testing	1.31E-04	5.76E-04
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.022**	**0.099**				**0.372**	**1.630**

Notes: 95% UCL for lead is 0.06 mg/dscm (see UCL Calc's tab)
Arsenic rates based upon non-detect level in Eagan testing

Table 11
Refinery Combustion
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Refinery Combustion

Emissions are for TOTAL of 10 stacks
Stack parameters are for EACH of 10 stacks

		Units
Short-Term Activity Level 1:	40	MMBTU/hr (oxyfuel)
Long-Term Activity Level 1:		
Short-Term Activity Level 2:		
Long-Term Activity Level 2:		

Stack ID			
Stack Height		feet	set per Barr drawings
Stack Flow	500	acfm	
Stack Diameter	12	inches	
Stack Temperature	450	deg F	

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.0076	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.30	1.33				0.30	1.33
VOC	0.0055	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.22	0.96				0.22	0.96
NOx	0.05	lb/MMBTU	AP42 Table 1.4-2 (NG)-low NOx	2.00	8.76				2.00	8.76
CO	0.084	lb/MMBTU	AP42 Table 1.4-2 (NG)	3.36	14.72				3.36	14.72
SO2	0.0165	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.66	2.89				0.66	2.89
Pb	0.0005	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.02	0.09				0.02	0.09
Antimony										
Arsenic										
cadmium										
Mercury	2.60E-07	lb/MMBTU	AP42 Table 1.4-4 (NG)	1.04E-05	4.56E-05				1.04E-05	4.56E-05
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.020**	**0.088**				**0.020**	**0.088**

Table 12
Plastics Plant
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Plastics Plant

		Units
Short-Term Activity Level 1:	3,500	lb/hr
Long-Term Activity Level 1:	24,000,000	lb/yr
Short-Term Activity Level 2:		
Long-Term Activity Level 2:		

Stack ID		
Stack Height	feet	Volume source
Stack Flow	acfm	
Stack Diameter	inches	
Stack Temperature	deg F	

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit Level	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	34.5	lb/MMlb	A&WMA Journal	0.12	0.53	34.5	lb/MMlb	A&WMA Journal	0.12	0.53
VOC	80.3	lb/MMlb	A&WMA Journal	0.28	1.23	80.3	lb/MMlb	A&WMA Journal	0.28	1.23
NOx										
CO										
SO2										
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Source article for emission factors is attached.

Table 13
Propane Vaporizer
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: **Propane Vaporizer**

		Units
Short-Term Activity Level 1:	1.2	MMBTU/hr
Long-Term Activity Level 1:		
Short-Term Activity Level 2:		
Long-Term Activity Level 2:		

Stack ID

Stack Height	9	feet	
Stack Flow	500	acfm	
Stack Diameter	8	inches	(capped)
Stack Temperature	600	deg F	est

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.0066	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.01	0.03				0.01	0.03
VOC	0.0055	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.01	0.03				0.01	0.03
NOx	0.21	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.25	1.10				0.25	1.10
CO	0.0352	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.04	0.19				0.04	0.19
SO2	0.0165	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.02	0.09				0.02	0.09
Pb				0.00	0.00				0.00	0.00
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Table 14
Emergency Generator
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Emergency Generator

		Units
Short-Term Activity Level 1:	762	HP (500 kW electrical output)
Long-Term Activity Level 1:		
Short-Term Activity Level 2:		
Long-Term Activity Level 2:		

Stack ID			
Stack Height	11.2	feet	per Barr drawings
Stack Flow	3,845	acfm	
Stack Diameter	8	inches	
Stack Temperature	941	deg F	

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.03	lb/hr	Vendor Specifications	0.03	0.00				0.03	0.01
VOC	0.01	lb/hr	Vendor Specifications	0.01	0.00				0.01	0.00
NOx	9.63	lb/hr	Vendor Specifications	9.63	0.96				9.63	2.41
CO	0.67	lb/hr	Vendor Specifications	0.67	0.07				0.67	0.17
SO2	0.002	lb/Hp-hr	AP-42, Table 3.3-1	1.52	0.15				1.52	0.38
Pb										
Antimony										
Arsenic										
Cadmium										
Mercury										
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.000**	**0.000**				**0.000**	**0.000**

Note: Assumed maximum hours of operation = 500

Table 15
Slurry Heaters
EnviroFocus Technologies, LLC
Tampa, Florida

Process Unit: Soda Ash Slurry Heaters

		Units	Stack ID			
Short-Term Activity Level 1:	1.5	MMBTU/hr (2 @ 0.75 mmBtu each)	Stack Height	11.2	feet	2 Horizontal stacks
Long-Term Activity Level 1:			Stack Flow	800	acfm	each
			Stack Diameter	8	inches	each
Short-Term Activity Level 2:			Stack Temperature	300	deg F	
Long-Term Activity Level 2:						

Pollutant	EF	EF Units	Reference	Expected Actual lb/hr	Expected Actual tons/yr	Limit	Units	Notes	Limiting Level lb/hr	Limiting Level tons/yr
PM10	0.0076	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.01	0.05				0.01	0.05
VOC	0.0055	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.01	0.04				0.01	0.04
NOx	0.21	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.32	1.38				0.32	1.38
CO	0.084	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.13	0.55				0.13	0.55
SO2	0.0165	lb/MMBTU	AP42 Table 1.5-1 (C3H8)	0.02	0.11				0.02	0.11
Pb	0.0005	lb/MMBTU	AP42 Table 1.4-2 (NG)	0.00	0.00				0.00	0.00
Antimony										
Arsenic										
cadmium										
Mercury	2.60E-07	lb/MMBTU	AP42 Table 1.4-4 (NG)	3.90E-07	1.71E-06				3.90E-07	1.71E-06
HCl										
H2SO4 (not a HAP)										
Carbon Disulfide										
Total HAPs				**0.001**	**0.003**				**0.001**	**0.003**

Table 16
Roadway Fugitives
EnviroFocus Technologies, LLC
Tampa, Florida

Source ID **Roadway Fugitives**

Collection of Volume Sources
Paved Roads

AP-42 Section 13.2.1

$$E = (k(sL/2)^{0.65} \times (W/3)^{1.5} - C) * CNTRL$$

where:

E = emission factor (lb/VMT)
k = particle size multiplier (lb/VMT, 0.016 for PM10, 0.082 for PM)
sL = road surface silt loading (g/m^2) Surface Silt Loading (sL) from direct measurements conducted at Gopher Resource Corporation, Eagan, Minnesota, October 2006
W = average weight of vehicles traveling the road (tons)
VMT = vehicle miles traveled
C = Emission factor for 1980's vehicle exhaust, brake wear, & tire wear (0.00047 lb/VMT)
CNTRL = 0.5 for 50% effectiveness of wet suppression emission control (efficiency per Secondary Lead NESHAP B.I.D.)

NOTE: Shipping occurs between hours of 6 a.m. and 10 p.m.. Emissions assumed to occur over this 16 hour period daily

Segment	Distance (ft)
1	780
2	650
3	1030
4	1090
5	980
6	300
7	690
8	300
9	250
10	730
11	740
12	750
13	570
14	670
15	600
16	600

Note: **In this table, the ton/year emission rates are based upon average daily traffic volumes**
Use these average daily rates in modeling lead (Pb) for the quarterly averaging period and PM10 for the annual averaging period

Table 16
Roadway Fugitives
EnviroFocus Technologies, LLC
Tampa, Florida

Vehicle Traffic

	Total Trucks	Shipping Days	Daily Trucks	Empty Weight	Load Weight	Loaded Weight
Inbound raw materials	12775	365	35	16	20	36
Outgoing product lead shipments	8030	365	22	16	20	36
Other large trucks (blast fluxes)	730	365	2	16	20	36
Other large trucks (refining fluxes)	730	365	2	16	20	36
Plastics shipments	365	365	1	16	20	36
Caustic Soda deliveries	730	365	2	16	17	33
Slag rolloffs, internal	1825	365	5	10	20	30
slag/ scrap metal offsite shipping	1825	365	5	16	20	36
Loaders	5840	365	16	12	3	15
Miscellaneous deliveries	1460	365	4	5	2	7

Note: 90 percent of incoming raw materials directly to dock, not warehouse

Note: Antimony assumed at 2% of lead emissions, arsenic at 1% of lead emissions

Description	Distance (ft)	Segment(s)	Trips/Year	W (tons)	sL	VMT (miles)	E (PM10)	E (TSP)	E (Pb)	E (Sb)	E (As)	PM10 (tons)	TSP (tons)	Pb (tons)	Sb (tons)	As (tons)
Incoming Batteries Warehouse (loaded)	780	1	1,278	36.0	1.48	189	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	2.58E-02	1.32E-01	7.07E-03	1.41E-04	7.07E-05
Incoming Batteries Warehouse (unloaded)	300	8	1,278	16.0	1.48	73	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	2.93E-03	1.51E-02	8.06E-04	1.61E-05	8.06E-06
Incoming Batteries Direct (loaded)	650	2	11,498	36.0	1.48	1,415	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	1.93E-01	9.92E-01	5.31E-02	1.06E-03	5.31E-04
Incoming Batteries Direct (unloaded)	250	9	11,498	16.0	1.48	544	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	2.20E-02	1.13E-01	6.04E-03	1.21E-04	6.04E-05
Outgoing Lead (unloaded)	1030	3	8,030	16.0	1.48	1,566	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	6.33E-02	3.25E-01	1.74E-02	3.48E-04	1.74E-04
Outgoing Lead (loaded)	730	10	8,030	36.0	1.48	1,110	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	1.52E-01	7.78E-01	4.16E-02	8.32E-04	4.16E-04
Plastics outgoing (loaded)	300	8	365	36.0	1.48	21	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	2.83E-03	1.45E-02	7.77E-04	1.55E-05	7.77E-06
Plastics outgoing (unloaded)	780	1	365	16.0	1.48	54	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	2.18E-03	1.12E-02	5.99E-04	1.20E-05	5.99E-06
Other Large Trucks, blast, bins (loaded)	1090	4	730	36.0	1.48	151	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	2.06E-02	1.06E-01	5.65E-03	1.13E-04	5.65E-05
Other Large Trucks blast, bins (unloaded)	740	11	730	16.0	1.48	102	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	4.13E-03	2.12E-02	1.14E-03	2.27E-05	1.14E-05
Other Large Trucks, refining fluxes (loaded)	1030	3	730	36.0	1.48	142	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	1.95E-02	9.98E-02	5.34E-03	1.07E-04	5.34E-05
Other Large Trucks, refining fluxes (unloaded)	730	10	730	16.0	1.48	101	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	4.08E-03	2.09E-02	1.12E-03	2.24E-05	1.12E-05
Slag/ scrap metal offsite shipping (loaded)	750	12	1,825	36.0	1.48	259	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	3.54E-02	1.82E-01	9.72E-03	1.94E-04	9.72E-05
Slag/ scrap metal offsite shipping (unloaded)	980	5	1,825	16.0	1.48	339	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	1.37E-02	7.03E-02	3.76E-03	7.52E-05	3.76E-05
Caustic Soda (loaded)	300	6	730	33.0	1.48	41	2.4E-01	1.2E+00	6.6E-02	1.3E-03	6.6E-04	4.97E-03	2.55E-02	1.36E-03	2.73E-05	1.36E-05
Caustic Soda (unloaded)	570	13	730	16.0	1.48	79	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	3.18E-03	1.64E-02	8.75E-04	1.75E-05	8.75E-06
Miscellaneous (loaded)	1030	3	1,460	7.0	1.48	285	2.3E-02	1.2E-01	6.4E-03	1.3E-04	6.4E-05	3.31E-03	1.71E-02	9.14E-04	1.83E-05	9.14E-06
Miscellaneous (unloaded)	730	10	1,460	5.0	1.48	202	1.4E-02	7.2E-02	3.9E-03	7.7E-05	3.9E-05	1.40E-03	7.30E-03	3.90E-04	7.81E-06	3.90E-06
Loaders (loaded)	690	7	5,840	15.0	1.48	763	7.3E-02	3.8E-01	2.0E-02	4.0E-04	2.0E-04	2.80E-02	1.44E-01	7.69E-03	1.54E-04	7.69E-05
Loaders (unloaded)	670	14	5,840	12.0	1.48	741	5.2E-02	2.7E-01	1.4E-02	2.9E-04	1.4E-04	1.94E-02	9.98E-02	5.34E-03	1.07E-04	5.34E-05
Slag Rolloffs (loaded)	600	16	1,825	30.0	1.48	207	2.1E-01	1.1E+00	5.7E-02	1.1E-03	5.7E-04	2.15E-02	1.11E-01	5.91E-03	1.18E-04	5.91E-05
Slag Rolloffs (unloaded)	600	15	1,825	10.0	1.48	207	4.0E-02	2.0E-01	1.1E-02	2.2E-04	1.1E-04	4.13E-03	2.12E-02	1.14E-03	2.27E-05	1.14E-05
												6.47E-01	3.32E+00	1.78E-01	3.55E-03	1.78E-03

Table 16
Roadway Fugitives
EnviroFocus Technologies, LLC
Tampa, Florida

PM10 Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	2.58E-02															
Incoming Batteries Warehouse (unloaded)								2.93E-03								
Incoming Batteries Direct (loaded)		1.93E-01														
Incoming Batteries Direct (unloaded)									2.2E-02							
Outgoing Lead (unloaded)			6.33E-02													
Outgoing Lead (loaded)										1.5E-01						
Plastics outgoing (loaded)								2.83E-03								
Plastics outgoing (unloaded)	2.18E-03															
Other Large Trucks, blast, bins (loaded)				2.06E-02												
Other Large Trucks blast, bins (unloaded)											4.1E-03					
Other Large Trucks, refining fluxes (loaded)			1.95E-02													
Other Large Trucks, refining fluxes (unloaded)										4.1E-03						
Slag/ scrap metal offsite shipping (loaded)												3.5E-02				
Slag/ scrap metal offsite shipping (unloaded)					1.37E-02											
Caustic Soda (loaded)						4.97E-03										
Caustic Soda (unloaded)													3.2E-03			
Miscellaneous (loaded)			3.31E-03													
Miscellaneous (unloaded)										1.4E-03						
Loaders (loaded)							2.80E-02									
Loaders (unloaded)														1.94E-02		
Slag Rolloffs (loaded)																2.15E-02
Slag Rolloffs (unloaded)															4.13E-03	

PM10, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2.80E-02	1.93E-01	8.60E-02	2.06E-02	1.37E-02	4.97E-03	2.80E-02	5.76E-03	2.20E-02	1.57E-01	4.13E-03	3.54E-02	3.18E-03	1.94E-02	4.13E-03	2.15E-02

Pb Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	7.07E-03															
Incoming Batteries Warehouse (unloaded)								8.06E-04								
Incoming Batteries Direct (loaded)		5.31E-02														
Incoming Batteries Direct (unloaded)									6.0E-03							
Outgoing Lead (unloaded)			1.74E-02													
Outgoing Lead (loaded)										4.2E-02						
Plastics outgoing (loaded)								7.77E-04								
Plastics outgoing (unloaded)	5.99E-04															
Other Large Trucks, blast, bins (loaded)				5.65E-03												
Other Large Trucks blast, bins (unloaded)											1.1E-03					
Other Large Trucks, refining fluxes (loaded)			5.34E-03													
Other Large Trucks, refining fluxes (unloaded)										1.1E-03						
Slag/ scrap metal offsite shipping (loaded)												9.7E-03				
Slag/ scrap metal offsite shipping (unloaded)					3.76E-03											
Caustic Soda (loaded)						1.36E-03										
Caustic Soda (unloaded)													8.7E-04			
Miscellaneous (loaded)			9.14E-04													
Miscellaneous (unloaded)										3.9E-04						
Loaders (loaded)							7.69E-03									
Loaders (unloaded)														5.34E-03		
Slag Rolloffs (loaded)																5.91E-03
Slag Rolloffs (unloaded)															1.14E-03	

Pb, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7.67E-03	5.31E-02	2.36E-02	5.65E-03	3.76E-03	1.36E-03	7.69E-03	1.58E-03	6.04E-03	4.31E-02	1.14E-03	9.72E-03	8.75E-04	5.34E-03	1.14E-03	5.91E-03

Table 16
Roadway Fugitives
EnviroFocus Technologies, LLC
Tampa, Florida

Sb Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	1.41E-04															
Incoming Batteries Warehouse (unloaded)								1.61E-05								
Incoming Batteries Direct (loaded)		1.06E-03														
Incoming Batteries Direct (unloaded)									1.2E-04							
Outgoing Lead (unloaded)			3.48E-04													
Outgoing Lead (loaded)										8.3E-04						
Plastics outgoing (loaded)								1.55E-05								
Plastics outgoing (unloaded)	1.20E-05															
Other Large Trucks, blast, bins (loaded)				1.13E-04												
Other Large Trucks blast, bins (unloaded)											2.3E-05					
Other Large Trucks, refining fluxes (loaded)			1.07E-04													
Other Large Trucks, refining fluxes (unloaded)										2.2E-05						
Slag/ scrap metal offsite shipping (loaded)												1.9E-04				
Slag/ scrap metal offsite shipping (unloaded)					7.52E-05											
Caustic Soda (loaded)						2.73E-05										
Caustic Soda (unloaded)													1.7E-05			
Miscellaneous (loaded)			1.83E-05													
Miscellaneous (unloaded)										7.8E-06						
Loaders (loaded)							1.54E-04									
Loaders (unloaded)														1.07E-04		
Slag Rolloffs (loaded)																1.18E-04
Slag Rolloffs (unloaded)															2.27E-05	

Sb, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.53E-04	1.06E-03	4.73E-04	1.13E-04	7.52E-05	2.73E-05	1.54E-04	3.17E-05	1.21E-04	8.62E-04	2.27E-05	1.94E-04	1.75E-05	1.07E-04	2.27E-05	1.18E-04

As Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	7.07E-05															
Incoming Batteries Warehouse (unloaded)								8.06E-06								
Incoming Batteries Direct (loaded)		5.31E-04														
Incoming Batteries Direct (unloaded)									6.0E-05							
Outgoing Lead (unloaded)			1.74E-04													
Outgoing Lead (loaded)										4.2E-04						
Plastics outgoing (loaded)								7.77E-06								
Plastics outgoing (unloaded)	5.99E-06															
Other Large Trucks, blast, bins (loaded)				5.65E-05												
Other Large Trucks blast, bins (unloaded)											1.1E-05					
Other Large Trucks, refining fluxes (loaded)			5.34E-05													
Other Large Trucks, refining fluxes (unloaded)										1.1E-05						
Slag/ scrap metal offsite shipping (loaded)												9.7E-05				
Slag/ scrap metal offsite shipping (unloaded)					3.76E-05											
Caustic Soda (loaded)						1.36E-05										
Caustic Soda (unloaded)													8.7E-06			
Miscellaneous (loaded)			9.14E-06													
Miscellaneous (unloaded)										3.9E-06						
Loaders (loaded)							7.69E-05									
Loaders (unloaded)														5.34E-05		
Slag Rolloffs (loaded)																5.91E-05
Slag Rolloffs (unloaded)															1.14E-05	

As, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7.67E-05	5.31E-04	2.36E-04	5.65E-05	3.76E-05	1.36E-05	7.69E-05	1.58E-05	6.04E-05	4.31E-04	1.14E-05	9.72E-05	8.75E-06	5.34E-05	1.14E-05	5.91E-05

Totals

Plantwide Emission Rates:

PM10 (tons)	TSP (tons)	Pb (tons)	Sb (tons)	As (tons)
0.647	3.317	0.178	3.55E-03	1.78E-03

Table 16
Roadway Fugitives
EnviroFocus Technologies, LLC
Tampa, Florida

Table 17
Plantwide Totals
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Expected Actual lb/hr	Expected Actual tons/yr	Limiting Levels lb/hr	Limiting Levels tons/yr
PM10	10.45	45.63	14.79	64.65
VOC	0.58	2.50	3.65	15.96
NOx	41.38	140.01	55.63	203.87
CO	195.97	855.48	208.87	912.08
SO2	177.69	771.75	204.98	891.52
Pb	0.25	1.12	0.93	4.06
Antimony	0.001	0.005	0.002	0.009
Arsenic	0.036	0.159	0.072	0.317
Cadmium	0.004	0.016	0.007	0.033
Mercury	0.001	0.002	0.004	0.018
HCl	0.05	0.22	0.05	0.22
H2SO4 (not a HAP)	1.08	4.73	1.48	6.49
Carbon Disulfide	0.65	2.85	1.13	4.97
Total HAPs	0.96	4.19	2.16	9.44

Table 18
Peak Daily Roadway Fugitives
EnviroFocus Technologies, LLC
Tampa, Florida

Source ID **Peak Daily Roadway Fugitives**

Collection of Volume Sources
Paved Roads

AP-42 Section 13.2.1

$$E = (k(sL/2)^{0.65} \times (W/3)^{1.5} - C) * CNTRL$$

where:

E = emission factor (lb/VMT)
k = particle size multiplier (lb/VMT, 0.016 for PM10, 0.082 for PM)
sL = road surface silt loading (g/m^2) Surface Silt Loading (sL) from direct measurements conducted at Gopher Resource Corporation, Eagan, Minnesota, October 2006
W = average weight of vehicles traveling the road (tons)
VMT = vehicle miles traveled
C = Emission factor for 1980's vehicle exhaust, brake wear, & tire wear (0.00047 lb/VMT)
CNTRL = 0.5 for 50% effectiveness of wet suppression emission control (efficiency per Secondary Lead NESHAP B.I.D.)

NOTE: Shipping occurs between hours of 6 a.m. and 10 p.m.. Emissions assumed to occur over this 16 hour period daily

Segment	Distance (ft)
1	780
2	650
3	1030
4	1090
5	980
6	300
7	690
8	300
9	250
10	730
11	740
12	750
13	570
14	670
15	600
16	600

Note: **In this table, the ton/year emission rates are based upon peak daily traffic volumes**
Use these peak daily rates in modeling PM10 for the 24-hour averaging period

Peak daily traffic volumes are 1.15 x average shipping day traffic volumes
This is 1.15 x (7/5) the annualized average traffic volumes modeled for the long-term averaging periods = 1.6 x

Vehicle Traffic

	Total Trucks	Shipping Days	Daily Trucks	Empty Weight	Load Weight	Loaded Weight
Inbound raw materials	20440	365	56	16	20	36
Outgoing product lead shipments	13140	365	36	16	20	36
Other large trucks (blast fluxes)	1095	365	3	16	20	36
Other large trucks (refining fluxes)	1095	365	3	16	20	36
Plastics shipments	730	365	2	16	20	36
Caustic Soda deliveries	1460	365	4	16	17	33
Slag rolloffs, internal	2920	365	8	10	20	30
slag/ scrap metal offsite shipping	2920	365	8	16	20	36
Loaders	8490	365	26	12	3	15
Miscellaneous deliveries	2920	365	8	5	2	7

Note: 90 percent of incoming raw materials directly to dock, not warehouse

Note: Antimony assumed at 2% of lead emissions, arsenic at 1% of lead emissions

Description	Distance (ft)	Segment(s)	Trips/Year	W (tons)	sL	VMT (miles)	E (PM10)	E (TSP)	E (Pb)	E (Sb)	E (As)	PM10 (tons)	TSP (tons)	Pb (tons)	Sb (tons)	As (tons)
Incoming Batteries Warehouse (loaded)	780	1	2,044	36.0	1.48	302	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	4.12E-02	2.12E-01	1.13E-02	2.26E-04	1.13E-04
Incoming Batteries Warehouse (unloaded)	300	8	2,044	16.0	1.48	116	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	4.69E-03	2.41E-02	1.29E-03	2.58E-05	1.29E-05
Incoming Batteries Direct (loaded)	650	2	18,396	36.0	1.48	2,265	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	3.09E-01	1.59E+00	8.49E-02	1.70E-03	8.49E-04
Incoming Batteries Direct (unloaded)	250	9	18,396	16.0	1.48	871	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	3.52E-02	1.81E-01	9.67E-03	1.93E-04	9.67E-05
Outgoing Lead (unloaded)	1030	3	13,140	16.0	1.48	2,563	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	1.04E-01	5.32E-01	2.85E-02	5.69E-04	2.85E-04
Outgoing Lead (loaded)	730	10	13,140	36.0	1.48	1,817	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	2.48E-01	1.27E+00	6.81E-02	1.36E-03	6.81E-04
Plastics outgoing (loaded)	300	8	730	36.0	1.48	41	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	5.67E-03	2.91E-02	1.55E-03	3.11E-05	1.55E-05
Plastics outgoing (unloaded)	780	1	730	16.0	1.48	108	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	4.36E-03	2.24E-02	1.20E-03	2.39E-05	1.20E-05
Other Large Trucks, blast, bins (loaded)	1090	4	1,095	36.0	1.48	226	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	3.09E-02	1.58E-01	8.47E-03	1.69E-04	8.47E-05
Other Large Trucks blast, bins (unloaded)	740	11	1,095	16.0	1.48	153	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	6.20E-03	3.18E-02	1.70E-03	3.41E-05	1.70E-05
Other Large Trucks, refining fluxes (loaded)	1030	3	1095	36.0	1.48	214	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	2.92E-02	1.50E-01	8.01E-03	1.60E-04	8.01E-05
Other Large Trucks, refining fluxes (unloaded)	730	10	1,095	16.0	1.48	151	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	6.12E-03	3.14E-02	1.68E-03	3.36E-05	1.68E-05
Slag/ scrap metal offsite shipping (loaded)	750	12	2,920	36.0	1.48	415	2.7E-01	1.4E+00	7.5E-02	1.5E-03	7.5E-04	5.67E-02	2.91E-01	1.55E-02	3.11E-04	1.55E-04
Slag/ scrap metal offsite shipping (unloaded)	980	5	2,920	16.0	1.48	542	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	2.19E-02	1.12E-01	6.02E-03	1.20E-04	6.02E-05
Caustic Soda (loaded)	300	6	1,460	33.0	1.48	83	2.4E-01	1.2E+00	6.6E-02	1.3E-03	6.6E-04	9.94E-03	5.10E-02	2.73E-03	5.46E-05	2.73E-05
Caustic Soda (unloaded)	570	13	1,460	16.0	1.48	158	8.1E-02	4.1E-01	2.2E-02	4.4E-04	2.2E-04	6.37E-03	3.27E-02	1.75E-03	3.50E-05	1.75E-05
Miscellaneous (loaded)	1030	3	2,920	7.0	1.48	570	2.3E-02	1.2E-01	6.4E-03	1.3E-04	6.4E-05	6.61E-03	3.42E-02	1.83E-03	3.65E-05	1.83E-05
Miscellaneous (unloaded)	730	10	2,920	5.0	1.48	404	1.4E-02	7.2E-02	3.9E-03	7.7E-05	3.9E-05	2.81E-03	1.46E-02	7.81E-04	1.56E-05	7.81E-06
Loaders (loaded)	690	7	9,490	15.0	1.48	1,240	7.3E-02	3.8E-01	2.0E-02	4.0E-04	2.0E-04	4.55E-02	2.34E-01	1.25E-02	2.50E-04	1.25E-04
Loaders (unloaded)	670	14	9,490	12.0	1.48	1,204	5.2E-02	2.7E-01	1.4E-02	2.8E-04	1.4E-04	3.15E-02	1.62E-01	8.68E-03	1.74E-04	8.68E-05
Slag Rolloffs (loaded)	600	16	2,920	30.0	1.48	332	2.1E-01	1.1E+00	5.7E-02	1.1E-03	5.7E-04	3.45E-02	1.77E-01	9.46E-03	1.89E-04	9.46E-05
Slag Rolloffs (unloaded)	600	15	2,920	10.0	1.48	332	4.0E-02	2.0E-01	1.1E-02	2.2E-04	1.1E-04	6.60E-03	3.40E-02	1.82E-03	3.64E-05	1.82E-05
												1.05E+00	5.37E+00	2.87E-01	5.75E-03	2.87E-03

PM10 Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	4.12E-02															
Incoming Batteries Warehouse (unloaded)								4.69E-03								
Incoming Batteries Direct (loaded)		3.09E-01														
Incoming Batteries Direct (unloaded)									3.5E-02							
Outgoing Lead (unloaded)			1.04E-01													
Outgoing Lead (loaded)										2.5E-01						
Plastics outgoing (loaded)								5.67E-03								
Plastics outgoing (unloaded)	4.38E-03															
Other Large Trucks, blast, bins (loaded)				3.09E-02												
Other Large Trucks blast, bins (unloaded)											6.2E-03					
Other Large Trucks, refining fluxes (loaded)			2.92E-02													
Other Large Trucks, refining fluxes (unloaded)										6.1E-03						
Slag/ scrap metal offsite shipping (loaded)												5.7E-02				
Slag/ scrap metal offsite shipping (unloaded)					2.19E-02											
Caustic Soda (loaded)						9.94E-03										
Caustic Soda (unloaded)													6.4E-03			
Miscellaneous (loaded)			6.61E-03													
Miscellaneous (unloaded)										2.8E-03						
Loaders (loaded)							4.55E-02									
Loaders (unloaded)														3.15E-02		
Slag Rolloffs (loaded)																3.45E-02
Slag Rolloffs (unloaded)															6.60E-03	

PM10, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
4.56E-02	3.09E-01	1.39E-01	3.09E-02	2.19E-02	9.94E-03	4.55E-02	1.04E-02	3.52E-02	2.57E-01	8.20E-03	5.67E-02	6.37E-03	3.15E-02	6.60E-03	3.45E-02	1.047

Pb Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	1.13E-02															
Incoming Batteries Warehouse (unloaded)								1.29E-03								
Incoming Batteries Direct (loaded)		8.49E-02														
Incoming Batteries Direct (unloaded)									9.7E-03							
Outgoing Lead (unloaded)			2.85E-02													
Outgoing Lead (loaded)										6.8E-02						
Plastics outgoing (loaded)								1.55E-03								
Plastics outgoing (unloaded)	1.20E-03															
Other Large Trucks, blast, bins (loaded)				8.47E-03												
Other Large Trucks blast, bins (unloaded)											1.7E-03					
Other Large Trucks, refining fluxes (loaded)			8.01E-03													
Other Large Trucks, refining fluxes (unloaded)										1.7E-03						
Slag/ scrap metal offsite shipping (loaded)												1.6E-02				
Slag/ scrap metal offsite shipping (unloaded)					6.02E-03											
Caustic Soda (loaded)						2.73E-03										
Caustic Soda (unloaded)													1.7E-03			
Miscellaneous (loaded)			1.83E-03													
Miscellaneous (unloaded)										7.8E-04						
Loaders (loaded)							1.25E-02									
Loaders (unloaded)														8.68E-03		
Slag Rolloffs (loaded)																9.46E-03
Slag Rolloffs (unloaded)															1.82E-03	

Pb, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1.25E-02	8.49E-02	3.83E-02	8.47E-03	6.02E-03	2.73E-03	1.25E-02	2.84E-03	9.67E-03	7.06E-02	1.70E-03	1.55E-02	1.75E-03	8.68E-03	1.82E-03	9.46E-03	0.267

Sb Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	2.26E-04															
Incoming Batteries Warehouse (unloaded)								2.58E-05								
Incoming Batteries Direct (loaded)		1.70E-03														
Incoming Batteries Direct (unloaded)									1.9E-04							
Outgoing Lead (unloaded)			5.69E-04													
Outgoing Lead (loaded)										1.4E-03						
Plastics outgoing (loaded)								3.11E-05								
Plastics outgoing (unloaded)	2.39E-05															
Other Large Trucks, blast, bins (loaded)				1.69E-04												
Other Large Trucks blast, bins (unloaded)											3.4E-05					
Other Large Trucks, refining fluxes (loaded)			1.60E-04													
Other Large Trucks, refining fluxes (unloaded)										3.4E-05						
Slag/ scrap metal offsite shipping (loaded)												3.1E-04				
Slag/ scrap metal offsite shipping (unloaded)					1.20E-04											
Caustic Soda (loaded)						5.46E-05										
Caustic Soda (unloaded)													3.5E-05			
Miscellaneous (loaded)			3.65E-05													
Miscellaneous (unloaded)										1.6E-05						
Loaders (loaded)							2.50E-04									
Loaders (unloaded)														1.74E-04		
Slag Rolloffs (loaded)																1.89E-04
Slag Rolloffs (unloaded)															3.64E-05	

Sb, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2.50E-04	1.70E-03	7.66E-04	1.69E-04	1.20E-04	5.46E-05	2.50E-04	5.69E-05	1.93E-04	1.41E-03	3.41E-05	3.11E-04	3.50E-05	1.74E-04	3.64E-05	1.89E-04	5.75E-03

As Emissions on Segments (tons per year):

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Incoming Batteries Warehouse (loaded)	1.13E-04															
Incoming Batteries Warehouse (unloaded)								1.29E-05								
Incoming Batteries Direct (loaded)		8.49E-04														
Incoming Batteries Direct (unloaded)									9.7E-05							
Outgoing Lead (unloaded)			2.85E-04													
Outgoing Lead (loaded)										6.8E-04						
Plastics outgoing (loaded)								1.55E-05								
Plastics outgoing (unloaded)	1.20E-05															
Other Large Trucks, blast, bins (loaded)				8.47E-05												
Other Large Trucks blast, bins (unloaded)											1.7E-05					
Other Large Trucks, refining fluxes (loaded)			8.01E-05													
Other Large Trucks, refining fluxes (unloaded)										1.7E-05						
Slag/ scrap metal offsite shipping (loaded)												1.6E-04				
Slag/ scrap metal offsite shipping (unloaded)					6.02E-05											
Caustic Soda (loaded)						2.73E-05										
Caustic Soda (unloaded)													1.7E-05			
Miscellaneous (loaded)			1.83E-05													
Miscellaneous (unloaded)										7.8E-06						
Loaders (loaded)							1.25E-04									
Loaders (unloaded)														8.68E-05		
Slag Rolloffs (loaded)																9.46E-05
Slag Rolloffs (unloaded)															1.82E-05	

As, Segment totals (tons/year):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1.25E-04	8.49E-04	3.83E-04	8.47E-05	6.02E-05	2.73E-05	1.28E-04	2.84E-05	9.67E-05	7.06E-04	1.70E-05	1.55E-04	1.75E-05	8.68E-05	1.82E-05	9.46E-05	2.87E-03

Totals

Plantwide Emission Rates:

PM10 (tons)	TSP (tons)	Pb (tons)	Sb (tons)	As (tons)
1.047	5.366	0.287	5.75E-03	2.87E-03

Stack Test Results History and Statistics - Gopher Resource Corporation, Eagan, Minnesota

Main Stack - Lead Results

Year	Date	Flow acfm	Flow scfm	Temp deg F	PWR tons/hr	Pb Conc mg/dscm	Pb Rate lb/hr	Pb EF lb/ton	log transformed data			Pb front lb/hr	Pb back lbhr
2007	6-Nov	144,900	106,300	159		0.0598	0.0238	#DIV/0!	-2.82E+00	-3.74E+00	#DIV/0!	0.0211	0.0027
2007	11-Sep	135,900	106,700	152	23.08	0.047	0.019	8.23E-04	-3.06E+00	-3.96E+00	-7.10E+00	0.018	0.0007
2006	27-Jun	136,900	102,300	181	23.45	0.16	0.06	2.56E-03	-1.83E+00	-2.81E+00	-5.97E+00	0.013	0.0468
2005	11-May	132,000	105,200	146	23.5	0.9	0.358	1.52E-02	-1.05E-01	-1.03E+00	-4.18E+00	0.355	0.0027
2004	14-Apr	144,700	106,200	195	24.3	0.11	0.046	1.89E-03	-2.21E+00	-3.08E+00	-6.27E+00	0.045	0.0007
2002	26-Jun	143,000	101,200	211	25.35	0.3	0.114	4.50E-03	-1.20E+00	-2.17E+00	-5.40E+00	0.113	0.001

Mean	0.263	0.103	#DIV/0!		
Sigma	0.325	0.129	#DIV/0!		
Mean+2.33sigma	**1.021**	**0.405**	**#DIV/0!**	**99% probability of not exceeding**	
Mean+2sigma	0.913	0.362	#DIV/0!	97.7% probability of not exceeding	
Mean+1.65sigma	0.800	0.317	#DIV/0!	95% probability of not exceeding	
NormInv at 99	1.020	0.404	#DIV/0!		
Norminv at 95	0.798	0.316	#DIV/0!		

mean of ln(x)	-1.681	-2.799	#DIV/0!	
sigma of ln(x)	1.094	1.082	#DIV/0!	
loginv at 99%	2.369	0.754	#DIV/0!	**99% probability of not exceeding**
loginv at 95%	1.125	0.361	#DIV/0!	95% probability of not exceeding

Torit Stack - Lead Results

Year	Date	Flow acfm	Flow scfm	Temp deg F	PWR tons/hr	Pb Conc mg/dscm	Pb Rate lb/hr	Pb EF lb/ton	log transformed data			Pb front lb/hr	Pb back lbhr
2007	5-Nov	188,300	179,500	90		0.0465	0.031	#DIV/0!	-3.07E+00	-3.47E+00	#DIV/0!	0.0266	0.0044
2007	11-Sep	168,400	152,000	98	23.08	0.019	0.011	4.77E-04	-3.96E+00	-4.51E+00	-7.65E+00	0.01	0.0013
2006	27-Jun	172,400	152,300	111	23.45	0.014	0.008	3.41E-04	-4.27E+00	-4.83E+00	-7.98E+00	0.003	0.0053
2005	11-May	167,200	151,800	99	23.5	0.042	0.024	1.02E-03	-3.17E+00	-3.73E+00	-6.89E+00	0.017	0.0069
2004	14-Apr	185,100	168,100	98	24.3	0.021	0.014	5.76E-04	-3.86E+00	-4.27E+00	-7.46E+00	0.01	0.0039
2002	26-Jun	225,100	198,100	115	25.35	0.013	0.0093	3.67E-04	-4.34E+00	-4.68E+00	-7.91E+00	0.008	0.001

Mean	0.026	0.016	#DIV/0!		
Sigma	0.015	0.009	#DIV/0!		
Mean+2.33sigma	**0.060**	**0.038**	**#DIV/0!**	**99% probability of not exceeding**	
Mean+2sigma	0.055	0.035	#DIV/0!	97.7% probability of not exceeding	
Mean+1.65sigma	0.050	0.031	#DIV/0!	95% probability of not exceeding	

mean of ln(x)	-3.779	-4.248	#DIV/0!	
sigma of ln(x)	0.543	0.540	#DIV/0!	
loginv at 99%	0.081	0.050	#DIV/0!	**99% probability of not exceeding**
loginv at 95%	0.056	0.035	#DIV/0!	95% probability of not exceeding

Particulate Results

	Year	Date	Flow acfm	Flow scfm	Temp deg F	PWR tons/hr	TSP Conc gr/dscf	TSP Rate lb/hr	TSP EF lb/ton	PM10 Conc gr/dscf	PM10 Rate lb/hr	PM10 EF lb/ton	%PM10
Main	2007	6-Nov	140,500	104,200	158		0.0517	46.2	#DIV/0!	0.0517	46.2	#DIV/0!	N/A
	2002	27-Jun	144,100	102,600	209	23.4	0.013	11.3	0.483	0.009	7.87	0.336	69.6
Torit	2007	5-Nov	187,800	165,900	90		0.0026	3.68	#DIV/0!	0.0026	3.68	#DIV/0!	N/A
	2002	27-Jun	228,700	197,300	122	23.4	0.0026	4.4	0.188	0.0029	5.05	0.216	114 8

EnviroFocus Technologies, LLC
Tampa, Florida

Baseline Emissions and Comparison with PSD Thresholds

Pollutant	Baseline Period	Emission Unit	Ave. EF (lb/ton)	Basis for EF	Total Production in 24-month period (tons)	Baseline Actuals TPY	Future Actuals Requested TPY	Increase (tpy)	PSD Threshold (tpy)	PSD
SO2	Dec '99- Nov '01	Blast Furnace	65.81	Stack test/CEM	51472	846.89				
		Natural Gas (MMCF)	0.60	AP-42	58.7	0.01				
		Sulfur refinery usage	0.133	lb/lb	169750	5.64				
		Total				**852.54**	891.50	38.96	40	No
NOx	2000-2001	Blast Furnace	0.10	FIRE	50808	1.27				
		Natural Gas (MMCF)	100.00	AP-42	58.7	1.47				
		Niter refinery usage	0.24	lb/lb	532,260	31.94				
		Total				**34.67**	**203.87**	**169.20**	**40**	**Yes**
CO	2002-2003	Blast Furnace	62.10	Stack test	52292	811.87				
		Natural Gas (MMCF)	84.00	AP-42	60.7	1.27				
		Total				**813.15**	912.10	98.95	100	No
VOC	Dec '99- Nov '01	Blast Furnace	4.49	Stack test	51472	57.80				
		Hygiene baghouse	0.16	Stack test	51472	2.07				
		Natural Gas (MMCF)	5.50	AP-42	58.7	0.08				
		Total				**59.95**	15.96	-43.99	40	No
PM/PM10	Dec '99- Nov '01	Blast Furnace	0.1267	Stack test	51472	1.63				
		Hygiene baghouse	0.0732	Stack test	51472	0.94				
		Refinery baghouse	0.0222	Stack test	47198	0.26				
		Natural Gas (MMCF)	7.6000	AP-42	58.7	0.11				
		Blast Fugitives	1.21	AP-42	51472	15.570				
		Breaker Fugitives	0.356	calc	51472	4.581				
		Refining Fugitives	0.001	AP-42, 50% control	47198	0.012				
		Casting Fugitives	0.001	AP-42, 50% control	47198	0.012				
		Soda Ash Silo		calc		0.010				
		Roadway Fugitives		scaling		0.680				
		Total				**23.81**	**64.65**	**40.84**	**25/15**	**Yes**
Lead	2002-2003	Blast Furnace	0.0284	Stack test	52292	0.37				
		Hygiene baghouse	0.00798	Stack test	52292	0.1043				
		refinery baghouse	0.00087	Stack test	47882	0.0104				
		Natural Gas (MMCF)	0.00050	AP-42	60.7	7.59E-06				
		Blast Fugitives	0.03	AP-42	52292	0.392				
		Breaker Fugitives	0.0044	calc	52292	0.058				
		Refining Fugitives	0.0003	AP-42, 50% control	47882	0.004				
		Casting Fugitives	0.00035	AP-42, 50% control	47882	0.004				
		Roadway Fugitives		scaling		0.276				
		Total				**1.219**	**4.06**	**2.84**	**0.6**	**Yes**
Mercury	2002-2003	Blast Furnace	0.00091	NESHAP BID	52292	0.0119				
		Natural Gas (MMCF)	2.60E-04	AP-42	60.7	3.95E-06				
		Kettle Refining	4.70E-06	FIRE	47882	5.6261E-05				
		Total				**0.0120**	0.02	0.0080	0.1	No
Carbon Disulfide	2002-2003	Blast Furnace	2.25	NESHAP BID	52292	**29.41**	4.97	-24.44	10	No
H2SO4 Mist	May '02 - Apr '04	Battery breaking	0.356	uncontrolled calc	49810	**4.433**	6.49	2.06	7	No

Notes:

Natural Gas (MMCF) is for combustion of natural gas in the facility's refining kettles
Natural Gas usage for the Dec '99 - Nov '01 period is represented by the usage in calendar years 2000 and 2001

Test Data

Note: For SO2 test data and analysis see sheet "AltSO2"

Year	Test Date	CO (lbs/hr)	Blast Furnace Production (tph)	CO (lb/ton) Output	Avg Blast Furnace Metals Out (tpy)	CO (tpy) Lead Produced	
2002	7/16/2002	209.7	3.25	64.52307692			
2003	7/24/2003	171.5	3.5	49			
2004	7/27/2004	234.7	3.08	76.20			
2005	7/28/2005	117.2	2.75	42.61818182			
2006	7/19/2006	243.9	3.12	78.17307692			
	Average			**62.10**	26146	**811.87**	**Ave./Year**

CO baseline period is 24 months ending December 2003

Year	Test Date	VOC (lbs/hr)	Blast Furnace Production (tph)	VOC (lb/ton) Output	Blast Furnace Metals Out (tpy)	VOC (tpy) Lead Produced	
	Blast Furnace						
1998	6/25/1998	12.10	3	4.034			
1999	7/29/1999 Blast Furnace	15.70	3.67	4.277			
2000	6/8/2000 Blast Furnace	26.52	3.77	7.036			
2001	6/26/2001	6.85	3.18	2.154			
2002	7/16/2002	16.11	3.25	4.956			
	Average			**4.491**	25736	**57.80**	**Ave./Year**
	Hygiene BH						
1998	6/24/1998	0.28	2.75	0.100			
1999	7/28/99 Hygiene BH	0.63	3.5	0.179			
	9/9/99 Hygiene BH	0.34	3.5	0.096			
2000	6/07/00 Hygiene BH	0.88	3.42	0.258			
2001	6/25/2001	1.01	3.42	0.296			
2002	7/15/2002	0.11	3.25	0.035			
	Average			**0.16**	25736	**2.07**	**Ave./Year**

VOC baseline period is 24 months ending November 2001

Year	Test Date	PM (lbs/hr)	Blast Furnace Production (tph)	PM (lb/ton) Output	Process Weight Rate (tpy)	PM (tpy) Lead Produced
	Blast furnace					
1998	6/25/1998	0.45	3	0.150		
1998	9/21/1998	0.61	3.43	0.178		
	12/9/1998	0.6828	3	0.228		
1999	3/5/1999 Blast Furnace	0.53	3.4	0.156		
	7/29/99 Blast Furnace	0.09	3.67	0.025		
2000	6/08/00 Blast Furnace	0.69	3.77	0.182		
2001	6/26/2001	0.07	3.18	0.021		
2002	7/16/2002	0.24	3.25	0.075		
	Average			**0.127**	25736	**1.63**
	Refinery BH					
1998	6/23/1998	0.060000	4.05	0.015		
1999	7/27/1999	0.015760	6.05	0.003		

2000	6/6/2000	0.271100	6.85	0.040		
2001	6/27/2001	0.084942	6.51	0.013		
2002	7/18/2002	0.127495	3.1	0.041		
	Average			**0.022**	23599	**0.26**
	Hygene BH					
1998	6/24/1998	0.107	2.75	0.039		
1999	7/28/1999	0.389	3.5	0.111		
2000	6/7/2000	0.209	3.42	0.061		
2001	6/25/2001	0.208	3.42	0.061		
2002	7/15/2002	0.306	3.25	0.094		
	Average			**0.073**	25736	**0.94**

Ave./Year

PM baseline period is 24 months ending November 2001

Year	Test Date	Pb (lbs/hr)	Blast Furnace Production (tph)	Pb (lb/ton) Output	Process Weight Rate (tpy)	Pb (tpy) Lead Produced
	Blast Furnace					
2002	7/16/2002	0.0504	3.25	0.0155		
2003	7/24/2003	0.0115	3.5	0.0033		
2004	7/27/04 Blast Furnace	0.1627	3.08	0.0528		
2005	7/28/05 Blast Furnace	0.1335	2.75	0.0485		
2006	7/19/2006	0.0676	3.12	0.0217		
	Average			**0.028**	26146	**0.37**
	Refinery BH					
2002	7/18/2002	0.00280	3.1	0.001		
2003	7/21/2003	0.00140	3.96	0.000		
2004	7/19/2004	0.00600	2.99	0.002		
2005	7/26/2005	0.00150	3.07	0.000		
2006	7/17/2006	0.00210	3.53	0.001		
	Average			**0.001**	23941	**0.01**
2002	7/15/2002	0.1149	3.25	0.0354		
2003	7/22/2003	0.002069	3.5	0.0006		
2004	8/03/04 Hygene BH	0.007109	3.08	0.0023		
2005	7/27/05 Hygene BH	0.001301	2.96	0.0004		
2006	7/18/2006	0.003617	3	0.0012		
	Average			**0.0080**	26146	**0.10**

Ave./Year

Pb baseline period is 24 months ending December 2003

Alternate SO2 Baselines and PSD-Avoidance Future Allowables

Five-year average of emission factors including two missing tests

Year	Test Date	SO2 (lbs/hr)	Blast Furnace Production (tph)	SO2 (lb/ton) Output
1997	9/25/1997	206.7	3.31	62.447
	12/11/1997	252.1	3.5	72.029
1998	3/17/1998	261.4	3.2	81.688
	6/25/1998	183.6	3	61.200
	7/20/1998	234	3.14	74.522
	9/21/1998	222.8	3.43	64.956
	12/9/1998	295.4	3	98.467
1999	3/5/1999	171.4	3.4	50.412
	7/29/1999	208.8	3.67	56.894
	6/8/2000	215.7	3.77	57.215
	6/26/2001	140.8	3.18	44.277
	CEM (10-01 to 6-02)			65.656
				65.81

Max 24 month production:
25,736 period ending November 2001

Baseline emissions (tons/year):
846.89

Future allowable (tons/year):

886.89

Use of 2 years of CEM data, per rule 62-210.370(2)(b) for CEM utilizing a calibrated continuous flowmeter

CEM-derived 24-month emission factor, from SO2 CEM sheet: 65.271 for period ending Sept 2003

24-month annual average blast furnace production: 25,669 for period ending Sept 2003

Baseline annual emissions: 837.72 (tons/year)

Future allowable emissions: **877.72** (tons/year)

Five-year average of emission factors NOT including two missing tests

Year	Test Date	SO2 (lbs/hr)	Blast Furnace Production (tph)	SO2 (lb/ton) Output
1997	9/25/1997	206.7	3.31	62.447
	12/11/1997	252.1	3.5	72.029
1998	3/17/1998	Not in ARMS		
	6/25/1998	183.6	3	61.200
	7/20/1998	Not in ARMS		
	9/21/1998	222.8	3.43	64.956
	12/9/1998	295.4	3	98.467
1999	3/5/1999	171.4	3.4	50.412
	7/29/1999	208.8	3.67	56.894
	6/8/2000	215.7	3.77	57.215
	6/26/2001	140.8	3.18	44.277
	CEM (10-01 to 6-02)			65.656
				63.36

Max 24 month production:
25,736 period ending November 2001

Baseline emissions (tons/year):
815.25

Future allowable (tons/year):

855.25

SO2 CEM Data

Date	SO2 (lb/ton)	SO2 (12-month avg)	SO2 (24-month avg)		SO2 (lbs)	SO2 (tons)	SO2 (12-month avg) TPY	SO2 lb/ton avg. for 2002-2003
Oct-01	68.5			68.5	153811	76.91		
Nov-01	78.5			78.5	143557	71.78		
Dec-01	64.8			64.8	101066	50.53		
Jan-02	70.1			70.1	164134	82.07		
Feb-02	66			66	132552	66.28		
Mar-02	59.8			59.8	115680	57.84		70.1
Apr-02	60.4			60.4	127128	63.56		66
May-02	64.1			64.1	141924	70.96		59.8
Jun-02	58.7			58.7	134294	67.15		60.4
Jul-02	61.4			65.66	127194	63.60		64.1
Aug-02	61.8				151085	75.54		58.7
Sep-02	66.2	65.03			134429	67.21	813.43	61.4
Oct-02	72.3	65.34			173773	86.89	823.41	61.8
Nov-02	73.5	64.93			166148	83.07	834.70	66.2
Dec-02	73	**65.61**			169333	84.67	868.84	72.3
Jan-03	73.6	65.90			169039	84.52	871.29	73.5
Feb-03	67.9	66.06			144691	72.35	877.36	73
Mar-03	71.6	67.04			137280	68.64	888.16	73.6
Apr-03	64.9	67.42			138617	69.31	893.90	67.9
May-03	58.2	66.93			127445	63.72	886.66	71.6
Jun-03	59.8	67.02			124879	62.44	881.96	64.9
Jul-03	64	67.23			146642	73.32	891.68	58.2
Aug-03	52	66.42			106922	53.46	869.60	59.8
Sep-03	55.4	65.52	65.27		113093	56.55	858.93	64
Oct-03	49.7	63.63	64.49		113112	56.56	828.60	52
Nov-03	54.5	62.05	63.49		119582	59.79	805.32	55.4
Dec-03	59.6	**60.93**	63.27		135518	67.76	788.41	49.7
Jan-04	60.9	59.88	62.89		126269	63.13	767.03	54.5
Feb-04	57.1	58.98	62.52		112351	56.18	750.86	59.6
Mar-04	58.6	57.89	62.47		113885	56.94	739.16	**63.2708333**
Apr-04	68.3	58.18	62.80		124013	62.01	731.86	
May-04	76.5	59.70	63.31		168602	84.30	752.43	
Jun-04	72.1	60.73	63.87		125395	62.70	752.69	
Jul-04	72.1	61.40	64.32		150797	75.40	754.77	
Aug-04	63.6	62.37	64.39		116750	58.38	759.68	
Sep-04	62.1	62.93	64.22		112349	56.17	759.31	
Oct-04	45.2	62.55	63.09		92988	46.49	749.25	
Nov-04	55.5	62.63	62.34		102449	51.22	740.68	
Dec-04	45.7	61.48	61.20		67488	33.74	706.67	
Jan-05	43.1	59.99	59.93		69919	34.96	678.49	
Feb-05	49.7	59.38	59.18		76233	38.12	660.43	
Mar-05	43.3	58.10	58.00		73334	36.67	640.16	
Apr-05	50.1	56.58	57.38		85629	42.81	620.97	
May-05	48.4	54.24	56.97		66182	33.09	569.76	
Jun-05	55	52.82	56.77		98505	49.25	556.31	
Jul-05	60.1	51.82	56.61		88250	44.13	525.04	
Aug-05	60.8	51.58	56.98		128092	64.05	530.71	
Sep-05	59.5	51.37	57.15		125798	62.90	537.43	
Oct-05	61.7	52.74	57.65		133677	66.84	557.78	
Nov-05	68.9	53.86	58.25		148857	74.43	580.98	
Dec-05	67.6	55.68	58.58		134875	67.44	614.68	
Average	62.724							

Data Verification

Year	Blast Furnace Metals Out (tpy)	Coke Usage (tpy)	Test Date (SO2)	SO2 Test Data (lb/ton)		Test Date (CO)	CO Test Data (lb/ton)	Test Date (VOC)	VOC Test Data (lb/ton)	Test Date (PM)	PM Test Data (lb/ton)	Test Date (Hg)	Lead Test Data (lb/ton)	Natual Gas Burned (MMCF/YR)
1997	22585.67		6/27/1997	97.95	feedstock?									
			9/25/1997	62.45	no output ref?									
			12/11/1997	72.03										
1998	24802.19		3/17/1998	*	no test record									
			6/25/1998	61.20										
			7/20/1998	*	no test record									
			9/21/1998	64.96										
			12/9/1998	98.47										
1999	23876		3/5/1999	50.41				7/29/1999	4.28	3/5/1999	0.16			
			7/29/1999	56.89						7/29/1999	0.02			
2000	26476	2757.6						6/8/2000	7.04	6/8/2000	0.18			34.7
2001	24332	2680.2												24
2003	25878					7/24/2003	49							
2004	23064					7/27/2004	76.20					7/27/2004	0.05	
2005	21744											7/28/2005	0.05	

NOx Emissions:
Coke EF=21 lb/ton. Reference: Fire 1-01-008-01
Natural Gas EF=100lb/MMCF Reference: AP-42

fburbach

15:38:6
Appendix B Baseline Calculations 073008.xls

Based on AOR

Year	Lead Casted (tpy) Refining
1997	20955.07
1998	22071.37
1999	22959.82
2000	24286.4
2001	22780.1
2003	23940.3
2004	22673.4
2005	17839

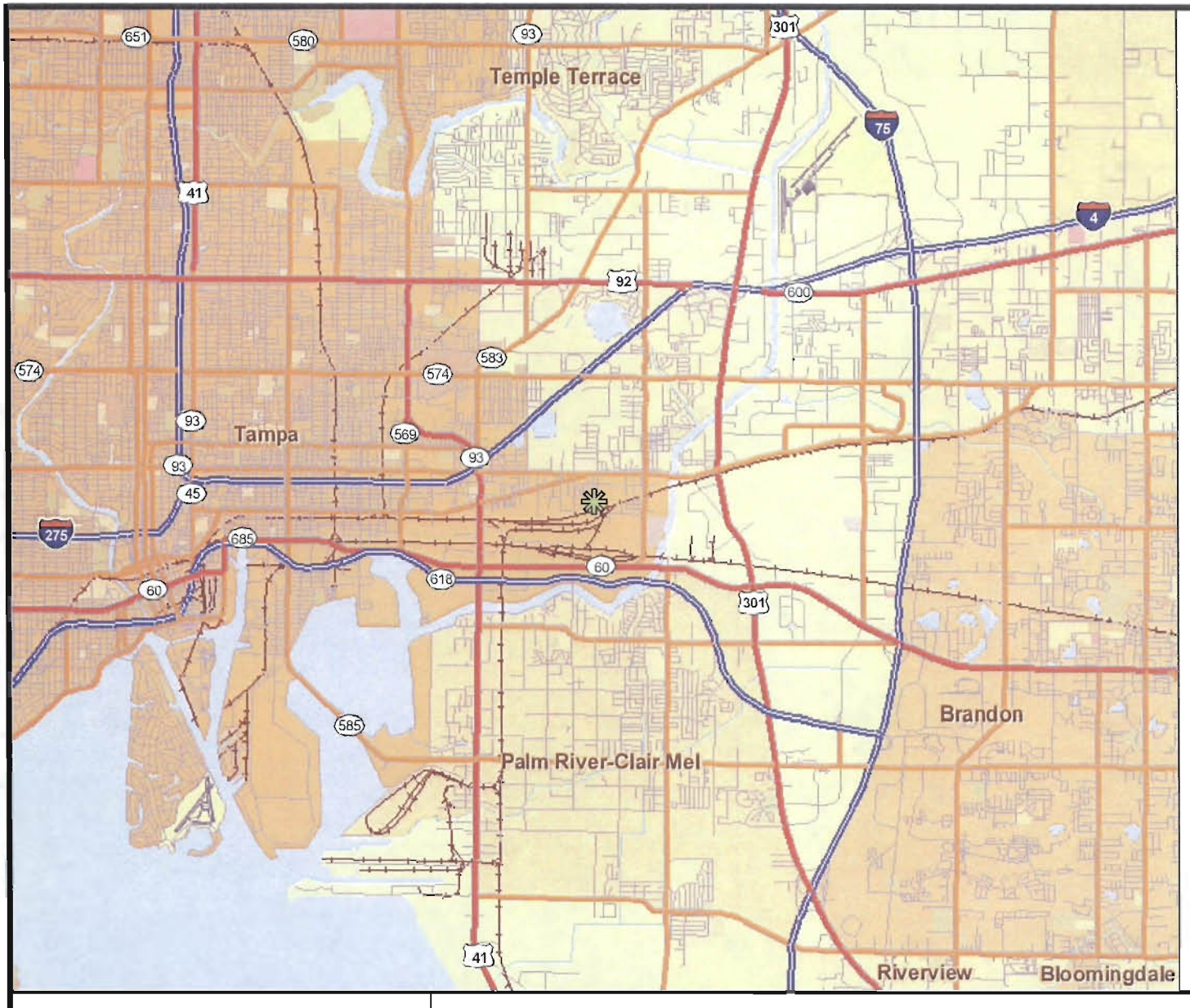
Year	Blast Furnace Metals In (tpy)
1997	31213.25
1998	30975.6
1999	37986.8
2000	39498.2
2001	38393.6
2003	35490.8
2004	32929.8
2005	31197.9

Year	Blast Furnace Metals Out (tpy)
1997	22585.67
1998	24802.19
1999	23876
2000	26476
2001	24332
2002	26414
2003	25878
2004	23064
2005	21744

Year	Metals into Kettles (tpy)
1997	22585.67
1998	24802.19
1999	25721.3
2000	27673.9
2001	26859.8
2002	
2003	28157.1
2004	24916.2
2005	22107.4

CEM	52292	
Total Avg	62.724	820.0
Avg.2002-03	63.27	827.1

Appendix C
Figures



N
W E
S

Legend

Facility Location

ENVIRON

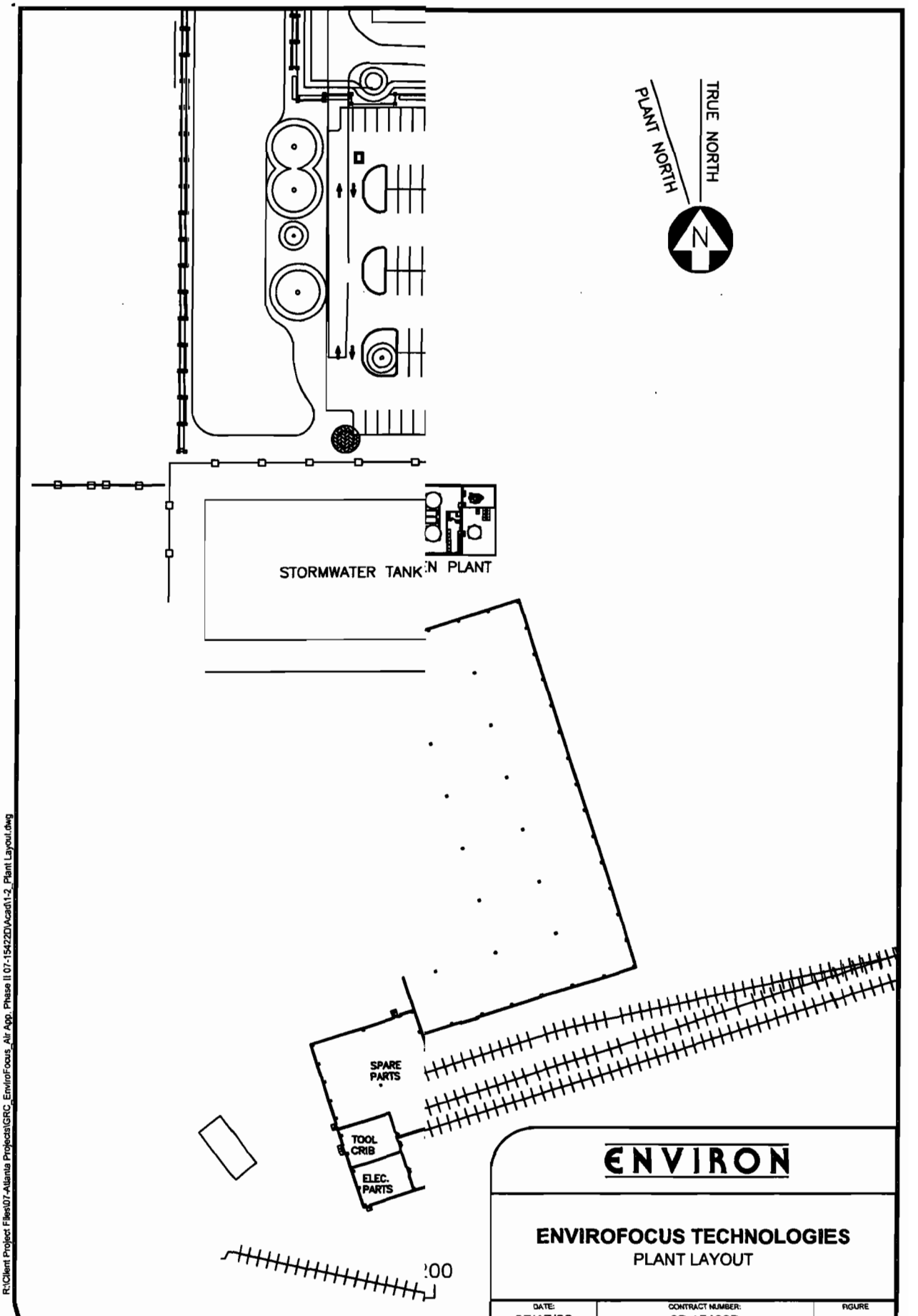
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

General Location of Facility
EnviroFocus Technologies, LLC
Tampa, Florida

4 2 0 4 Kilometers

Figure
1-1

Drafter:	Date:	Contract Number:	Approved:	Revised:



R:\Client Project Files\07-Atlanta Projects\GRC_EnviroFocus_Air App. Phase II 07-15422D\Acad\1-2_Plant Layout.dwg

ENVIRON

ENVIROFOCUS TECHNOLOGIES
PLANT LAYOUT

DATE:	CONTRACT NUMBER:		FIGURE
07/17/08	07-15422D		1-2
DRAFTER: ELS	APPROVED:	REVISED:	

PROPOSED: EFT PHASE II PROCESS FLOW DIAGRAM

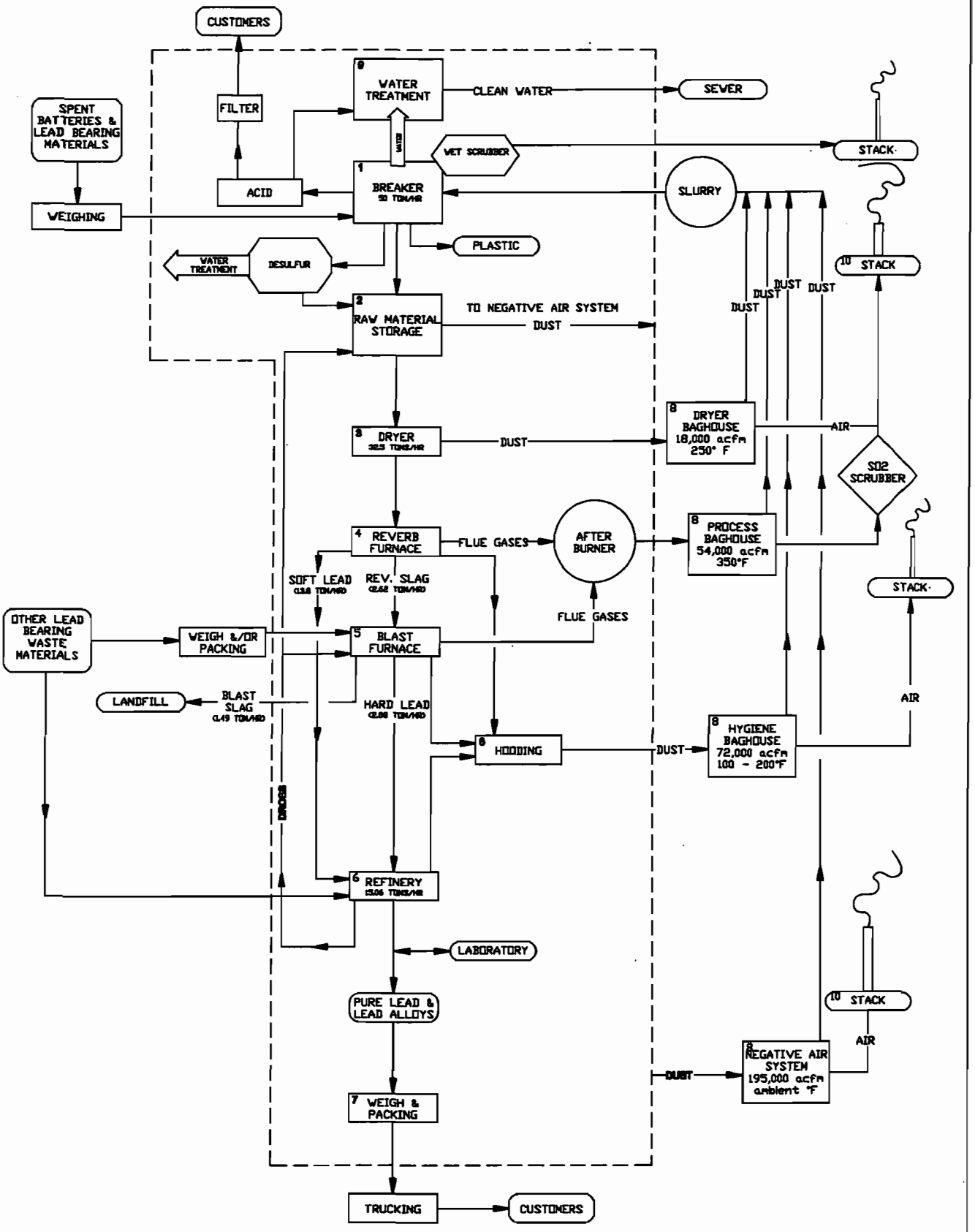
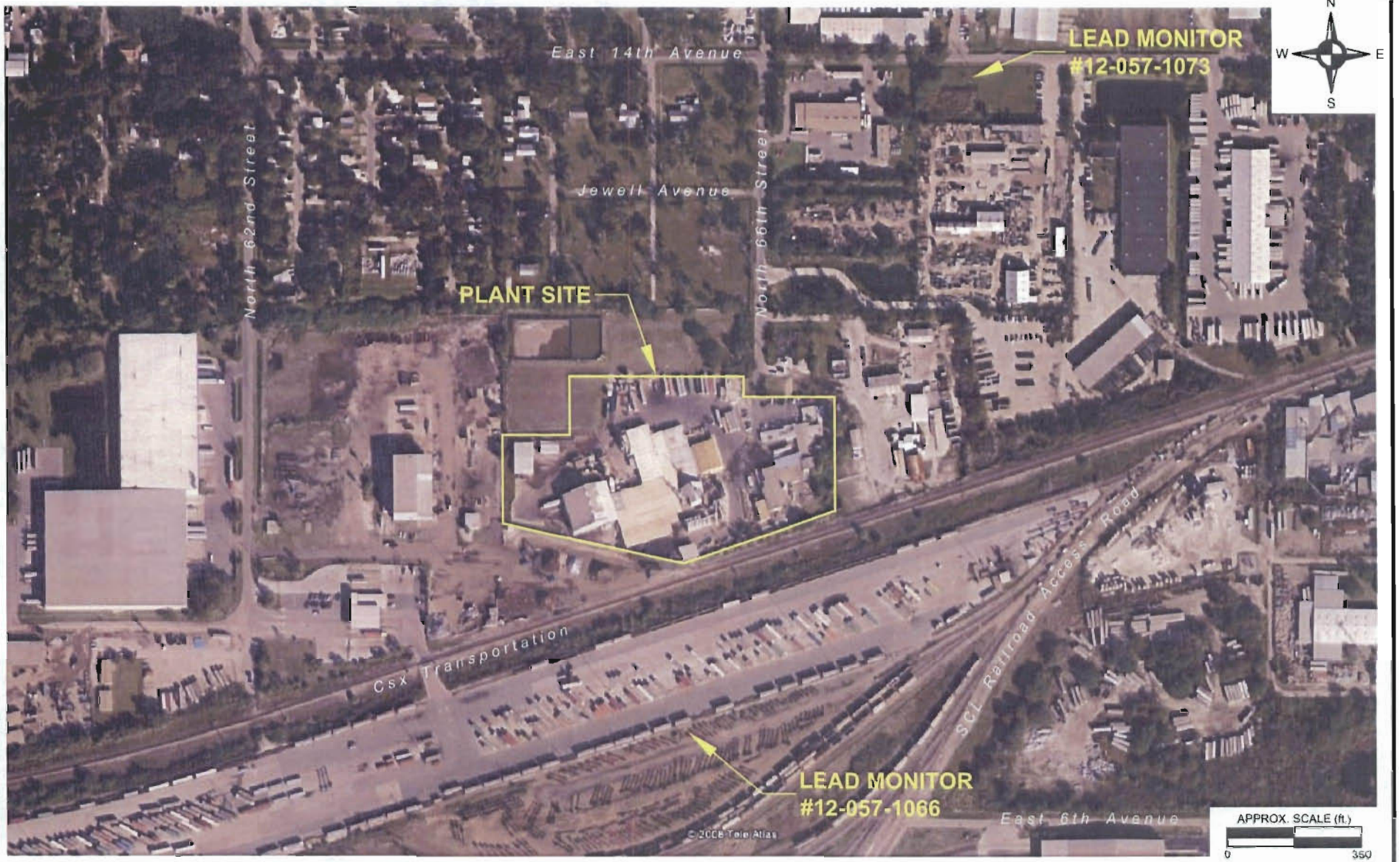


FIGURE 1-3



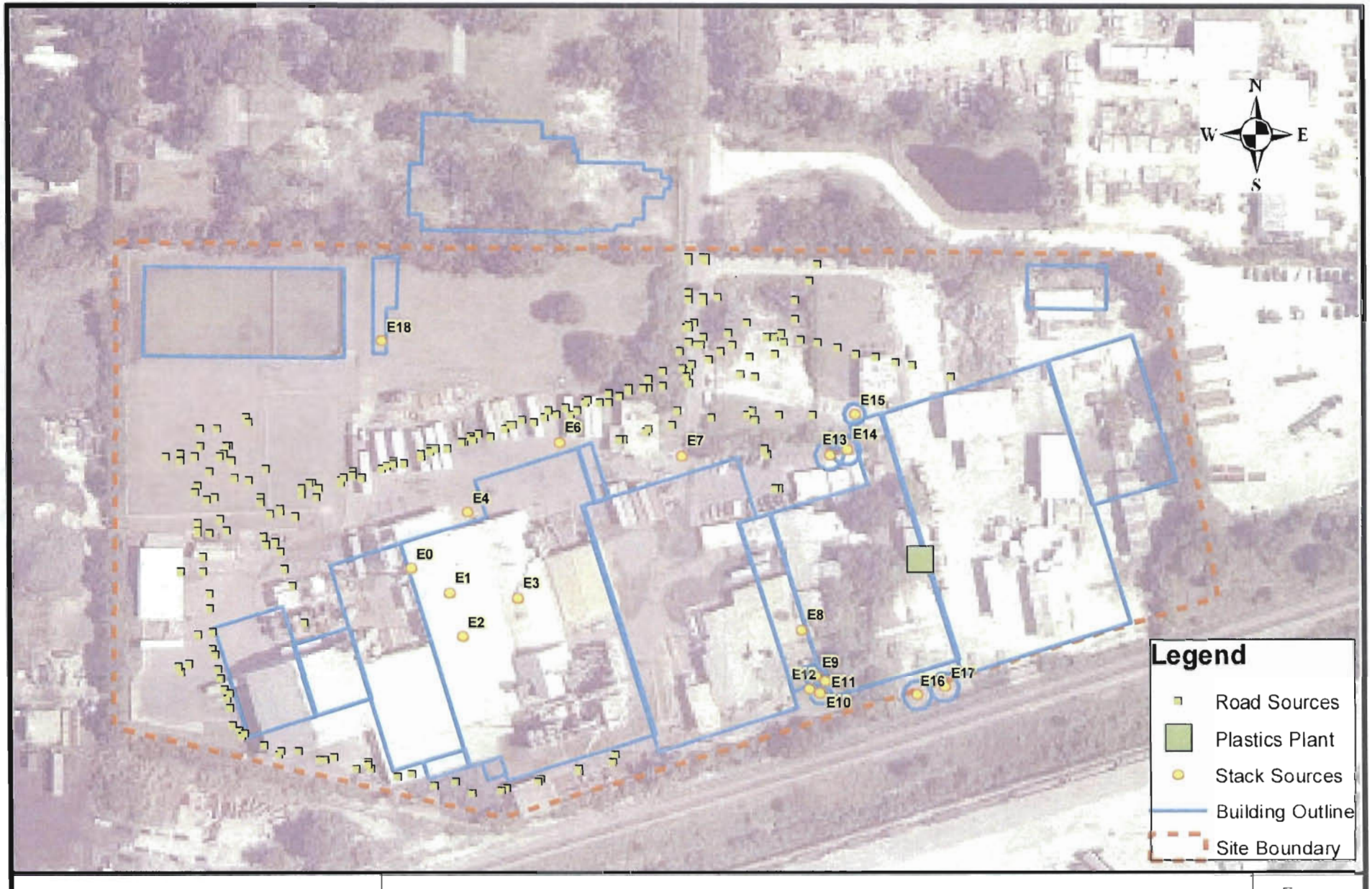
ENVIRON

LEAD MONITOR LOCATIONS
ENVIROFOCUS TECHNOLOGIES
1901 NORTH 66th STREET
TAMPA, FLORIDA

Figure
5-1

Drafter:	ELS	Date:	08/01/08	Contract Number:	07-15422D	Approved:	Revised:

R:\Client Project Files\07-Atlanta Projects\GRC_EnviroFocus_Air App. Prints\ti 07-15422D\Acad\5-1_Lead Monitor Locations.dwg



ENVIRON

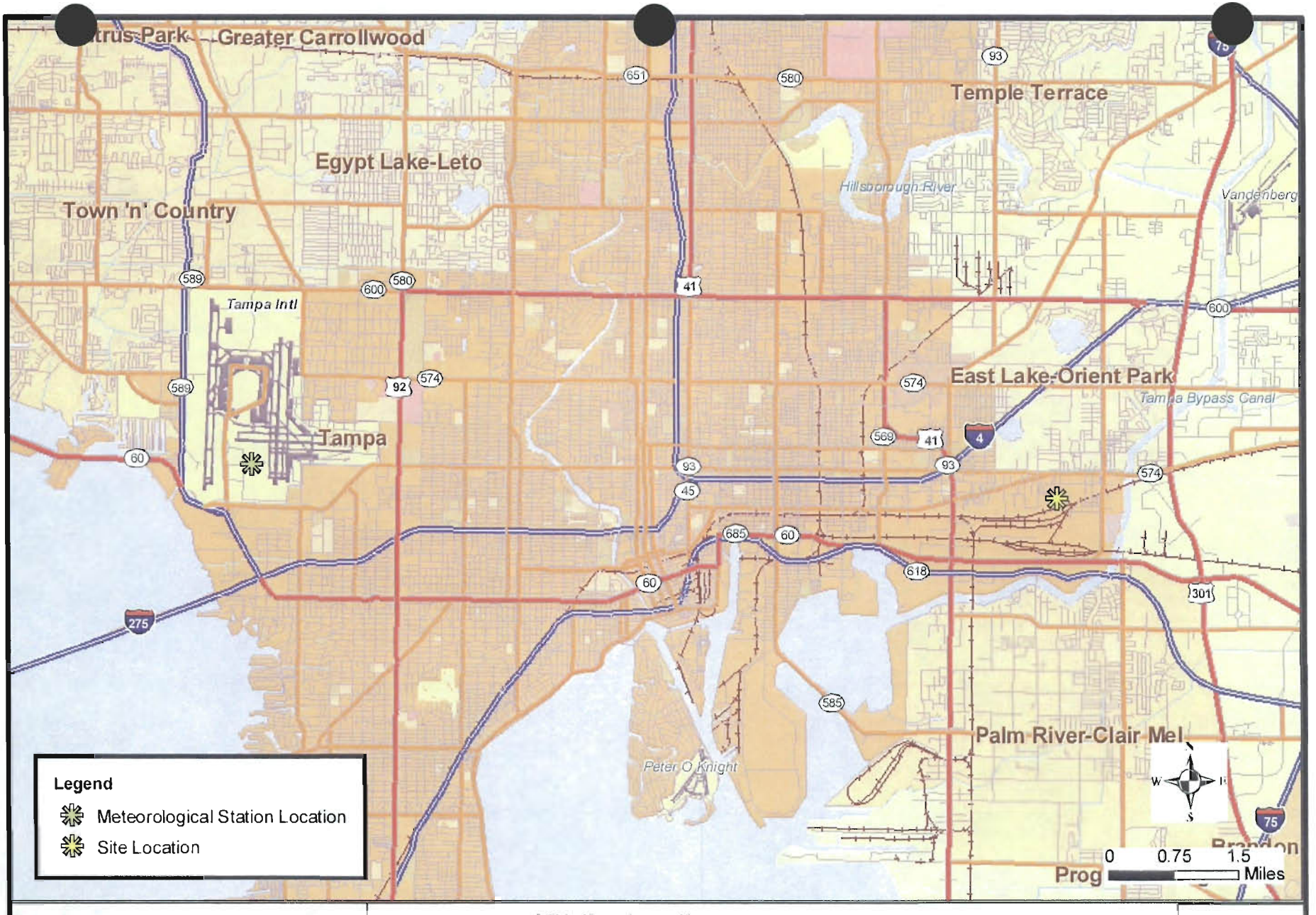
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Modeled Sources and Buildings Layout
EnviroFocus Technologies, LLC
Tampa, Florida

200 100 0 200 Feet

Figure **5-2**

Drafter: Date: Contract Number: Approved: Revised:



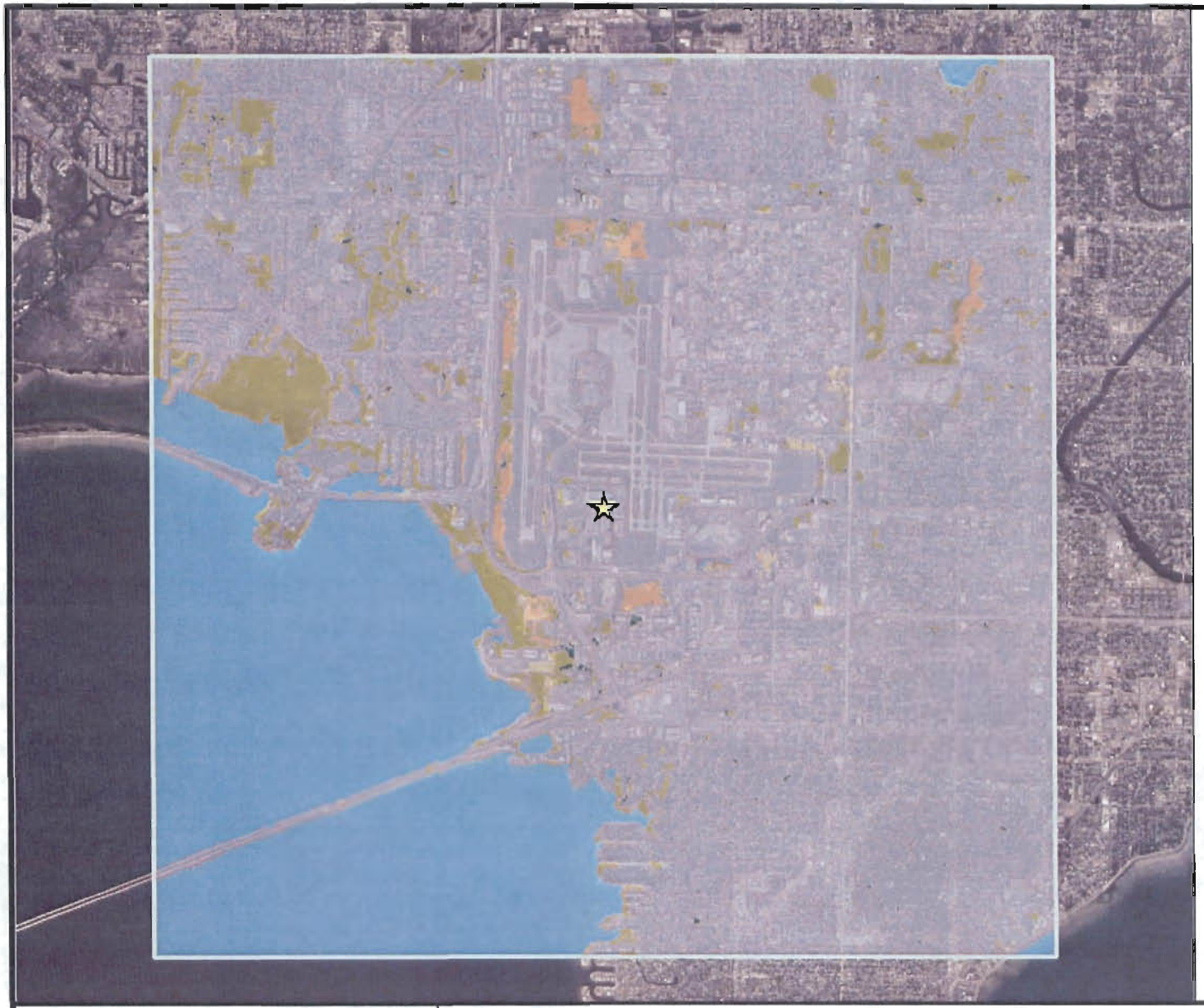
ENVIRON

1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Meteorological Station Location
EnviroFocus Technologies, LLC
Tampa, Florida

Figure **5-3**

Drafter: RS | Date: 4/2/08 | Contract Number: 07-15422D | Approved: | Revised:



N
W E
S

Legend

- Tampa Airport Station
- 10-km Square

Land Classification

- Coniferous Forest
- Cultivated Land
- Deciduous Forest
- Desert Shrubland
- Grassland
- Mixed Forest
- Swamp
- Urban
- Water

ENVIRON

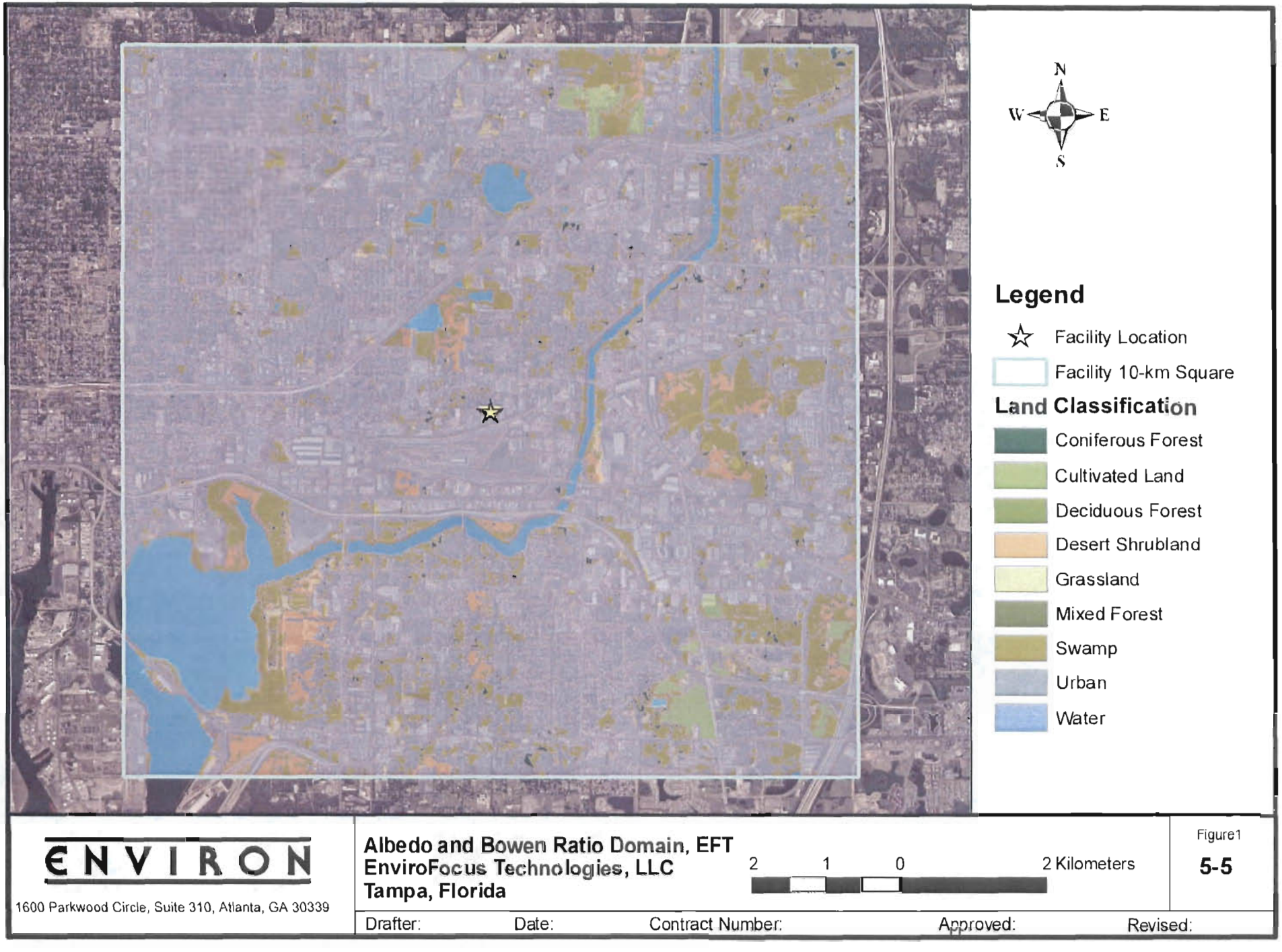
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Albedo and Bowen Ratio Domain, Tampa Airport Station
nviroFocus Technologies, LLC
Tampa, Florida

2 1 0 2 Kilometers

Figure **5-4**

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

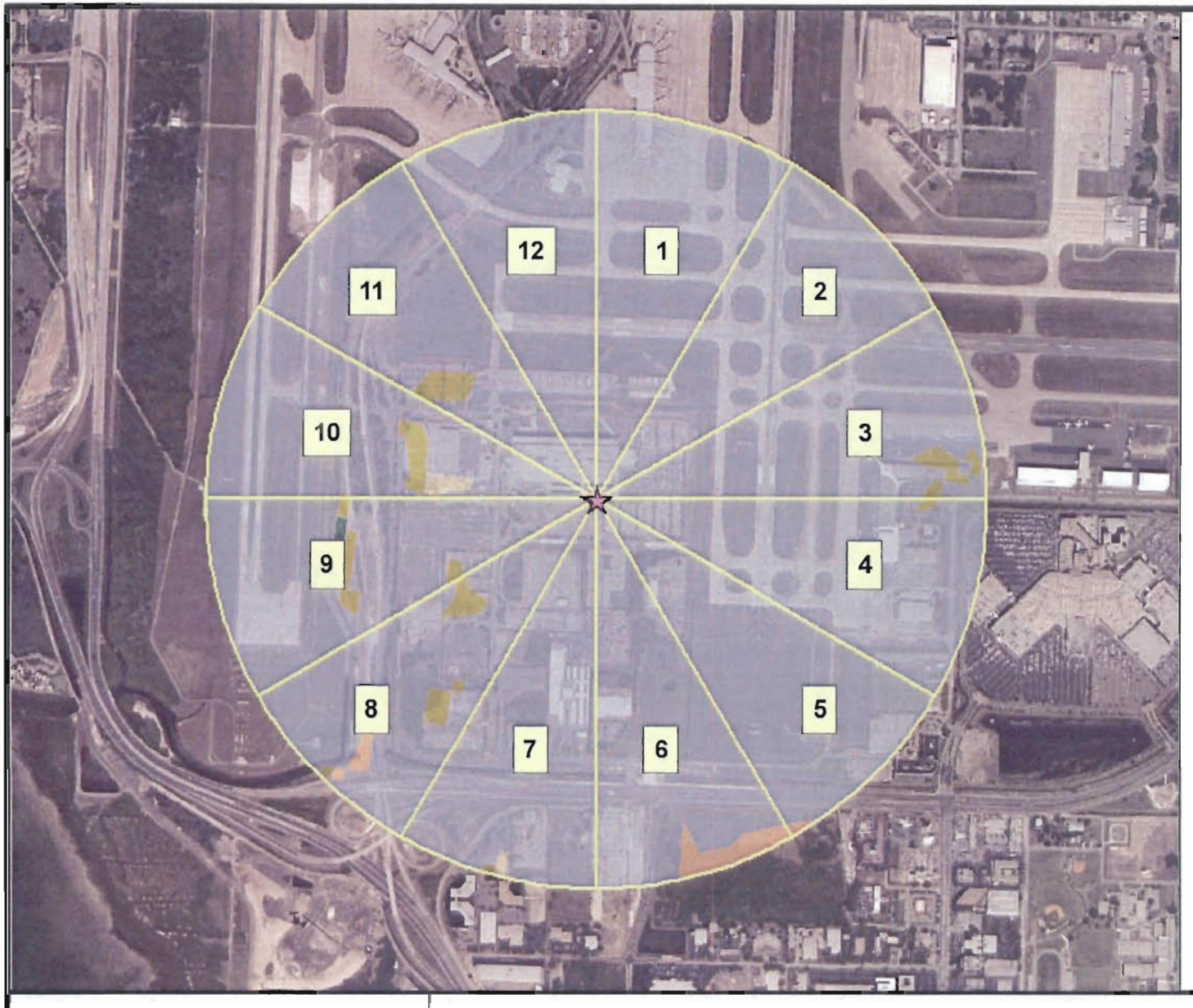
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Albedo and Bowen Ratio Domain, EFT
EnviroFocus Technologies, LLC
Tampa, Florida

2 1 0 2 Kilometers

Figure1
5-5

Drafter: Date: Contract Number: Approved: Revised:



N
W E
S

Legend

- Tampa Airport Station
- 1-km Buffer

Land Classification

- Coniferous Forest
- Cultivated Land
- Deciduous Forest
- Desert Shrubland
- Grassland
- Mixed Forest
- Swamp
- Urban
- Water

ENVIRON

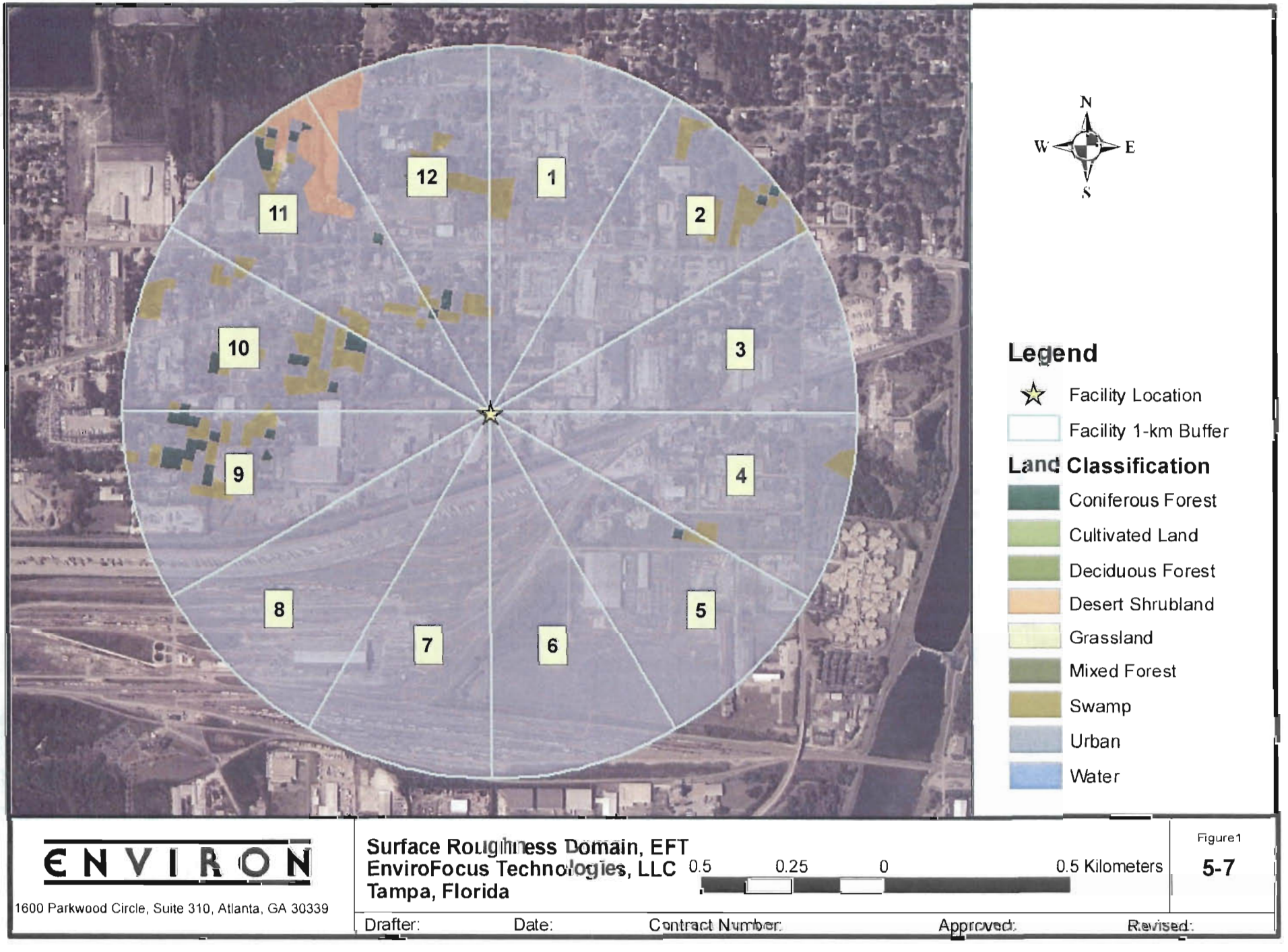
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Surface Roughness Domain, Tampa Airport Station
EnviroFocus Technologies, LLC
Tampa, Florida

0.5 0.25 0 0.5 Kilometers

Figure **5-6**

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Surface Roughness Domain, EFT
EnviroFocus Technologies, LLC
Tampa, Florida

0.5 0.25 0 0.5 Kilometers

Figure1
5-7

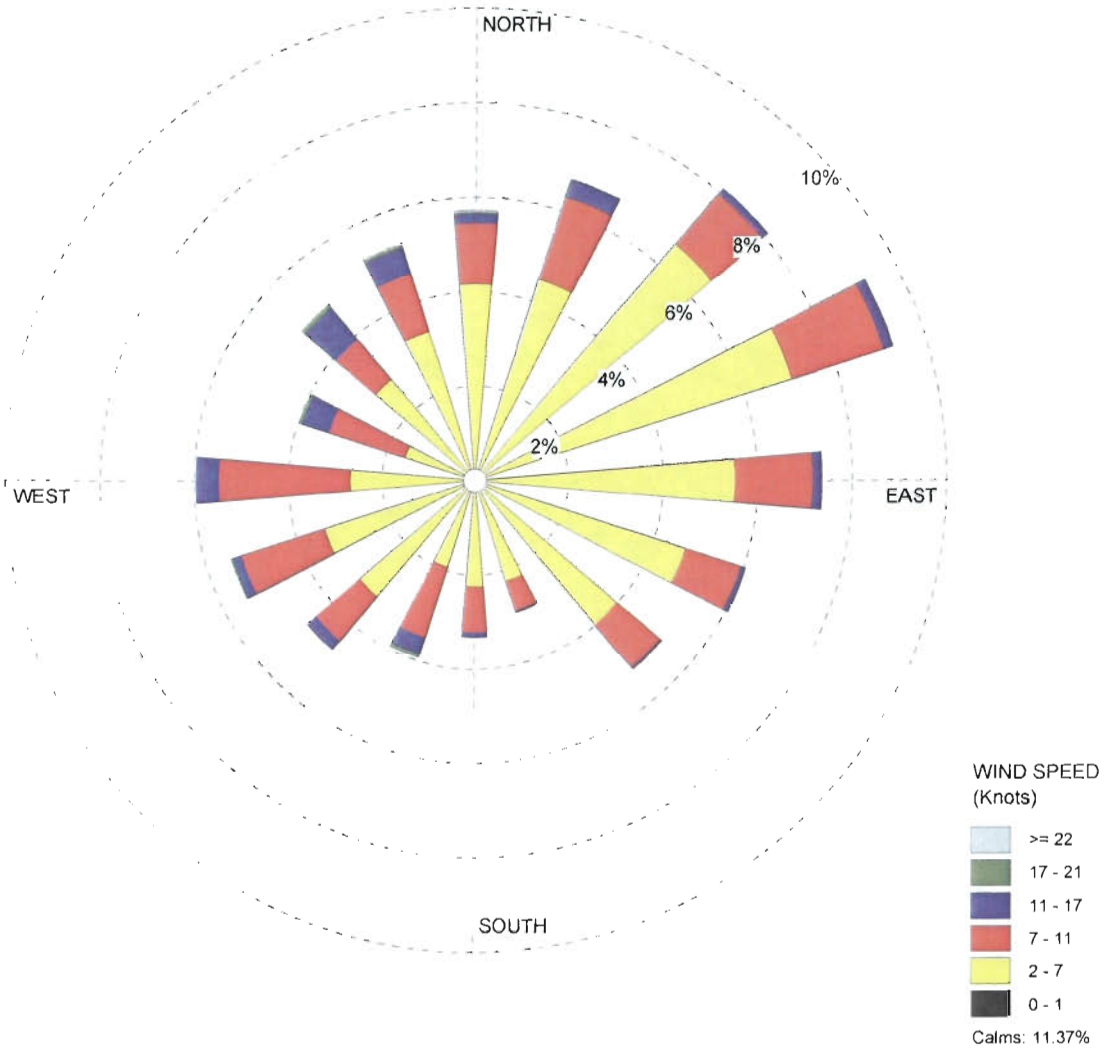
Drafter: Date: Contract Number: Approved: Revised:

WIND ROSE PLOT:

Figure 5-8a
Wind Rose 2001

DISPLAY:

Wind Speed
Direction (blowing from)



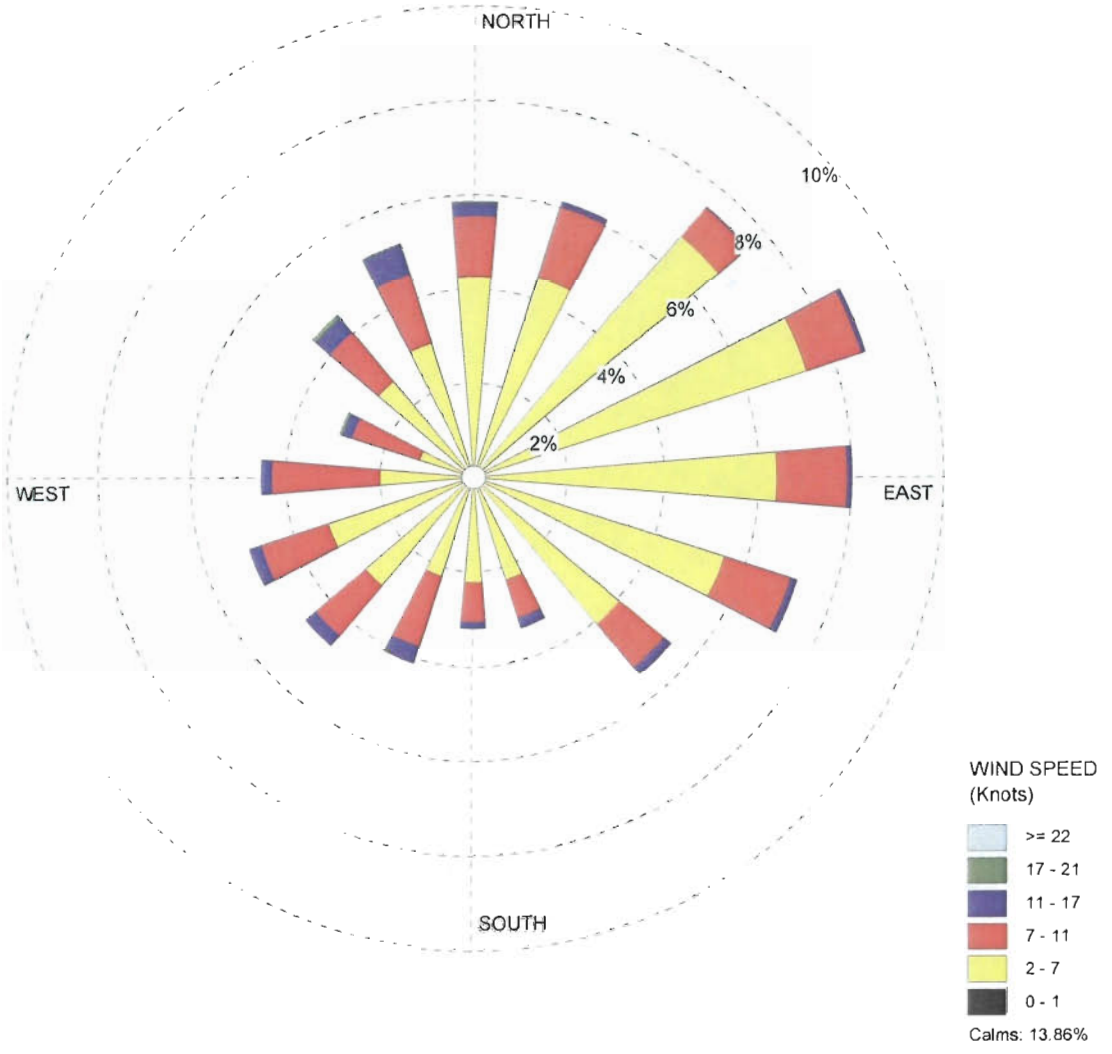
COMMENTS:	DATA PERIOD: **2001** **Jan 1 - Dec 31** **00:00 - 23:00**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **11.37%**	TOTAL COUNT: **8760 hrs.**	
	AVG. WIND SPEED: **5.89 Knots**	DATE: **05/02/2008**	PROJECT NO.:

WIND ROSE PLOT:

Figure 5-8b
Wind Rose 2002

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **2002 Jan 1 - Dec 31 00:00 - 23:00**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **13.86%**	TOTAL COUNT: **8760 hrs.**	
	AVG. WIND SPEED: **5.54 Knots**	DATE: **05/02/2008**	PROJECT NO.:

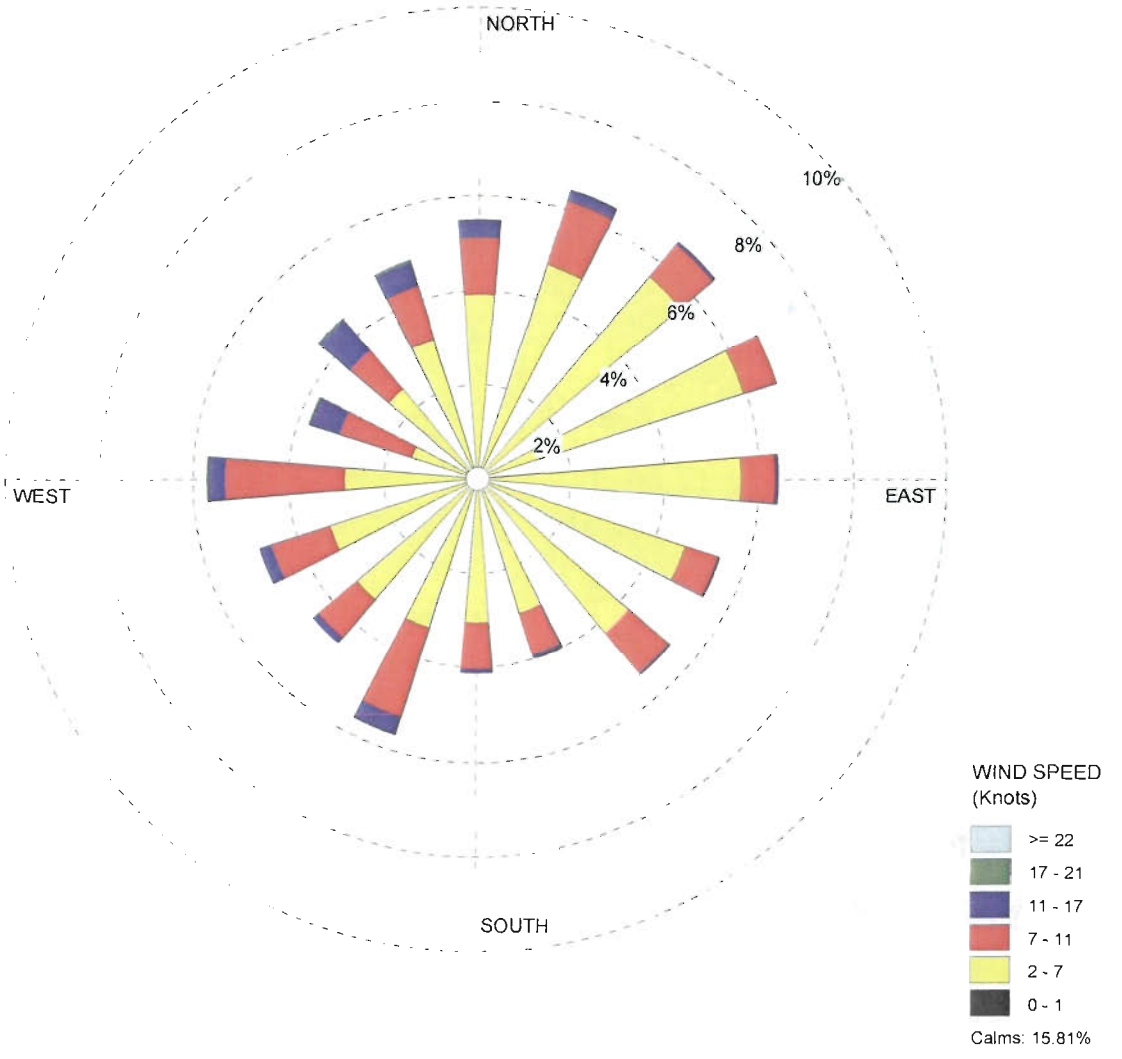
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Figure 5-8c
Wind Rose 2003

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **2003 Jan 1 - Dec 31 00:00 - 23:00**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **15.81%**	TOTAL COUNT: ***8760 hrs.***	
	AVG. WIND SPEED: **5.35 Knots**	DATE: **05/02/2008**	PROJECT NO.:

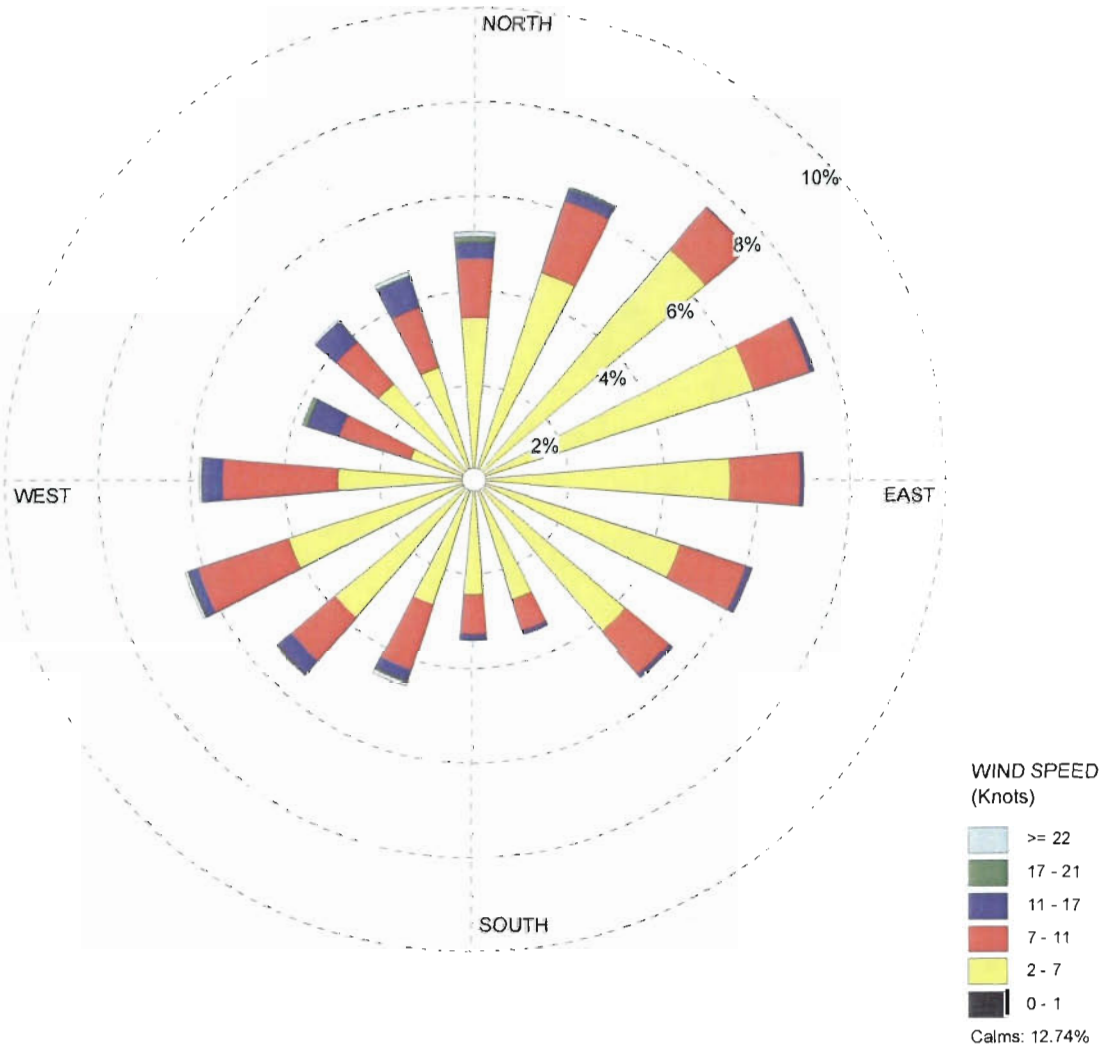
WRPLOT View - Lakes Environmental Software

WIND ROSE PLOT:

Figure 5-8d
Wind Rose 2004

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **2004** **Jan 1 - Dec 31** **00:00 - 23:00**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **12.74%**	TOTAL COUNT: **8784 hrs.**	
	AVG. WIND SPEED: **5.80 Knots**	DATE: **05/02/2008**	PROJECT NO.:

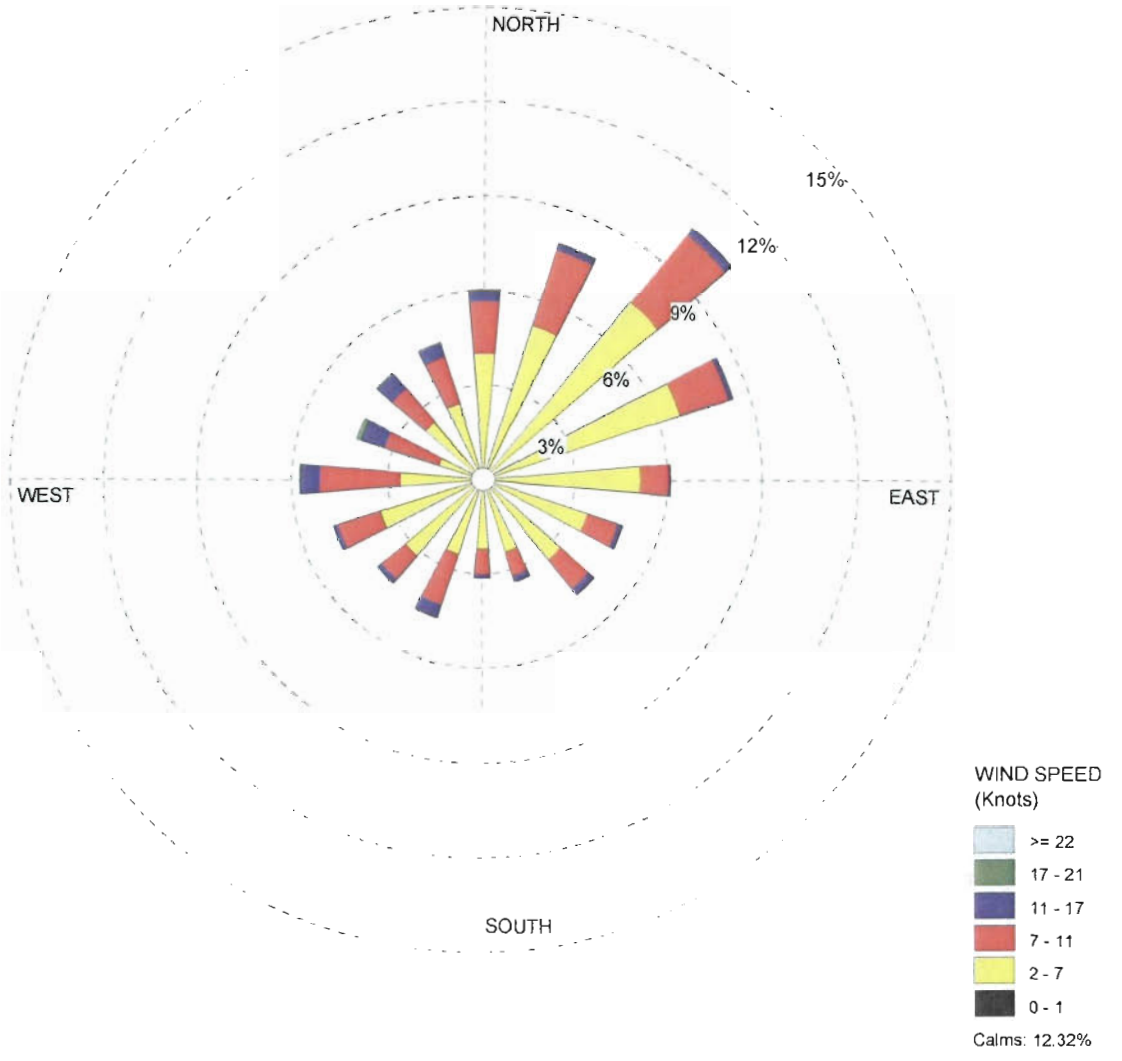
WR:PLOT View - Lakes Environmental Software

WIND ROSE PLOT:

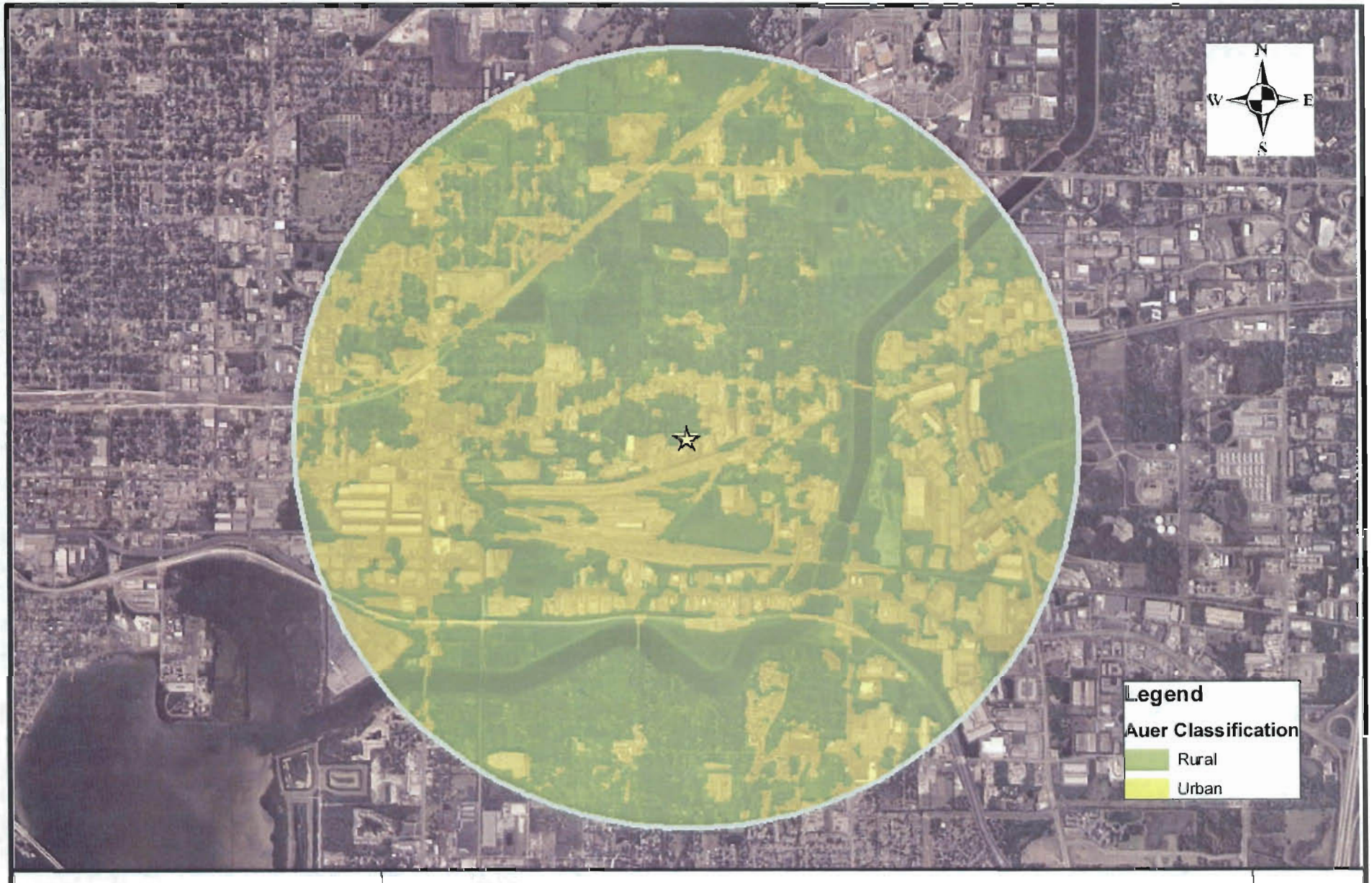
Figure 5-8e
Wind Rose 2005

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **2005** **Jan 1 - Dec 31** **00:00 - 23:00**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **12.32%**	TOTAL COUNT: **8760 hrs.**	
	AVG. WIND SPEED: **5.93 Knots**	DATE: **05/02/2008**	PROJECT NO.:



ENVIRON

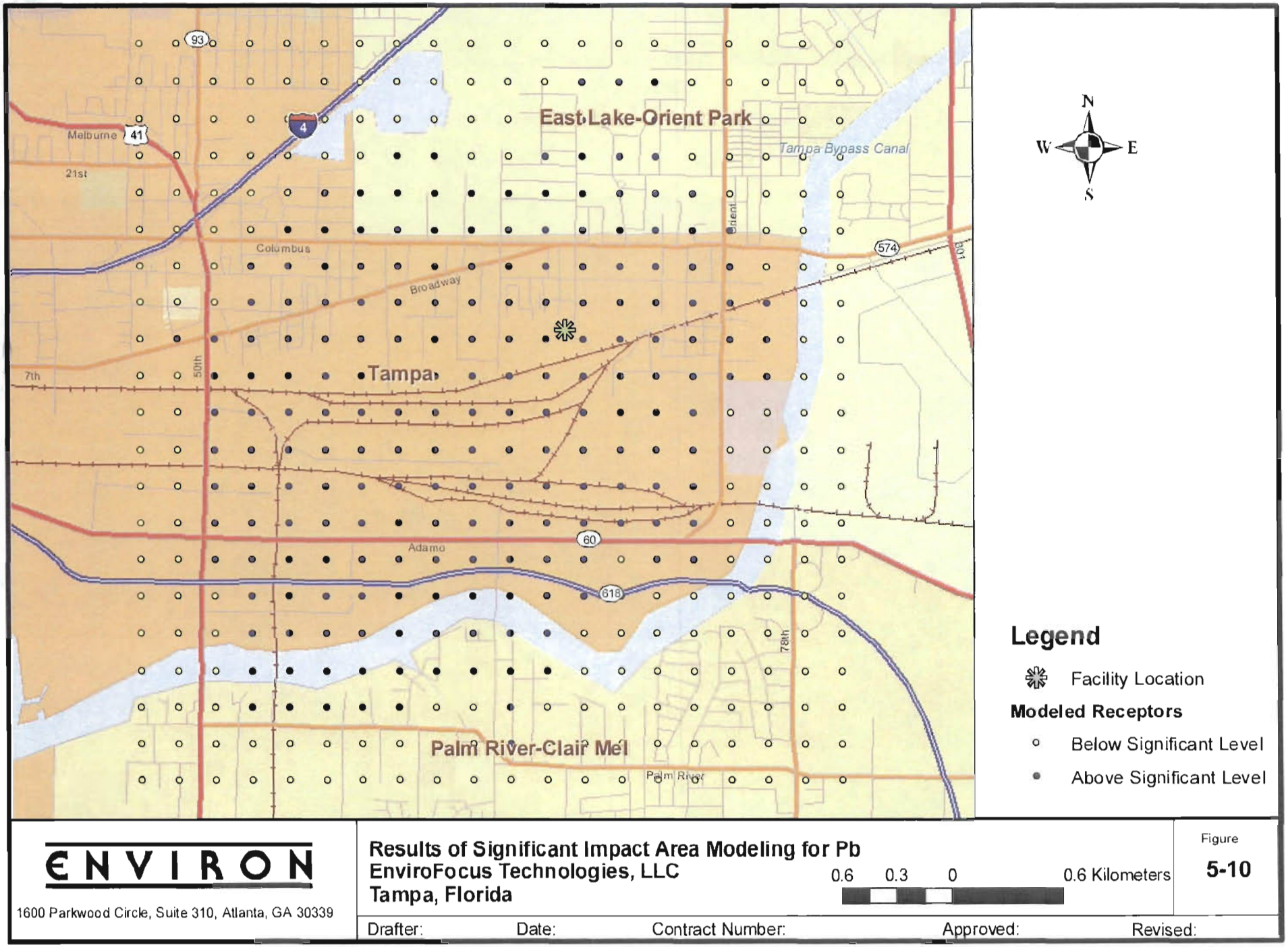
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Land Use Classification Analysis
EnviroFocus Technologies, LLC
Tampa, Florida

1,000 500 0 1,000 Meters

Figure
5-9

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

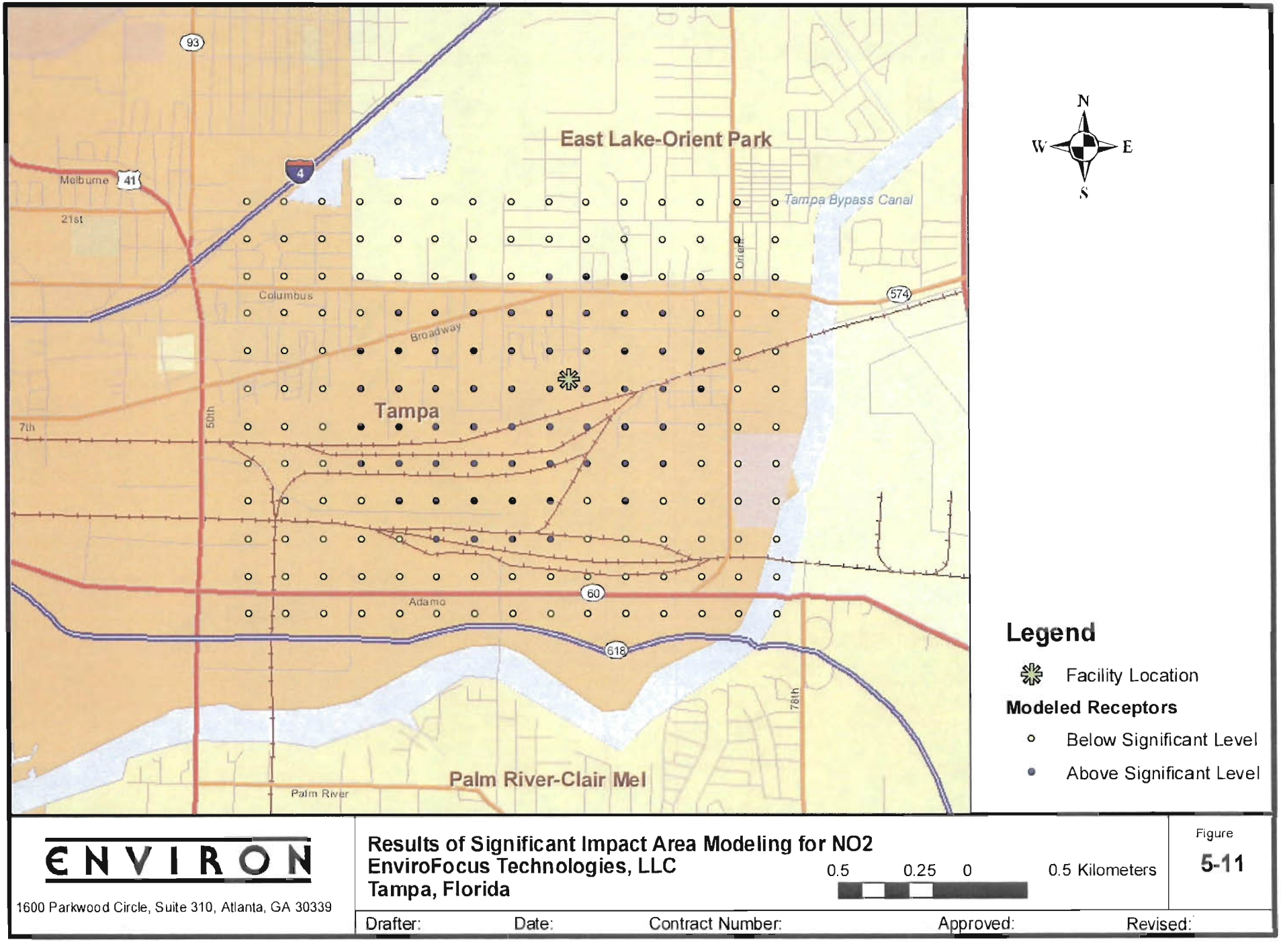
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Results of Significant Impact Area Modeling for Pb
EnviroFocus Technologies, LLC
Tampa, Florida

0.6 0.3 0 0.6 Kilometers

Figure **5-10**

Drafter: Date: Contract Number: Approved: Revised:



ENVIRON

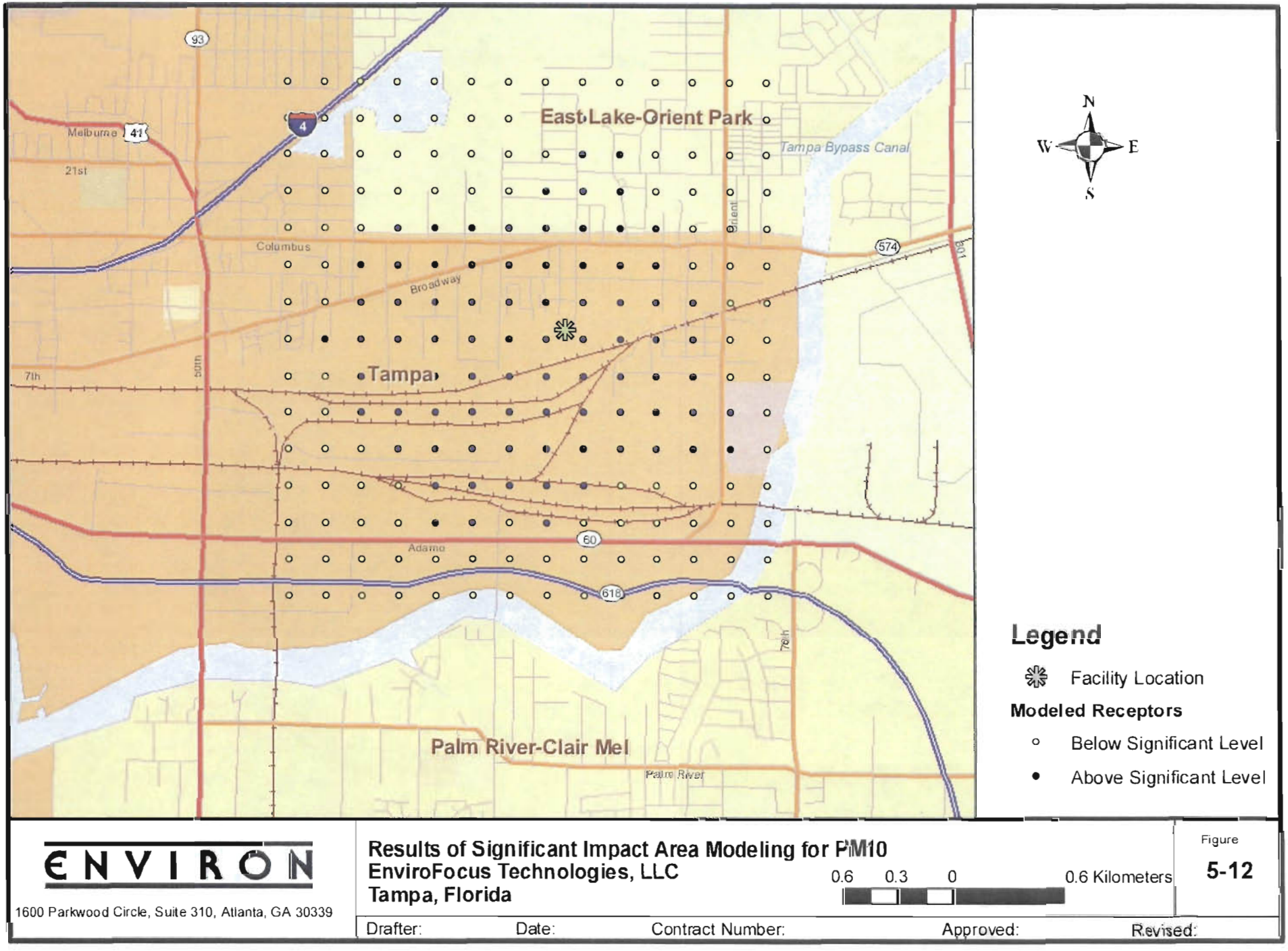
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Results of Significant Impact Area Modeling for NO2
EnviroFocus Technologies, LLC
Tampa, Florida

0.5 0.25 0 0.5 Kilometers

Figure **5-11**

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

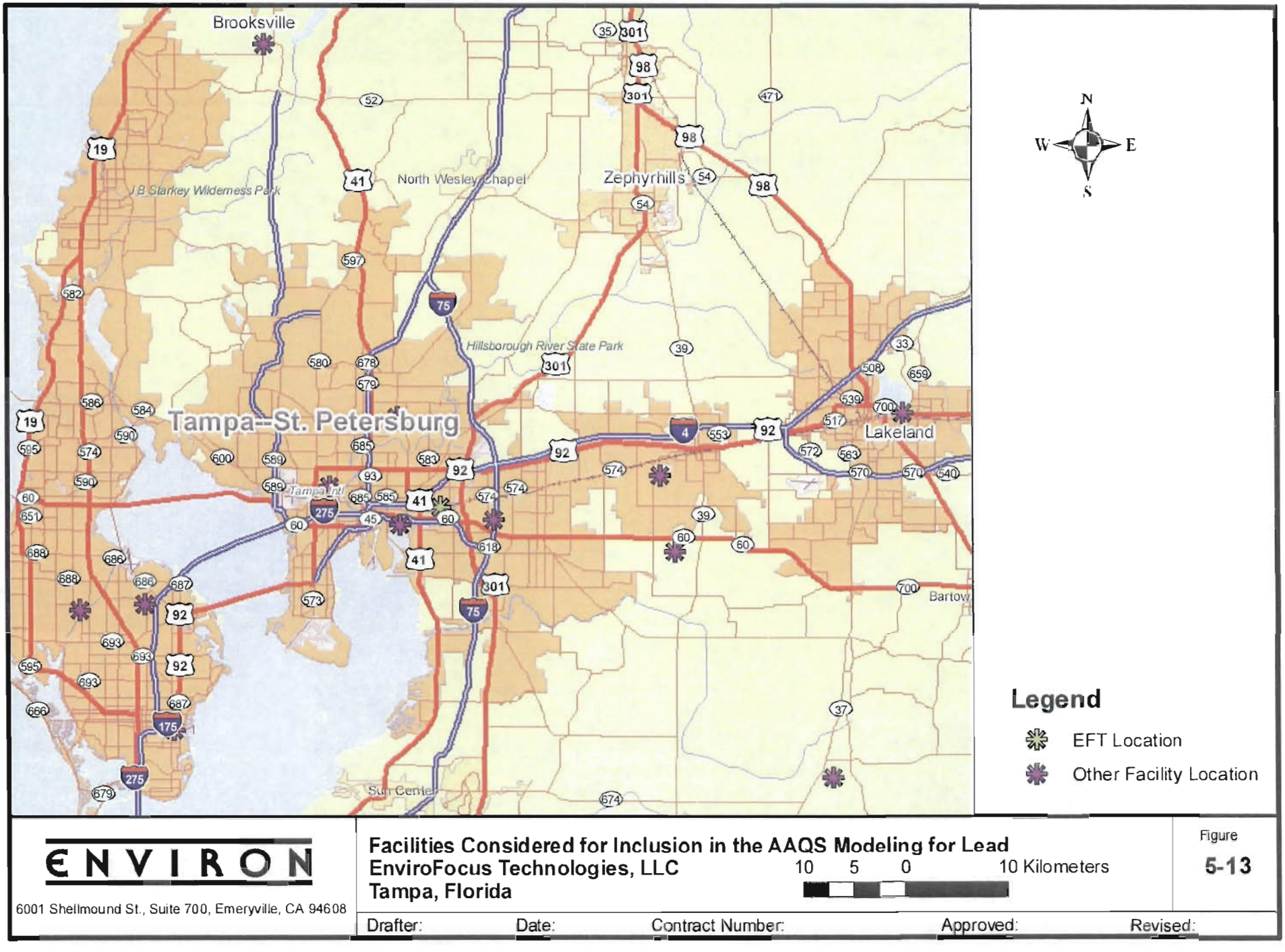
1600 Parkwood Circle, Suite 310, Atlanta, GA 30339

Results of Significant Impact Area Modeling for PM10
EnviroFocus Technologies, LLC
Tampa, Florida

0.6 0.3 0 0.6 Kilometers

Figure **5-12**

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

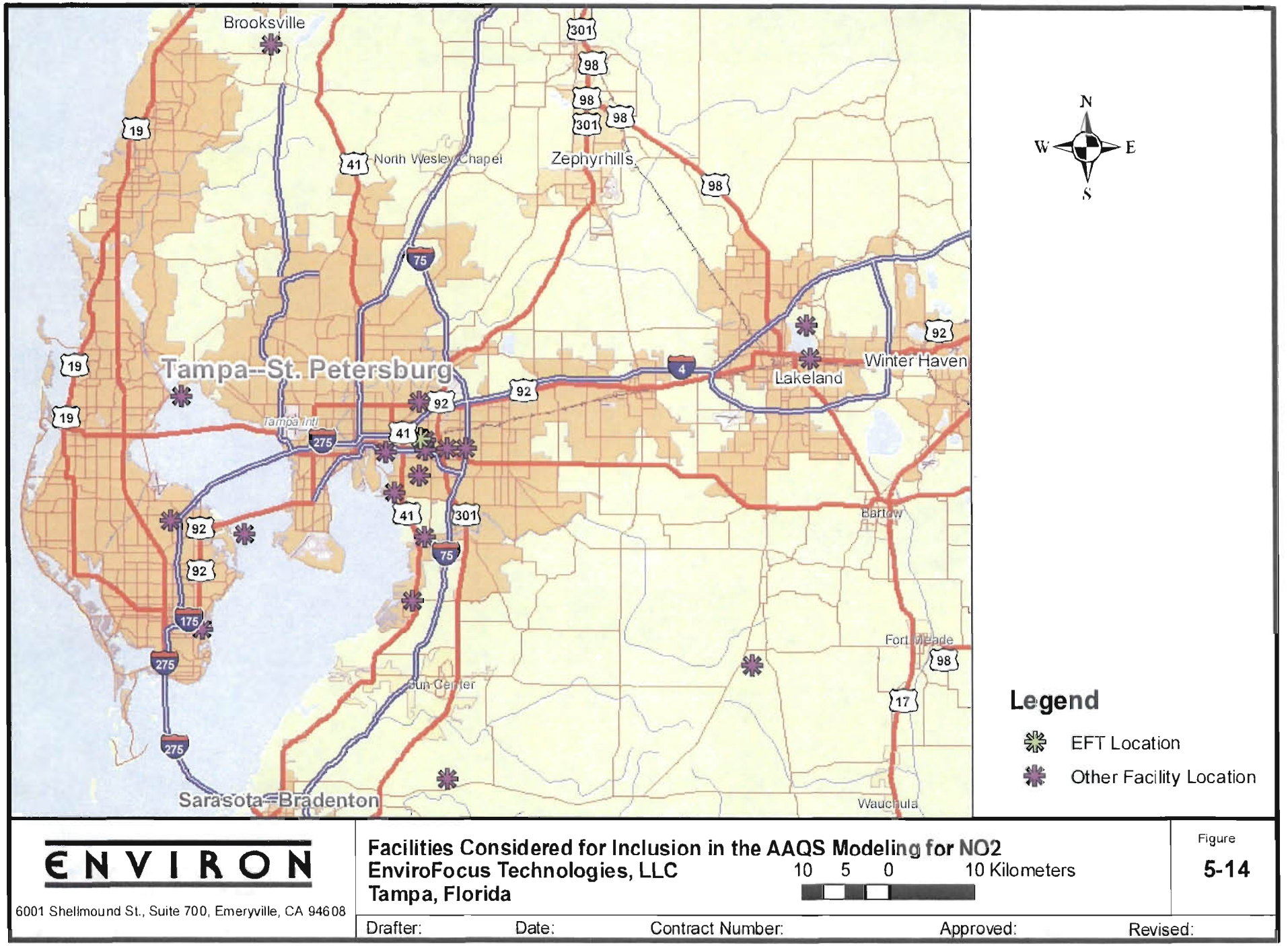
6001 Shellmound St., Suite 700, Emeryville, CA 94608

Facilities Considered for Inclusion in the AAQS Modeling for Lead
EnviroFocus Technologies, LLC
Tampa, Florida

10 5 0 10 Kilometers

Figure
5-13

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

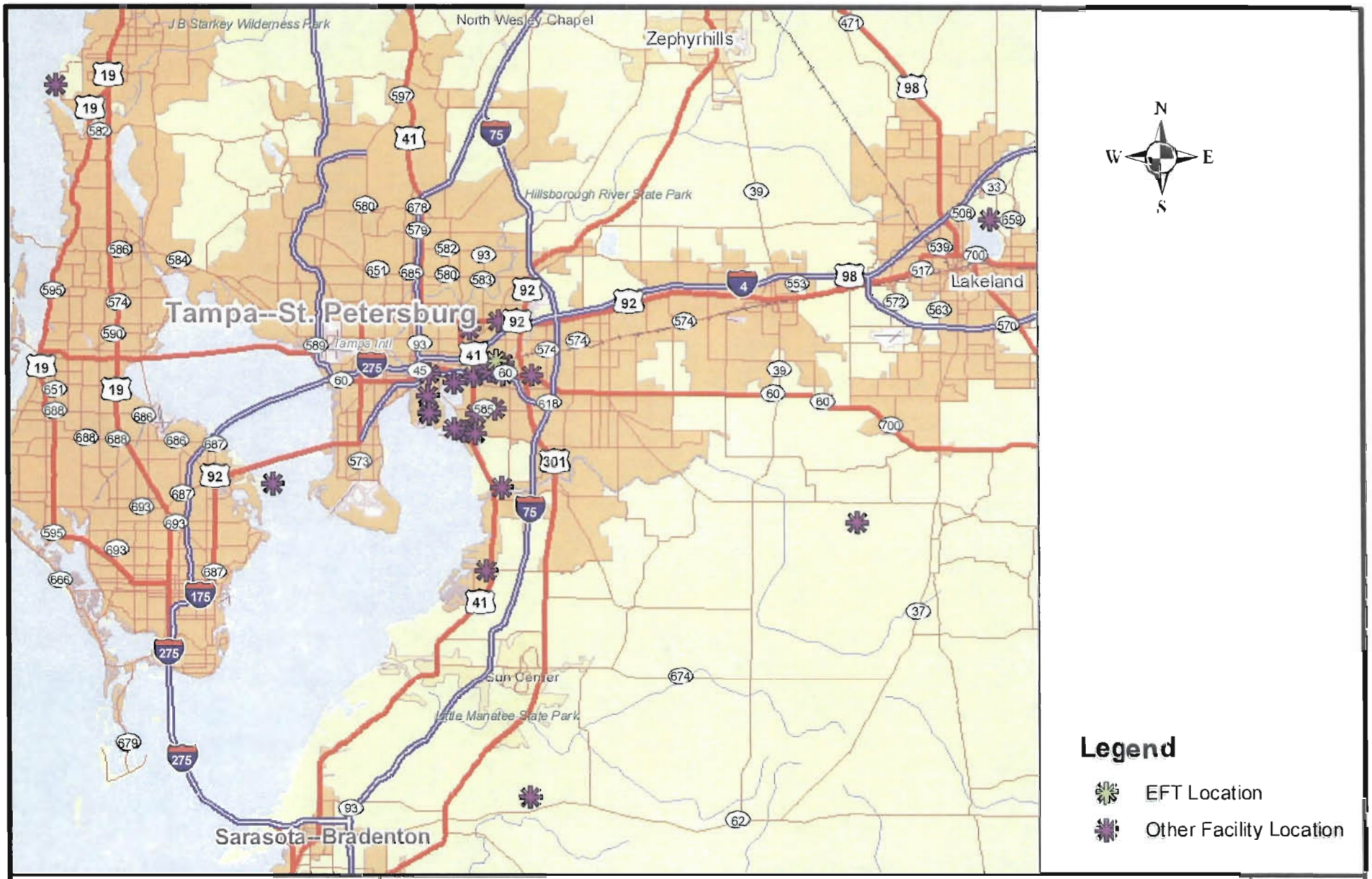
6001 Shellmound St., Suite 700, Emeryville, CA 94608

Facilities Considered for Inclusion in the AAQS Modeling for NO2
EnviroFocus Technologies, LLC
Tampa, Florida

10 5 0 10 Kilometers

Figure
5-14

Drafter: Date: Contract Number: Approved: Revised:



ENVIRON

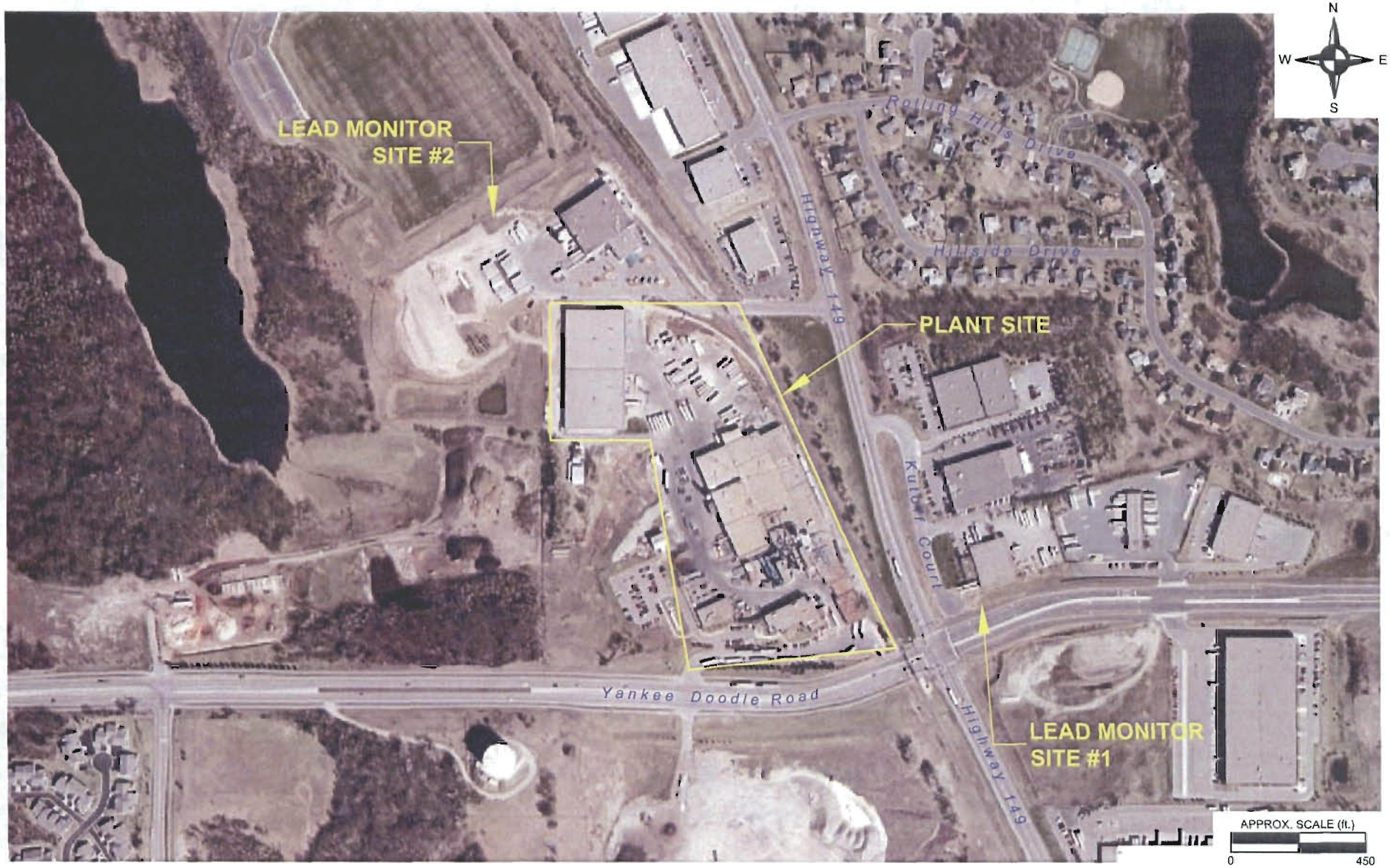
6001 Shellmound St., Suite 700, Emeryville, CA 94608

Facilities Considered for Inclusion in the AAQS Modeling for PM10
EnviroFocus Technologies, LLC
Tampa, Florida

10 5 0 10 Kilometers

Figure **5-15**

Drafter:	Date:	Contract Number:	Approved:	Revised:



ENVIRON

LEAD MONITOR LOCATIONS
GOPHER RESOURCE CORPORATION
3385 HIGHWAY 149
EAGAN, MINNESOTA

Figure
5-16

Drafter:	ELS	Date:	08/01/08	Contract Number:	07-15422D	Approved:	Revised:

R:\Client Project Files\07-Atlanta Projects\GRC, EnviroFocus, Air App, Phase II 07-15422D\Eagan, MN\5-16_Lead Monitor Locations.dwg

Appendix D
RBLC Determinations

http://cfpub.epa.gov/rblc/cfm/basicSearchResult.cfm?RequestTimeout=500&CFID=1444975&CFTOKEN=58971110&jsessionid=98303c46b4be8aa261ed7d37274826673a36TR Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

RBLC Search Results

List of Reports | Help

Your search has found **3** facilities and **6** processes that match your search criteria. You can view details for one or more facilities by clicking on the highlighted RBLC identifier or the process description in the list below. To create a report, select one of the standard output formats from the list of reports at the bottom of this page. Only facilities that are checked in the table below will be included in your report. Click on the check box next to any facility to switch between checked and unchecked or use the "Check" or "Un-Check" all facilities buttons at the top of the list to check or uncheck all records in the list.

Matching Facilities for Search Criteria:
Permit Date Between 1/1/1988 And 7/16/2008
And Process Type Contains '82.52'

Check | Un-Check **ALL Facilities** | New Search

NOTE: Draft determinations are marked with a " * " beside the RBLC ID.

RBLC ID	CORPORATE/COMPANY & FACILITY NAME	CODE	PROCESS DESCRIPTION	PERMIT NUMBER PERMIT DATE
Sort By	Sort By			Sort By
☑ AL-0049	INTERSTATE LEAD COMPANY, INC. INTERSTATE LEAD COMPANY, INC.	82.520	FURNACE, BLAST 1, REVERB 1	4-07-0170-9101, 9102 04/09/1991
		82.520	FURNACE, BLAST, REVERB, REFINING	
☑ MO-0025	DOE RUN CO. DOE RUN CO.	82.520	LEAD SMELTING FURNACE	0989-003 09/12/1989
		82.520	SECONDARY LEAD OPERATION (BLAST FURNACE)	
		82.520	SECONDARY LEAD OPERATION (REVERBERATORY FURNACE)	
☑ AL-0028	SANDERS LEAD CO. SANDERS LEAD CO.	82.520	FURNACE, BLAST	210-0005-X025 02/03/1988

Check | Un-Check **ALL Facilities** | Back to Top of Page

Select a Report Format

Formatting your report may take a while, especially if your facility has a large number of processes and pollutants. The detail reports take the longest amount of time because they include the most information. Please be patient after you select "Create report" .

○ Show All Records ◉ Show Only Selected Records On This Page

Process Index Report(as Sorted in Results Table) | Create report | Help

http://cfpub.epa.gov/rblc/cfm/ProcDetl.cfm?facnum=24456&Procnum=97066
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

Help

FINAL

RBLC ID: AL-0049
Corporate/Company: INTERSTATE LEAD COMPANY, INC.
Facility Name: INTERSTATE LEAD COMPANY, INC.
Process: FURNACE, BLAST, REVERB, REFINING

Primary Fuel:
Throughput: 73.00 MT/YR
Process Code: 82.520

Pollutant Information - List of Pollutants

Help

Pollutant	Primary Emission Limit	Basis Verified
Lead (Pb) / Lead Compounds	1 EE-4 GR/DSCF	RACT

Process Notes:

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=24456&Procnum=97066&poltnum=120267
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: AL-0049
Corporate/Company: INTERSTATE LEAD COMPANY, INC.
Facility Name: INTERSTATE LEAD COMPANY, INC.
Process: FURNACE, BLAST, REVERB, REFINING

Pollutant: Lead (Pb) / Lead Compounds **CAS Number:** 7439-92-1
Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A
P2/Add-on Description: FABRIC FILTER, BUILDING ENCLOSURE

Estimated % Efficiency: 98.700
Compliance Verified:
EMISSION LIMITS:
Basis: RACT
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 1.0000 EE-4 GR/DSCF
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/ProcDetl.cfm?facnum=3943&Procnum=1
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: SECONDARY LEAD OPERATION (BLAST FURNACE)

Primary Fuel: PROPANE GAS
Throughput: 60000.00 SHORT TONS/YR.
Process Code: 82.520

Pollutant Information - List of Pollutants

Help

Pollutant	Primary Emission Limit	Basis	Verified
Particulate Matter < 10 µ (PM10)	24.4000 TPY	BACT-PSD	
Lead (Pb) / Lead Compounds	8.3000 TPY	BACT-PSD	

Process Notes: CONTROL DEVICES ARE TO BE ABLE TO REMOVE 98.4% OF PARTICULATE MATTER, & 99.2% OF THE FUGITIVE EMISSIONS. THE SECONDARY FEED SHALL BE LIMITED TO 400 TONS PER DAY.

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=3943&Procnum=1&poltnum=105104
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: SECONDARY LEAD OPERATION (BLAST FURNACE)

Pollutant: Particulate Matter < 10 µ (PM10) **CAS Number:** PM

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A

P2/Add-on Description: SCRUBBER

Estimated % Efficiency: 90.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 24.4000 TPY
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=3943&Procnum=1&poltnum=105105
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: SECONDARY LEAD OPERATION (BLAST FURNACE)

Pollutant: Lead (Pb) / Lead Compounds **CAS Number:** 7439-92-1
Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A
P2/Add-on Description: SCRUBBER

Estimated % Efficiency: 90.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 8.3000 TPY
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/ProcDetl.cfm?facnum=3943&Procnum=3
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: LEAD SMELTING FURNACE

Primary Fuel: PROPANE
Throughput: 42150.00 TON OF PB BULLION/YR
Process Code: 82.520

Pollutant Information - List of Pollutants

Help

Pollutant	Primary Emission Limit	Basis	Verified
Particulate Matter < 10 µ (PM10)	24.4000 TPY	BACT-PSD	
Lead (Pb) / Lead Compounds	8.3000 TPY	BACT-PSD	

Process Notes: CONTROL DEVICES SHALL CAPTURE AT LEAST 99.2% OF DIRECT AND FUGITIVE EMISSIONS.

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=3943&Procnum=3&poltnum=102601
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: LEAD SMELTING FURNACE

Pollutant: Particulate Matter < 10 µ (PM10) **CAS Number:** PM

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A

P2/Add-on Description: SCRUBBER

Estimated % Efficiency: 90.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 24.4000 TPY
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=3943&Procnum=3&poltnum=102602
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: LEAD SMELTING FURNACE

Pollutant: Lead (Pb) / Lead Compounds **CAS Number:** 7439-92-1
Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A
P2/Add-on Description: SCRUBBER

Estimated % Efficiency:	90.000
Compliance Verified:	
EMISSION LIMITS:	
Basis:	BACT-PSD
Other Applicable Requirements:	
Other Factors Influence Decision:	
Emission Limit 1:	8.3000 TPY
Emission Limit 2:	0.0000
Standardized:	0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/ProcDetl.cfm?facnum=3943&Procnum=2
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: SECONDARY LEAD OPERATION (REVERBERATORY FURNACE)

Primary Fuel: PROPANE
Throughput: 46200.00 TON OF PB BULLION/YR
Process Code: 82.520

Pollutant Information - List of Pollutants

Help

Pollutant	Primary Emission Limit	Basis	Verified
Sulfur Dioxide (SO2)	830 TPY	BACT-PSD	
Lead (Pb) / Lead Compounds	12.6000 TPY	BACT-PSD	
Particulate Matter < 10 µ (PM10)	60.6000 TPY	BACT-PSD	

Process Notes: CONTROL DEVICES SHALL CAPTURE 99.2% OF DIRECT AND FUGITIVE PARTICULATE EMISSIONS.

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=3943&Procnum=2&poltnum=105893
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: SECONDARY LEAD OPERATION (REVERBERATORY FURNACE)

Pollutant: Particulate Matter < 10 µ (PM10) **CAS Number:** PM

Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A

P2/Add-on Description: BAGHOUSE

Estimated % Efficiency: 99.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 60.6000 TPY
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=3943&Procnum=2&poltnum=105622
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: MO-0025
Corporate/Company: DOE RUN CO.
Facility Name: DOE RUN CO.
Process: SECONDARY LEAD OPERATION (REVERBERATORY FURNACE)

Pollutant: Lead (Pb) / Lead Compounds **CAS Number:** 7439-92-1
Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A
P2/Add-on Description: BAGHOUSE

Estimated % Efficiency: 99.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 12.6000 TPY
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/ProcDetl.cfm?facnum=60&Procnum=1
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Process Information - Details

For information about the pollutants related to this process, click on the specific pollutant in the list below.

Help

FINAL

RBLC ID: AL-0028
Corporate/Company: SANDERS LEAD CO.
Facility Name: SANDERS LEAD CO.
Process: FURNACE, BLAST

Primary Fuel:
Throughput: 7500.00 LB/H CHARGE RATE
Process Code: 82.520

Pollutant Information - List of Pollutants

Help

Pollutant	Primary Emission Limit	Basis	Verified
Sulfur Dioxide (SO2)	261 LB/H	BACT-PSD	
Lead (Pb) / Lead Compounds	0.0050 GR/DSCF	BACT-PSD	
Particulate Matter (PM)	0.0100 GR/DSCF	BACT-PSD	

Process Notes:

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=60&Procnum=1&poltnum=102913
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: AL-0028
Corporate/Company: SANDERS LEAD CO.
Facility Name: SANDERS LEAD CO.
Process: FURNACE, BLAST

Pollutant: Particulate Matter (PM) **CAS Number:** PM
Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A
P2/Add-on Description: BAGHOUSE

Estimated % Efficiency: 84.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 0.0100 GR/DSCF
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

http://cfpub.epa.gov/rblc/cfm/PoltDetl.cfm?facnum=60&Procnum=1&poltnum=102912
Last updated on Wednesday, July 16th, 2008.

Technology Transfer Network
Clean Air Technology Center - RACT/BACT/LAER Clearinghouse

Pollutant Information

Click on the Process Information button to see more information about the process associated with this pollutant.
Or click on the Process List button to return to the list of processes.

RBLC Home | New Search | Search Results | Facility Information | Process List | Process Information | Pollutant Information

Help

FINAL

RBLC ID: AL-0028
Corporate/Company: SANDERS LEAD CO.
Facility Name: SANDERS LEAD CO.
Process: FURNACE, BLAST

Pollutant: Lead (Pb) / Lead Compounds **CAS Number:** 7439-92-1
Pollution Prevention/Add-on Control Equipment/Both/No Controls Feasible: A
P2/Add-on Description: BAGHOUSE

Estimated % Efficiency: 84.000
Compliance Verified:
EMISSION LIMITS:
Basis: BACT-PSD
Other Applicable Requirements:
Other Factors Influence Decision:
Emission Limit 1: 0.0050 GR/DSCF
Emission Limit 2: 0.0000
Standardized: 0.0000

COST DATA: **Verified by Agency?** No
Year Used in Cost Estimates:
Cost Effectiveness:
Incremental Cost Effectiveness:

Pollutant Notes:

Appendix E
Equipment Information

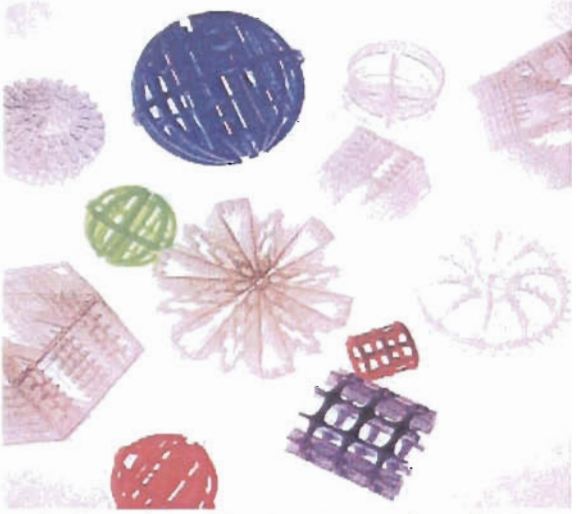
Envitech

Packed Bed Scrubbers For Acid Gas Removal

Custom Designed Packed Bed Scrubbers

These high-efficiency, low pressure drop scrubbers use structured or random packing, mist eliminator, and liquid distribution system to remove acid and toxic gases through absorption and neutralization. They are designed to control acid and toxic gas emissions typically associated with waste incineration, IC manufacturing, chemical processing, and many other processes.

Envitech offers total solutions along with the most complete range of on-site services, pre-engineered and custom air purification systems. available. Our typical system consists of duct, dampers, fan, scrubber, recirculation pumps, chemical feed pumps, chemical storage tanks, instrumentation and control system. For more information, contact your Envitech representative.



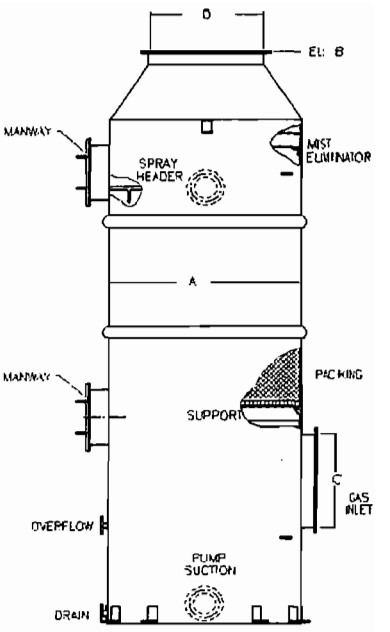
A wide variety of the latest generation of high-efficiency packing is available from Envitech.

Envitech Packed Bed Scrubbers

Vessel

Standard models are fabricated from high-strength, corrosion-resistant, fiberglass-reinforced plastic (FRP) in accordance with the latest ASTM and Product Standards. High quality vinyl ester resins are utilized for maximum strength and superior corrosion resistance. Other materials of construction are available upon request.

MODEL	NOMINAL FLOWRATE, acfm	A in.	B* in.	C in.	D in.
VT1.5-10	500 - 900	18	192	8	8
VT2-10	900 - 1,600	24	192	10	10
VT3-10	1,600 - 3,500	36	218	18	16
VT4-10	3,500 - 6,500	48	218	12 x 36	20
VT5-10	5,800 - 10,200	60	228	15 x 45	24
VT6-10	8,500 - 14,600	72	240	18 x 54	30
VT7-10	11,600 - 20,300	84	252	21 x 64	36
VT8-10	15,200 - 26,100	96	264	24 x 72	42
VT9-10	19,100 - 33,000	108	276	27 x 81	48
VT10-10	23,600 - 40,800	120	288	30 x 90	54
VT11-10	28,600 - 48,000	132	300	33 x 98	60
VT12-10	33,900 - 56,500	144	312	36 x 108	66
VT13-10	39,900 - 70,300	156	324	39 x 117	72



* *Height with 10 ft. of packing. Actual height depends on packing depth.*

Packing

Different types of packing are suitable for Envitech's packed bed scrubbers. Envitech continues to utilize various packing which demonstrate the ideal characteristics for each application in terms of:

- Corrosion resistance
- Even Liquid/Gas Distribution
- Gas Absorption Efficiency
- High Flood Point/Low Wetting Point
- Pressure Drop
- Process Capacities
- Service/maintainability
- Surface Area/Unit Volume
- Optimal Velocity

Packing Support

Our packing support provides sufficient open area for upward gas movement and liquid drainage. Standard material of construction is FRP for rigidity, long life and strength.

Liquid Distribution System

Liquid distribution system uniformly distributes the scrubbing liquid onto the packing material. Standard distributor consists of full cone, non-clog spray nozzles attached to a corrosion-resistant pipe ladder. Weir-trough distributors are available on request. Type, size and materials will be selected to provide optimum performance.

Mist Eliminator

A mist eliminator is provided with each tower to remove entrained liquid drops from the air stream prior to exhaust. Standard is chevron type wave-form profile mist eliminator. Other types are available on request.

Access Doors

Suitable doors are provided for easy loading and removal of packing and inspection of scrubber internals.

For more information:

Envitech
2924 Emerson Street
San Diego, CA 92106 USA
619-223-9925
619-223-9938 Fax
envitechinc.com

2. Technology Overview

5.1 Pyretron™ Air/Oxy/Fuel

The Pyretron™ variable ratio Air/Oxy/Fuel combustion technology provides a high velocity, bushy, luminous flame with enhanced radiative and convective heat transfer characteristics. Convective and radiative heat transfer increases heat flux to the charge and the furnace refractory walls.

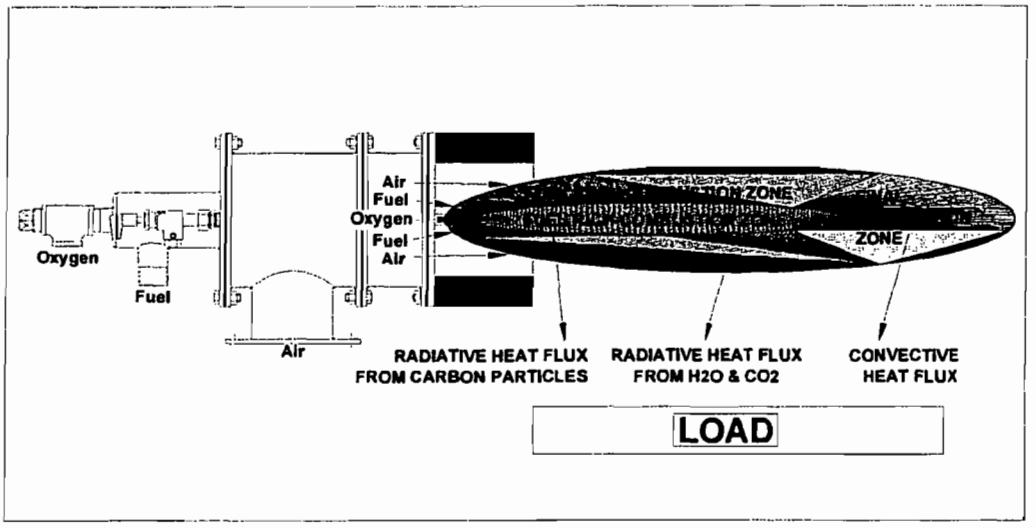


Figure 1: PYRETRON Flame Pattern Structure

The Pyretron™ combustion system provides maximized heating temperatures to the furnace refractory lining. In addition, Pyretron significantly reduced energy cost with the use of the following unique components:

- Proprietary variable air/oxy/fuel ***Pyretron***™ Combustion System providing **more than a 60% increase in heating efficiency**,
- Fully automated PLC based control system providing control logic to continuously optimize flame characteristics to maximize heat transfer. The control system is equipped with self-diagnostic software for friendly operation and maintenance.

U.S. Patent Nos.
4,622,047
4,642,047
4,497,087

The reduction in total energy costs (fuel plus oxygen) can be dramatic, at the high temperatures common to the metal industry. Especially in applications where the unit cost of fuel exceeds the unit cost of oxygen. The oxygen to air ratio, as well as the firing

rate, varies based on exhaust gas temperature throughout the heating cycle in order to provide the optimum flame temperature and heat transfer characteristics with minimum total energy cost.

Through the substitution of oxygen for a portion of combustion air requirements, thermal efficiency (i.e. percent available heat) is greatly increased. The thermal efficiency increases, by reducing the amount of ballast nitrogen introduced with combustion air that is present in high temperature flue gases. Considering your oxygen/natural gas costs ratio, ACI optimizes and reduces the amount of oxygen and fuel consumption.

In more than 150 installations over the last 18 years, ***Pyretron***™ melting technology has provided the metal industry with a reliable heating with low total energy cost and low maintenance requirements.

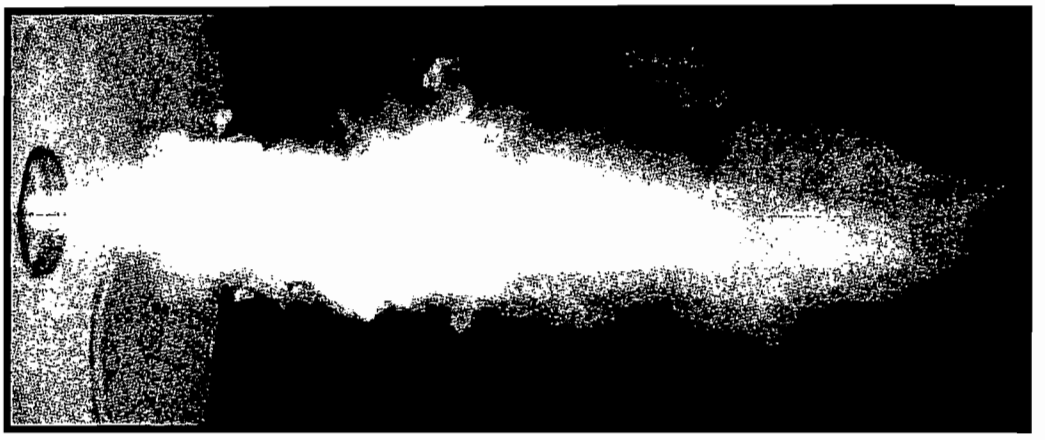


Figure 2: Picture of PYRETRON™ NF2500 Flame using Natural Gas

Trade Name	Gasses	Part Number	Minimum Rate	Nominal Rate	Maximum Rate
Pyretron I	Oxy/Fuel/Air	PT 750	150 KW	750 KW	1000 KW
		PT 2000	400 KW	2000 KW	3000 KW
		PT 4000	600 KW	4000 KW	5000 KW
Pyretron II	Oxy/Fuel/Air	PT2 1500	275 KW	1500 KW	2000 KW
		PT2 2500	350 KW	2500 KW	3000 KW
		PT2 5000	800 KW	5000 KW	6000 KW

Figure 3: Burner Range

Appendix F
Correspondence with U.S. Fish and Wildlife Service

Russell Kemp

From: Catherine_Collins@fws.gov
Sent: Tuesday, June 24, 2008 12:13 PM
To: Russell Kemp
Subject: Re: EnviroFocus Technologies, LLC - Tampa, Florida - upcoming PSD application

Mr. Kemp --

Based upon the relatively low emissions you described (below) for the proposed EnviroFocus Technoligies, LLC (EFT) facility in Tampa, Florida, the Fish and Wildlife Service - Branch of Air Quality does not anticipate that this project will have significant impacts to air quality or air quality related values at the Chassahowitzka National Wildlife Refuge and Wilderness Area. Thus, a Class I air quality analysis is not necessary for this project. Should the emissions or characteristics of the project change significantly, please contact us.

Thank you for involving the FWS in this project review.

Catherine Collins, Environmental Engineer
U.S. Fish and Wildlife Service
Air Quality Branch
7333 W. Jefferson Ave., Suite 375
Lakewood, CO 80235-2034
303-914-3807
(303) 969-5444 fax
Catherine_Collins@fws.gov

"Russell Kemp" <rkemp@environcorp.com>

05/13/2008 12:04 PM

To <Catherine_Collins@fws.gov>

cc <david.read@dep.state.fl.us>, <deborah.nelson@dep.state.fl.us>, "Frank Burbach" <fburbach@environcorp.com>, "Tapper, John" <John.Tapper@grcmn.com>, "Widell, John" <John.Widell@efttampa.com>, "Yates, Steve" <Steve.Yates@grcmn.com>

Subject EnviroFocus Technologies, LLC - Tampa, Florida - upcoming PSD application

Good afternoon Ms. Collins.

On behalf of my client, EnviroFocus Technologies, LLC (EFT), this email follows up on our phone conversations of November 6, 2007 and February 28, 2008 regarding an upcoming Prevention of Significant Deterioration (PSD) application for the modification of an existing secondary lead smelter located at 1901 North 66th Street, Tampa, Florida 33619. EFT had a pre-application meeting with representatives of the Environmental Protection Commission of Hillsborough County and the Florida Department of Environmental Protection (FDEP) on October 12, 2007. FDEP will be the agency receiving and processing this application.

EFT's plans to expand their existing facility involve additions of equipment and operations which will result in projected emissions increases which will exceed the PSD significant increase thresholds for NOx, PM10, and lead (Pb). The facility will be installing a wet SO2 scrubber which will allow the expansion to occur without triggering PSD significance for SO2.

We have been working diligently with EFT and their design team to refine the facility design and emission estimates, which have been updated and revised since our original transmittal to you on November 8, 2007. The following table summarizes the comparison between facility baseline and future emissions:

Pollutant	Baseline (tons/year)	Future Allowable (tons/year)	Increase (tons/year)
SO2	853	891	38
NOx	35	203	168
CO	813	910	97
VOC	60	16	-44
PM10	24	65	65 (*)
Lead	1.22	4.05 (+/-)	2.83

(*) The facility has an existing facility-wide PSD avoidance limit for PM10 emissions. Upon exceeding that limit, the entire future facility-wide allowable emission rate is viewed as an increase for PSD purposes.

The future allowable lead emission rate is based on the assumption that the main emitting baghouse exhaust stacks are at an average exit loading of 1 mg/dscm Pb, or 1/2 the NESHAP limit of 2 mg/dscm, as BACT. Expected actual performance for one of the stacks is substantially lower than the BACT level such that expected future facility-wide actual emissions of lead are more on the order of 2.1 tons/year, an increase of about 0.9 tons/year Pb.

The distance from the facility to the southern boundary of the Chassahowitzka National Wildlife Refuge (NWR) is approximately 70 kilometers. The Q/D ratio for this project would be the amount of emissions increase for the visibility-affecting pollutants (SO2, NOx and PM10) in tons/year (Q) divided by the distance between the facility and NWR in kilometers (D) as:

Q = 38 + 168 + 65 = 271 tons/year
D = 70 km

Q/D = 3.87

This Q/D value of 3.87 is less than 4, the screening level commonly used by the FWS to assess the potential for adverse impacts on the Class 1 areas under its jurisdiction.

We ask that you consider the above-provided information and provide EnviroFocus Technologies, LLC with your written concurrence that the proposed project satisfies the evaluation criteria of the Fish & Wildlife Service and that no further analysis or CALPUFF modeling is required to assess air quality related values for this project's potential impact on the Chassahowitzka NWR.

Thank you very much for your consideration of this project. Both EFT and FDEP greatly appreciate your efforts. Please feel free to call or email me with any questions or comments you may have.

Russell

Russell S. Kemp, PE
Principal
ENVIRON International Corporation
1600 Parkwood Circle, Suite 310
Atlanta, Georgia 30339
(Tel) 678-388-1654
(Fax) 770-874-5011
(Cell) 404-374-7836
rkemp@environcorp.com

Appendix G
Correspondence with Florida Department of Environmental Protection

ENVIRON

May 14, 2008

Debbie Nelson
Meteorologist, Special Projects Section
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Modeling Protocol for PSD Permit Application
EnviroFocus Expansion Project - Tampa, Florida

Dear Ms. Nelson:

Enclosed for your review and approval is the proposed Modeling Protocol for the PSD Permit Application we are currently preparing for the EnviroFocus Expansion Project in Tampa, Florida. Also included is a CD containing the modeling files needed to verify the Significant Impact Area determination in the Protocol. Accordingly, with your approval of this protocol, we are requesting that you provide us with the inventory of neighboring sources required to be included in the final modeling for the PSD permit application.

Thank you for your attention to this matter. If you have any questions or need additional information, please don't hesitate to contact me at 678-388-1642.

Sincerely,

Frank J. Burbach, P.E.
Manager

Enclosure: Proposed Modeling Protocol

Copy: David Read, Florida DEP
John Widell, EnviroFocus Technologies
Robert Hudson, Gopher Resource Corporation

Frank Burbach

From: Nelson, Deborah [Deborah.Nelson@dep.state.fl.us]
Sent: Monday, June 09, 2008 3:14 PM
To: Wenxin Li
Cc: Frank Burbach
Subject: RE: EnviroFocus Modeling

Wenxin,

12-057-1075 may not be used as a background monitor because it was not a regulatory lead monitor. We would be happy to discuss any other options you may suggest. I realize that 12-057-1073 is close and may double count some of the lead air emissions. My main concern with having a background monitor further away from 1073 is that the modeling would then elliminate all background lead from the soils in the vicinity of the facility.

Debbie

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Tuesday, June 03, 2008 8:33 AM
To: Nelson, Deborah
Cc: Frank Burbach; Jennifer Ahluwalia; Russell Kemp
Subject: RE: EnviroFocus Modeling

Debbie,

Frank forwarded me your comments regarding the lead monitor we selected.
3. Normally the nearest monitor is used for background concentrations.
While this may be complicated with regards to lead, please provide background information describing why a particular monitor was selected. The nearest pb monitor is by the CSX, 12-057-1066. A possible good background monitor is
12-057-1073 which is a little further away and close to residential areas.
The Department requires recent monitor data as well. More recent data is available than years 2001-2003.

I didn't select the two nearest monitors because they were placed within a quarter mile of EFT specifically to measure the lead impacts from EFT; otherwise, the impact from EFT would be double-counted. 120571074 is located
0.6 mile away but 2001 is the last year of operation. We selected the next closest

120571075, which operated from 2001 to 2003.

Other than the two nearest monitors you mentioned, the closest that operated from 2001 to 2007 is 121033005, located 20 miles away from EFT.

Please let us know if you still have questions.

Thanks,
Wenxin

Wenxin Li, CIH | Senior Associate
ENVIRON | www.environcorp.com <http://www.environcorp.com/>
V: 510.931.6167| F: 510.655.9517| wli@environcorp.com <mailto:wli@environcorp.com>

Frank Burbach

From: Wenxin Li
Sent: Tuesday, July 15, 2008 9:28 AM
To: Nelson, Deborah; Russell Kemp; Frank Burbach
Subject: RE: EFT increment inventory

I see. Thanks Debbie for your prompt reply.

From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]
Sent: 7/15/2008 (Tue) 6:27
To: Wenxin Li
Subject: RE: EFT increment inventory

We always use potential emissions when actual emissions from 77 are unknown. If your modeling comes close to the thresholds, we can begin researching the actuals emissions. However, if will take some time.

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

-----Original Message-----
From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Tuesday, July 15, 2008 9:23 AM
To: Nelson, Deborah
Subject: RE: EFT increment inventory

Thanks Debbie. Since we don't have the '77 actual emissions, wouldn't it be conservative enough to assume the '77 actual emissions to be zero and model the current actual emissions as the incremental emissions?

From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]
Sent: 7/15/2008 (Tue) 6:17
To: Wenxin Li
Subject: RE: EFT increment inventory

You need the list of post 77 sources. You will need to model potential emissions, not actuals since we do not have actuals from 77 to compare them to. I will begin working on those.

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

-----Original Message-----
From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Tuesday, July 15, 2008 5:12 AM
To: Nelson, Deborah
Cc: Frank Burbach; Russell Kemp
Subject: RE: EFT increment inventory

Thanks Debbie for your detailed explanation. In this case, will you provide us a list of the PM facilities that started operation after 1977? For these sources, could you send us their current actual PM10 emissions?

Many thanks,
Wenxin

Wenxin Li, CIH | Senior Associate
ENVIRON | www.environcorp.com
V: 510.931.6167| F: 510.655.9517| wli@environcorp.com

-----Original Message-----
From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]
Sent: Monday, July 14, 2008 1:41 PM
To: Wenxin Li
Subject: RE: EFT increment inventory

Since we do not have actual data, I would exclude the sources that were in existence prior to 1977 from the Increment modeling inventory (unless your modeling results are close to the thresholds). In general, the sources that were in existence in 1977 had potential emission rates that are higher or the same as today, thus making your analysis more conservative leaving them out. However, in the event a unit has shut down, we do not allow for an increment expansion of 1977 potential emission rates because the unit may not have

operated close to their limit, thus making your analysis less conservative. One of your sources is FPL Manatee. Units 1 and 2 are baseline and thus would be left out because we do not know their actual emissions from 1977. However, you would need to model the combustion turbines that have been constructed post 77.

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

-----Original Message-----
From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Friday, July 11, 2008 7:42 PM
To: Nelson, Deborah
Subject: RE: EFT increment inventory

I see. Thanks Debbie for your explanation.

So, you are helping us to look for the potential emissions around 1977? We should model the difference between the current potential emissions and the 1977 potential emissions. Is that right?

Wenxin Li, CIH | Senior Associate
ENVIRON | www.environcorp.com
V: 510.931.6167| F: 510.655.9517| wli@environcorp.com

-----Original Message-----
From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]
Sent: Friday, July 11, 2008 8:04 AM
To: Wenxin Li
Subject: RE: EFT increment inventory

Ideally, but we do not have actual data from 1977 at this time, therefore potentials must be used.

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

-----Original Message-----
From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Friday, July 11, 2008 4:11 AM
To: Nelson, Deborah
Subject: RE: EFT increment inventory

Debbie, we have the potential and allowable emissions of PM10 for these facilities. I think we would also need the current actual emissions and the 1977 actual emissions. Is that right?

Thanks,
Wenxin

Wenxin Li, CIH | Senior Associate
ENVIRON | www.environcorp.com
V: 510.931.6167| F: 510.655.9517| wli@environcorp.com

-----Original Message-----
From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]
Sent: Thursday, July 10, 2008 6:38 AM
To: Wenxin Li
Cc: Frank Burbach; Russell Kemp
Subject: RE: EFT increment inventory

I was not aware that you did not have everything you needed. I'm assuming that you just need to know which of the sources were pre-1977?

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

-----Original Message-----
From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Thursday, July 10, 2008 4:58 AM
To: Nelson, Deborah
Cc: Frank Burbach; Russell Kemp
Subject: RE: EFT increment inventory

Debbie,

Thanks for your explanation. I just wanted to remind you that we are still waiting for the PM increment inventory. If you could send us the data at your earliest convenience, we would really appreciate it.

The PM10 tab of the attached file summarized the facilities we will include for the AAQS modeling (within SIA and over 20D).

Thanks,
Wenxin

Wenxin Li, CIH | Senior Associate
ENVIRON | www.environcorp.com
V: 510.931.6167| F: 510.655.9517| wli@environcorp.com

-----Original Message-----
From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]
Sent: Tuesday, July 08, 2008 7:01 AM
To: Wenxin Li
Subject: RE: EFT increment inventory

For NOx only. Other pollutants have an earlier baseline date. For those for which you have actual data, model the difference between 1988 and 2005-2007 (greatest number). If no actuals are available, you model the difference between the potentials from 1988 and 2005-2007 for each eu. For the AAQS, potentials are modeled for all sources from 2007.

Debbie Nelson
Meteorologist
Special Projects Section
850-921-9537
deborah.nelson@dep.state.fl.us

-----Original Message-----
From: Wenxin Li [mailto:wli@Environcorp.com]
Sent: Tuesday, July 08, 2008 9:44 AM
To: Nelson, Deborah
Subject: RE: EFT increment inventory

Thanks Debbie. For the increment modeling, I think we should be modeling the difference between the 2006-07 actuals and the 1987-88 actuals. If the 1987-88 actual emissions are not available, we should be modeling the 2006-07 actual emissions (not the potential emissions). Could you please confirm?

Many thanks,

Appendix H
Dispersion Modeling Tables and Files

Table 5-1
PSD Significant Impact Thresholds
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Averaging Period	Value	Units
Particulate Matter (PM_{10})	24-hour	5	$\mu g/m^3$
	Annual	1	$\mu g/m^3$
Nitrogen Dioxide (NO_2)	Annual	1	$\mu g/m^3$
Lead (Pb)	Calendar quarter	0.03	$\mu g/m^3$

Note:
[1] Significance thresholds from FDEP Rule 62-210.200(279), http://www.dep.state.fl.us/legal/Rules/air/62-210/62-210.pdf.

Table 5-2
National and State Ambient Air Quality Standards and Allowable PSD Increments
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Averaging Period	Federal Standard	Florida Standard	Hillsborough County Attainment Status[1]	Class II PSD Allowable Increments
Particulate Matter (PM_{10})	24-hour	150 $\mu g/m^3$	150 $\mu g/m^3$	Attainment	30 $\mu g/m^3$
	Annual	---	50 $\mu g/m^3$	Attainment	17 $\mu g/m^3$
Nitrogen Dioxide (NO_2)	Annual	0.053 ppm (100 $\mu g/m^3$)	0.053 ppm (100 $\mu g/m^3$)	Attainment	25 $\mu g/m^3$
Lead (Pb)	Calendar quarter	1.5 $\mu g/m^3$	1.5 $\mu g/m^3$	Attainment	-

Notes:
[1] Standard attainment status based on USEPA websites (www.epa.gov/air/oaqps/greenbk/index.html).

Table 5-3
Modeling Source Parameters - Point Sources
EnviroFocus Technologies, LLC
Tampa, Florida

Source ID	Source	Coordinates		Exit Flowrate		Diameter		Exit Velocity[1]	Temperature[2]		Stack Height	
		UTMx (m)	UTMy (m)	(ft^3/min)	(m^3/sec)	(in)	(m)	(m/sec)	(F)	(K)	(ft)	(m)
E16	Plastics Bin Vent	364,216	3,093,735	1,750	0.8	14	0.36	0.001	ambient	0	68.5	20.9
E15	Silo Bin Vent	364,195	3,093,833	650	0.3	16	0.41	0.001	ambient	0	35.0	10.7
E8	Breaker Scrubber Stack	364,176	3,093,758	25,700	12.1	42	1.07	13.6	ambient	0	90	27.4
E3	Refinery Combustion Stack A[3]	364,077	3,093,768	1000	0.5	17	0.43	3.2	450	505	59.1	18.0
E2	Refinery Combustion Stack B[3]	364,058	3,093,753	2000	0.9	24	0.61	3.2	450	505	54.1	16.5
E1	Refinery Combustion Stack C[3]	364,053	3,093,769	2000	0.9	24	0.61	3.2	450	505	54.8	16.7
E4	Combined Stack of Feed Dryer, Reverb Furnace and Blast Furnace	364,057	3,093,807	58886	27.8	60	1.52	15.2	150	339	130	39.6
E18	Propane Vaporizer	364,029	3,093,856	500	0.2	8	0.20	0.001	600	589	9.3	2.8
E6	Hygiene Baghouse and Stack	364,092	3,093,823	72000	34.0	60	1.52	18.6	150	339	130	39.6
E7	Torit Building Ventilation Torit Stack	364,134	3,093,819	195000	92.0	96	2.44	19.7	ambient	0	120	36.6
E9	Silo Bin Vent	364,181	3,093,742	650	0.3	16	0.41	2.4	ambient	0	70	21.3
E10	Silo Bin Vent	364,183	3,093,736	650	0.3	16	0.41	2.4	ambient	0	70	21.3
E12	Geneartor Exhaust	364,179	3,093,737	3845	1.8	8	0.20	56.0	941	778	11.2	3.4
E11	Soda Ash Slurry Exhaust	364,184	3,093,740	800	0.4	8	0.20	11.6	300	422	11.2	3.4
-	Former Refinery Baghouse Stack	364,040	3,093,779	17905	8.5	26	0.66	24.7	98.6	310	60.5	18.4

Notes:

[1] Stacks with rain caps were modeled with a 0.001 m/sec exit velocity.

[2] Exhaust at ambient temperature was modeled with a zero K temperature.

[3] Stack A represented two co-located stacks with flowrate and stack area equivalent of two stacks.
Stacks B and C each represented four co-located stacks with flowrate and stack area equivalent of four stacks.

Table 5-4
Modeling Source Parameters - Volume Sources
EnviroFocus Technologies, LLC
Tampa, Florida

Source	Coordinates		Height (m)	Width (m)	Release Height (m)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)
	UTMx (m)	UTMy (m)					
Plastics Plant	364217	3093782	17.4	40	8.7	9.30	8.09

Table 5-5
Physical and Modeling Parameters of Road Emissions
EnviroFocus Technologies, LLC
Tampa, Florida

Source	Parameters		
Truck Traffic on Paved Roads	Length	10,730	feet
		3,271	meters
	Width	2.59	meters
	Adjusted width[1]	8.59	meters
	Maximum vehicle height in Florida	14	feet
		4	meters
	Release height	4.1	meters
	Height of volume source	8.23	meters
	Initial vertical dimension	3.80	meters

Note:
[1] Adjusted road widths were calculated based on the maximum vehicle width in Florida and the Texas Natural Resource Conservation Commission (TNRCC) modeling guidelines (TNRCC 1999).

Reference:
Texas Natural Resources Conservation Commission (TNRCC). 1999. *Air Quality Modeling Guidelines*. February. (http://www.tnrcc.state.tx.us/permitting/airperm/nsr_permits/admt/guid_docs/rg25.pdf)

Florida Department of Transportation.2006.*Commercial Motor Vehicle Manual*. (http://www.dot.state.fl.us/mcco/downloads/TruckingManual%20-%206th%20Edition%202006%20english.pdf)

Table 5-6
Modeling Source Parameters - Line/Volume Sources
EnviroFocus Technologies, LLC
Tampa, Florida

Road ID	Coordinates		Modeling Parameters		
	UTM_x (meters)	UTM_y (meters)	Release Height (meters)	Initial Lateral Dimension (meters)	Initial Vertical Dimension (meters)
1	364096	3093833	4.11	4.00	3.83
1	364109	3093837	4.11	4.00	3.83
1	364123	3093842	4.11	4.00	3.83
1	364137	3093848	4.11	4.00	3.83
1	364144	3093852	4.11	4.00	3.83
1	364152	3093857	4.11	4.00	3.83
1	364164	3093860	4.11	4.00	3.83
1	364176	3093859	4.11	4.00	3.83
1	364189	3093856	4.11	4.00	3.83
1	364202	3093853	4.11	4.00	3.83
1	364215	3093850	4.11	4.00	3.83
1	364228	3093846	4.11	4.00	3.83
2	364168	3093807	4.11	4.00	3.83
2	364164	3093819	4.11	4.00	3.83
2	364160	3093831	4.11	4.00	3.83
2	364160	3093846	4.11	4.00	3.83
2	364167	3093860	4.11	4.00	3.83
2	364174	3093873	4.11	4.00	3.83
2	364182	3093886	4.11	4.00	3.83
2	364179	3093880	4.11	4.00	3.83
2	364174	3093866	4.11	4.00	3.83
2	364170	3093858	4.11	4.00	3.83
2	364167	3093854	4.11	4.00	3.83
2	364158	3093853	4.11	4.00	3.83
2	364148	3093855	4.11	4.00	3.83
2	364139	3093865	4.11	4.00	3.83
2	364137	3093876	4.11	4.00	3.83
2	364137	3093887	4.11	4.00	3.83
3	364137	3093888	4.11	4.00	3.83
3	364137	3093876	4.11	4.00	3.83
3	364136	3093863	4.11	4.00	3.83
3	364134	3093855	4.11	4.00	3.83
3	364128	3093848	4.11	4.00	3.83
3	364116	3093841	4.11	4.00	3.83
3	364101	3093837	4.11	4.00	3.83
3	364087	3093832	4.11	4.00	3.83
3	364073	3093828	4.11	4.00	3.83
3	364059	3093823	4.11	4.00	3.83
3	364044	3093818	4.11	4.00	3.83
3	364030	3093814	4.11	4.00	3.83
3	364016	3093809	4.11	4.00	3.83
3	364002	3093805	4.11	4.00	3.83
3	363988	3093804	4.11	4.00	3.83
3	363979	3093811	4.11	4.00	3.83
3	363975	3093819	4.11	4.00	3.83
3	363973	3093828	4.11	4.00	3.83
3	363977	3093822	4.11	4.00	3.83
3	363984	3093810	4.11	4.00	3.83
3	363991	3093798	4.11	4.00	3.83
3	363995	3093785	4.11	4.00	3.83
3	363999	3093773	4.11	4.00	3.83
3	364003	3093760	4.11	4.00	3.83
13	364114	3093824	4.11	4.00	3.83
13	364122	3093827	4.11	4.00	3.83
13	364131	3093829	4.11	4.00	3.83
13	364145	3093832	4.11	4.00	3.83
13	364157	3093833	4.11	4.00	3.83
13	364168	3093833	4.11	4.00	3.83
13	364180	3093833	4.11	4.00	3.83
4	364137	3093888	4.11	4.00	3.83
4	364137	3093876	4.11	4.00	3.83
4	364137	3093863	4.11	4.00	3.83
4	364134	3093855	4.11	4.00	3.83
4	364128	3093848	4.11	4.00	3.83
4	364116	3093841	4.11	4.00	3.83
4	364101	3093837	4.11	4.00	3.83
4	364087	3093832	4.11	4.00	3.83
4	364073	3093828	4.11	4.00	3.83
4	364058	3093823	4.11	4.00	3.83
4	364044	3093819	4.11	4.00	3.83
4	364030	3093814	4.11	4.00	3.83
4	364016	3093810	4.11	4.00	3.83
4	364007	3093804	4.11	4.00	3.83
4	364000	3093797	4.11	4.00	3.83
4	363989	3093790	4.11	4.00	3.83
4	363976	3093792	4.11	4.00	3.83
4	363969	3093803	4.11	4.00	3.83
4	363970	3093813	4.11	4.00	3.83
4	363976	3093822	4.11	4.00	3.83
4	363983	3093832	4.11	4.00	3.83

Table 5-6
Modeling Source Parameters - Line/Volume Sources
EnviroFocus Technologies, LLC
Tampa, Florida

Road ID	Coordinates		Modeling Parameters		
	UTM_x (meters)	UTM_y (meters)	Release Height (meters)	Initial Lateral Dimension (meters)	Initial Vertical Dimension (meters)
4	363984	3093830	4.11	4.00	3.83
4	363978	3093817	4.11	4.00	3.83
4	363972	3093804	4.11	4.00	3.83
4	363966	3093791	4.11	4.00	3.83
4	363960	3093778	4.11	4.00	3.83
14	363960	3093743	4.11	4.00	3.83
14	363963	3093746	4.11	4.00	3.83
14	363975	3093737	4.11	4.00	3.83
14	363978	3093725	4.11	4.00	3.83
14	363995	3093716	4.11	4.00	3.83
14	364008	3093713	4.11	4.00	3.83
14	364021	3093710	4.11	4.00	3.83
14	364035	3093707	4.11	4.00	3.83
14	364048	3093704	4.11	4.00	3.83
14	364061	3093701	4.11	4.00	3.83
14	364073	3093703	4.11	4.00	3.83
14	364085	3093706	4.11	4.00	3.83
14	364098	3093709	4.11	4.00	3.83
14	364110	3093712	4.11	4.00	3.83
5	364137	3093888	4.11	4.00	3.83
5	364137	3093876	4.11	4.00	3.83
5	364137	3093864	4.11	4.00	3.83
5	364134	3093855	4.11	4.00	3.83
5	364128	3093848	4.11	4.00	3.83
5	364116	3093842	4.11	4.00	3.83
5	364102	3093838	4.11	4.00	3.83
5	364088	3093834	4.11	4.00	3.83
5	364075	3093829	4.11	4.00	3.83
5	364061	3093825	4.11	4.00	3.83
5	364047	3093821	4.11	4.00	3.83
5	364034	3093817	4.11	4.00	3.83
5	364020	3093813	4.11	4.00	3.83
5	364006	3093809	4.11	4.00	3.83
5	363995	3093799	4.11	4.00	3.83
5	363990	3093787	4.11	4.00	3.83
15	363955	3093818	4.11	4.00	3.83
15	363960	3093819	4.11	4.00	3.83
15	363967	3093828	4.11	4.00	3.83
15	363967	3093822	4.11	4.00	3.83
15	363966	3093808	4.11	4.00	3.83
15	363966	3093795	4.11	4.00	3.83
15	363968	3093783	4.11	4.00	3.83
15	363970	3093770	4.11	4.00	3.83
15	363971	3093757	4.11	4.00	3.83
15	363973	3093744	4.11	4.00	3.83
15	363976	3093734	4.11	4.00	3.83
15	363980	3093723	4.11	4.00	3.83
15	363989	3093718	4.11	4.00	3.83
15	364001	3093716	4.11	4.00	3.83
15	364013	3093714	4.11	4.00	3.83
15	364025	3093712	4.11	4.00	3.83
6	364137	3093888	4.11	4.00	3.83
6	364137	3093873	4.11	4.00	3.83
6	364137	3093858	4.11	4.00	3.83
6	364137	3093844	4.11	4.00	3.83
6	364133	3093834	4.11	4.00	3.83
6	364123	3093828	4.11	4.00	3.83
6	364113	3093824	4.11	4.00	3.83
16	363955	3093818	4.11	4.00	3.83
16	363955	3093818	4.11	4.00	3.83
16	363960	3093817	4.11	4.00	3.83
16	363965	3093806	4.11	4.00	3.83
16	363966	3093792	4.11	4.00	3.83
16	363968	3093778	4.11	4.00	3.83
16	363970	3093765	4.11	4.00	3.83
16	363971	3093751	4.11	4.00	3.83
16	363974	3093741	4.11	4.00	3.83
16	363977	3093731	4.11	4.00	3.83
16	363981	3093721	4.11	4.00	3.83
16	363994	3093715	4.11	4.00	3.83
16	364010	3093713	4.11	4.00	3.83
16	364026	3093710	4.11	4.00	3.83
7	363959	3093745	4.11	4.00	3.83
7	363966	3093756	4.11	4.00	3.83
7	363972	3093749	4.11	4.00	3.83
7	363977	3093736	4.11	4.00	3.83
7	363982	3093722	4.11	4.00	3.83
7	363995	3093716	4.11	4.00	3.83
7	364010	3093713	4.11	4.00	3.83
7	364025	3093711	4.11	4.00	3.83

Table 5-8
Modeling Source Parameters - Line/Volume Sources
EnviroFocus Technologies, LLC
Tampa, Florida

Road ID	Coordinates		Modeling Parameters		
	UTM_x (meters)	UTM_y (meters)	Release Height (meters)	Initial Lateral Dimension (meters)	Initial Vertical Dimension (meters)
7	364040	3093708	4.11	4.00	3.83
7	364055	3093705	4.11	4.00	3.83
7	364071	3093702	4.11	4.00	3.83
7	364084	3093705	4.11	4.00	3.83
7	364098	3093710	4.11	4.00	3.83
7	364111	3093715	4.11	4.00	3.83
10	363996	3093779	4.11	4.00	3.83
10	363993	3093788	4.11	4.00	3.83
10	363995	3093800	4.11	4.00	3.83
10	364008	3093807	4.11	4.00	3.83
10	364023	3093811	4.11	4.00	3.83
10	364038	3093816	4.11	4.00	3.83
10	364053	3093821	4.11	4.00	3.83
10	364068	3093825	4.11	4.00	3.83
10	364083	3093830	4.11	4.00	3.83
10	364098	3093834	4.11	4.00	3.83
10	364113	3093839	4.11	4.00	3.83
10	364128	3093843	4.11	4.00	3.83
10	364135	3093849	4.11	4.00	3.83
10	364140	3093857	4.11	4.00	3.83
10	364142	3093872	4.11	4.00	3.83
10	364142	3093888	4.11	4.00	3.83
11	363970	3093791	4.11	4.00	3.83
11	363974	3093796	4.11	4.00	3.83
11	363988	3093802	4.11	4.00	3.83
11	364002	3093807	4.11	4.00	3.83
11	364017	3093811	4.11	4.00	3.83
11	364032	3093815	4.11	4.00	3.83
11	364047	3093820	4.11	4.00	3.83
11	364062	3093824	4.11	4.00	3.83
11	364076	3093829	4.11	4.00	3.83
11	364091	3093833	4.11	4.00	3.83
11	364106	3093837	4.11	4.00	3.83
11	364121	3093842	4.11	4.00	3.83
11	364136	3093846	4.11	4.00	3.83
11	364141	3093857	4.11	4.00	3.83
11	364142	3093872	4.11	4.00	3.83
11	364142	3093888	4.11	4.00	3.83
8	364209	3093851	4.11	4.00	3.83
8	364195	3093854	4.11	4.00	3.83
8	364182	3093858	4.11	4.00	3.83
8	364169	3093861	4.11	4.00	3.83
8	364157	3093865	4.11	4.00	3.83
8	364147	3093874	4.11	4.00	3.83
8	364143	3093887	4.11	4.00	3.83
12	363955	3093818	4.11	4.00	3.83
12	363965	3093818	4.11	4.00	3.83
12	363974	3093818	4.11	4.00	3.83
12	363990	3093814	4.11	4.00	3.83
12	364005	3093809	4.11	4.00	3.83
12	364020	3093812	4.11	4.00	3.83
12	364034	3093816	4.11	4.00	3.83
12	364049	3093821	4.11	4.00	3.83
12	364064	3093826	4.11	4.00	3.83
12	364079	3093831	4.11	4.00	3.83
12	364094	3093835	4.11	4.00	3.83
12	364109	3093840	4.11	4.00	3.83
12	364123	3093845	4.11	4.00	3.83
12	364138	3093850	4.11	4.00	3.83
12	364142	3093860	4.11	4.00	3.83
12	364142	3093874	4.11	4.00	3.83
12	364142	3093888	4.11	4.00	3.83
9	364167	3093807	4.11	4.00	3.83
9	364163	3093821	4.11	4.00	3.83
9	364159	3093834	4.11	4.00	3.83
9	364155	3093847	4.11	4.00	3.83
9	364151	3093861	4.11	4.00	3.83
9	364147	3093874	4.11	4.00	3.83
9	364143	3093888	4.11	4.00	3.83

Table 5-7
Summary of Meteorological Data Completeness Analysis
EnviroFocus Technologies, LLC
Tampa, Florida

Year	Quarter	Completeness of Surface Meteorological Parameters					
		Wind Speed	Wind Direction	Temperature	Sky Cover	Ceiling Height	Joint Recovery
2001	1	100%	99.9%	100%	100%	100%	99.9%
	2	100%	99.4%	100%	100%	100%	99.4%
	3	100%	99.4%	99.8%	100%	100%	99.3%
	4	100%	99.2%	100%	100%	100%	99.2%
2002	1	100%	99.4%	100%	100%	100%	99.4%
	2	100%	99.7%	100%	100%	100%	99.7%
	3	100%	98.6%	100%	100%	100%	98.6%
	4	100%	99.3%	100%	100%	100%	99.3%
2003	1	100%	99.5%	100%	100%	100%	99.5%
	2	100%	98.8%	100%	100%	100%	98.8%
	3	100%	97.4%	100%	100%	100%	97.4%
	4	100%	97.7%	100%	100%	100%	97.7%
2004	1	99.9%	98.2%	99.9%	100%	100%	98.2%
	2	100%	98.4%	100%	100%	100%	98.4%
	3	100%	98.1%	100%	100%	100%	98.1%
	4	100%	96.6%	100%	100%	100%	96.6%
2005	1	100%	98.7%	100%	100%	100%	98.7%
	2	100%	97.7%	100%	100%	100%	97.7%
	3	100%	98.0%	100%	100%	100%	98.0%
	4	100%	99.4%	99.9%	100%	100%	99.3%

Table 5-8
Summary of Surface Parameters Values
EnviroFocus Technologies, LLC
Tampa, Florida

Land Use Type	Meteorology					Facility				
	Albedo	Bowen Ratio-Average	Bowen Ratio-Wet	Bowen Ratio-Dry	Surface Roughness	Albedo	Bowen Ratio-Average	Bowen Ratio-Wet	Bowen Ratio-Dry	Surface Roughness
Open Water	0.1	0.1	0.1	0.1	0.001	0.1	0.1	0.1	0.1	0.001
Low Intensity Residential	0.16	0.9	0.6	2.25	0.54	0.16	0.9	0.6	2.25	0.54
Medium Intensity Residential	0.17	1.2	0.8	2.625	0.77	0.17	1.2	0.8	2.625	0.77
High Intensity Residential	--	--	--	--	--	0.18	1.5	1	3	1
Commercial/Industrial/Transp (Site at Airport)	0.18	1.5	1	3	0.1	--	--	--	--	--
Bare Rock/Sand/Clay (Non-arid Region)	0.2	1.5	1	3	0.05	0.2	1.5	1	3	0.05
Evergreen Forest	0.12	0.55	0.25	1.05	1.3	0.12	0.55	0.25	1.05	1.3
Shrubland (Non-arid Region)	0.18	1.25	0.9	2.75	0.3	0.18	1.25	0.9	2.75	0.3
Grasslands/Herbaceous	0.18	0.9	0.45	2	0.1	0.18	0.9	0.45	2	0.1
Pasture/Hay	--	--	--	--	--	0.2	0.6	0.35	1.75	0.15
Urban/Recreational Grasses	0.15	0.6	0.35	1.75	0.02	0.15	0.6	0.35	1.75	0.02
Woody Wetlands	0.14	0.2	0.1	0.2	0.7	0.14	0.2	0.1	0.2	0.7
Emergent Herbaceous Wetlands	0.14	0.1	0.1	0.2	0.2	0.14	0.1	0.1	0.2	0.2

Table 5-9
Summary of Surface Moisture Conditions
EnviroFocus Technologies, LLC
Tampa, Florida

Year	Average Precipitation (in)	Moisture Condition
2001	38	dry
2002	59	wet
2003	50	average
2004	58	wet
2005	38	dry
	Precipitation (in)	
1978-2007	40	30th percentile
1978-2007	53	70th percentile

Table 5-10
Comparison of Surface Parameters at Facility and Meteorological Station
EnviroFocus Technologies, LLC
Tampa, Florida

Sector	Start (degree)	End (degree)	Meteorological Station Land Use[1]							Facility Land Use[2]							Relative Difference[3]						
			Albedo	Bowen Ratio					Surface Roughne	Albedo	Bowen Ratio					Surface Roughne	Albedo	Bowen Ratio					Surface Roughne
			2001-2005	2001	2002	2003	2004	2005	2001-2005	2001-2005	2001	2002	2003	2004	2005	2001-2005	2001-2005	2001	2002	2003	2004	2005	2001-2005
1	0	30	0.15	0.98	0.37	0.52	0.37	0.98	0.13	0.16	1.35	0.42	0.65	0.42	1.35	0.16	6%	37%	14%	25%	14%	37%	19%
2	30	60	0.15	0.98	0.37	0.52	0.37	0.98	0.13	0.16	1.35	0.42	0.65	0.42	1.35	0.37	6%	37%	14%	25%	14%	37%	193%
3	60	90	0.15	0.98	0.37	0.52	0.37	0.98	0.14	0.16	1.35	0.42	0.65	0.42	1.35	0.53	6%	37%	14%	25%	14%	37%	280%
4	90	120	0.15	0.98	0.37	0.52	0.37	0.98	0.11	0.16	1.35	0.42	0.65	0.42	1.35	0.51	6%	37%	14%	25%	14%	37%	380%
5	120	150	0.15	0.98	0.37	0.52	0.37	0.98	0.06	0.16	1.35	0.42	0.65	0.42	1.35	0.34	6%	37%	14%	25%	14%	37%	425%
6	150	180	0.15	0.98	0.37	0.52	0.37	0.98	0.20	0.16	1.35	0.42	0.65	0.42	1.35	0.21	6%	37%	14%	25%	14%	37%	6%
7	180	210	0.15	0.98	0.37	0.52	0.37	0.98	0.20	0.16	1.35	0.42	0.65	0.42	1.35	0.68	6%	37%	14%	25%	14%	37%	240%
8	210	240	0.15	0.98	0.37	0.52	0.37	0.98	0.16	0.16	1.35	0.42	0.65	0.42	1.35	0.83	6%	37%	14%	25%	14%	37%	417%
9	240	270	0.15	0.98	0.37	0.52	0.37	0.98	0.19	0.16	1.35	0.42	0.65	0.42	1.35	0.34	6%	37%	14%	25%	14%	37%	74%
10	270	300	0.15	0.98	0.37	0.52	0.37	0.98	0.14	0.16	1.35	0.42	0.65	0.42	1.35	0.24	6%	37%	14%	25%	14%	37%	65%
11	300	330	0.15	0.98	0.37	0.52	0.37	0.98	0.11	0.16	1.35	0.42	0.65	0.42	1.35	0.16	6%	37%	14%	25%	14%	37%	53%
12	330	360	0.15	0.98	0.37	0.52	0.37	0.98	0.15	0.16	1.35	0.42	0.65	0.42	1.35	0.18	6%	37%	14%	25%	14%	37%	20%

Notes:

[1] Meteorological data processed with surface characteristics around the meteorological station.

[2] Meteorological data processed with surface characteristics around the facility.

[3] Relative differences were calculated as (Facility-Met Station)/Met Station.

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
Main1	1	8.9	4	8.9	363996	3093766
					364007	3093728
					363983	3093721
					363972	3093759
Main2	1	8.9	4	8.9	364019	3093759
					364026	3093734
					364007	3093728
					363999	3093753
Main3	1	8.9	4	8.9	364036	3093788
					364058	3093717
					364034	3093709
					364012	3093780
Main4	1	8.9	10	17.0	364104	3093803
					364099	3093822
					364063	3093811
					364067	3093797
					364037	3093788
					364060	3093710
					364071	3093714
					364074	3093706
					364125	3093722
					364100	3093801
Main5	1	8.9	6	16.2	364154	3093818
					364160	3093797
					364155	3093795
					364175	3093731
					364126	3093716
					364100	3093801
Main6	1	10.4	6	13.2	364166	3093799
					364154	3093795
					364173	3093737
					364179	3093739
					364177	3093745
					364182	3093747
Main7	1	10.4	6	15.2	364204	3093834
					364193	3093830
					364199	3093809
					364165	3093799
					364185	3093734
					364231	3093748
Main8	1	10.4	4	7.6	364263	3093852
					364291	3093761
					364232	3093742
					364204	3093833

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
Main9	1	10.4	4	7.6	364292	3093861
					364307	3093811
					364277	3093802
					364262	3093852
Flat1	1	8.9	4	8.5	364059	3093717
					364061	3093710
					364046	3093706
					364044	3093712
Flat2	1	8.9	4	6.1	364071	3093714
					364073	3093708
					364067	3093706
					364065	3093712
Flat3	1	8.9	4	6.1	364103	3093823
					364109	3093804
					364104	3093802
					364098	3093822
E17-00	1	9.1	24	19.2	364226	3093743
					364227	3093743
					364228	3093742
					364229	3093741
					364230	3093740
					364231	3093739
					364231	3093738
					364231	3093737
					364230	3093736
					364229	3093735
					364228	3093734
					364227	3093733
					364226	3093733
					364225	3093733
					364223	3093734
					364222	3093735
					364222	3093736
					364221	3093737
					364221	3093738
					364221	3093739
					364222	3093740
					364222	3093741
					364223	3093742
					364225	3093743
E16-00	1	9.1	24	19.2	364216	3093740
					364218	3093740
					364219	3093739
					364220	3093739

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
					364221	3093738
					364221	3093736
					364221	3093735
					364221	3093734
					364221	3093733
					364220	3093732
					364219	3093731
					364218	3093730
					364216	3093730
					364215	3093730
					364214	3093731
					364213	3093732
					364212	3093733
					364212	3093734
					364211	3093735
					364212	3093736
					364212	3093738
					364213	3093739
					364214	3093739
					364215	3093740
E13-00	1	8.7	24	19.2	364186	3093824
					364187	3093824
					364188	3093823
					364189	3093822
					364190	3093821
					364191	3093820
					364191	3093819
					364191	3093818
					364190	3093817
					364189	3093816
					364188	3093815
					364187	3093814
					364186	3093814
					364185	3093814
					364184	3093815
					364183	3093816
					364182	3093817
					364181	3093818
					364181	3093819
					364181	3093820
					364182	3093821
					364183	3093822
					364184	3093823
					364185	3093824

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
E14-00	1	8.7	24	19.2	364192	3093826
					364193	3093826
					364194	3093825
					364195	3093824
					364196	3093823
					364197	3093822
					364197	3093821
					364197	3093820
					364196	3093818
					364195	3093817
					364194	3093817
					364193	3093816
					364192	3093816
					364191	3093816
					364190	3093817
					364189	3093817
					364188	3093818
					364187	3093820
					364187	3093821
					364187	3093822
					364188	3093823
					364189	3093824
					364190	3093825
					364191	3093826
E15-00	1	8.6	24	9.1	364195	3093837
					364196	3093837
					364197	3093836
					364198	3093836
					364198	3093835
					364198	3093834
					364199	3093833
					364198	3093832
					364198	3093831
					364198	3093830
					364197	3093830
					364196	3093830
					364195	3093829
					364194	3093830
					364193	3093830
					364192	3093830
					364192	3093831
					364191	3093832
					364191	3093833
					364191	3093834

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
					364192	3093835
					364192	3093836
					364193	3093836
					364194	3093837
E9-00	1	9.1	24	19.8	364181	3093745
					364182	3093745
					364183	3093745
					364183	3093744
					364184	3093744
					364184	3093743
					364185	3093742
					364184	3093741
					364184	3093740
					364183	3093739
					364183	3093739
					364182	3093738
					364181	3093738
					364180	3093738
					364179	3093739
					364178	3093739
					364178	3093740
					364177	3093741
					364177	3093742
					364177	3093743
					364178	3093744
					364178	3093744
					364179	3093745
					364180	3093745
E10-00	1	9.1	24	19.8	364183	3093740
					364184	3093739
					364184	3093739
					364185	3093738
					364186	3093738
					364186	3093737
					364186	3093736
					364186	3093735
					364186	3093734
					364185	3093733
					364184	3093733
					364184	3093732
					364183	3093732
					364182	3093732
					364181	3093733
					364180	3093733

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
					364179	3093734
					364179	3093735
					364179	3093736
					364179	3093737
					364179	3093738
					364180	3093738
					364181	3093739
					364182	3093739
praxair	1	8.5	4	8.2	364283	3093885
					364282	3093870
					364255	3093870
					364255	3093886
propane	1	8.1	6	4.6	364036	3093870
					364036	3093888
					364027	3093888
					364027	3093854
					364032	3093854
					364032	3093870
STMWATER	1	8.0	4	2.0	364017	3093884
					364017	3093853
					363947	3093853
					363948	3093885
BLD9	1	8.1	30	6.1	364045	3093938
					364062	3093938
					364062	3093936
					364087	3093935
					364087	3093930
					364097	3093930
					364097	3093925
					364099	3093925
					364099	3093922
					364122	3093921
					364122	3093919
					364128	3093919
					364128	3093916
					364131	3093916
					364131	3093913
					364129	3093912
					364129	3093909
					364122	3093909
					364122	3093902
					364118	3093902
					364118	3093900
					364112	3093900

Table 5-11
Summary of Modeled Building Parameters
EnviroFocus Technologies, LLC
Tampa, Florida

Building ID	Number of Tiers	Elevation (meters)	Number of Corners	Height (meters)	UTMx (meters)	UTMy (meters)
					364112	3093898
					364100	3093898
					364100	3093897
					364044	3093898
					364044	3093903
					364040	3093903
					364040	3093921
					364044	3093921

Table 5-12
Results of Significant Impact Area Modeling
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Averaging Period	PSD Significant Impact Levels	Radius of Significant Impact Area (km)	
			Facility Land Use[2]	Met Station Land Use[3]
Particulate Matter (PM_{10})	24-hour	5 $\mu g/m^3$	1.2	1.3
	Annual	1 $\mu g/m^3$	0.8	0.8
Nitrogen Dioxide (NO_2)	Annual	1 $\mu g/m^3$	1.1	1.2
Lead (Pb)	Calendar quarter	0.03 $\mu g/m^3$	2.4	2.7

Notes:

[1] Standard attainment status based on USEPA websites (www.epa.gov/air/oaqps/greenbk/index.html).

[2] Meteorological data processed with surface characteristics around the facility.

[3] Meteorological data processed with surface characteristics around the meteorological station.

TABLE 5-13
Summary of Background Concentrations
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Value	Units	Monitor ID	Averaging Period
PM_{10}	76	$\mu g/m^3$	120570095[a]	24-hour
	27	$\mu g/m^3$	120570095[a]	annual
NO_2	13.2	$\mu g/m^3$	120573002[b]	annual
Lead	0.01	$\mu g/m^3$	120571075[c]	quarterly
	0.47	$\mu g/m^3$	120571073[a]	quarterly

Notes:

[a] Highest monitored value during the period of 2001 to 2005.

[b] Highest monitored value during the period of 2004 to 2007, as the monitor was not in operation from 2001 to 2003.

[c] Highest monitored value during the period of 2001 to 2003, as the monitor stopped operation after 2004.

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
0490015	HARDEE POWER PARTNERS LIMITED	55	241	241	8093	0	NO	NO
0490041	CF INDUSTRIES, INC.	61	0	1.4			NO	NO
0490043	VANDOLAH POWER COMPANY, LLC	66	164	164	2016	0	NO	NO
0490340	SEMINOLE ELECTRIC COOPERATIVE, INC.	55	309	309	3550		NO	NO
0490343	OLDCASTLE LAWN AND GARDEN, INC.	56	0	1.2	37		NO	NO
0570001	JOHNSON CONTROLS BATTERY GROUP, INC	9.6	70	81	2.7	3.0	NO	NO
0570003	CF INDUSTRIES, INC.	4.7	0	8.4	9.2	0	NO	NO
0570005	CF INDUSTRIES, INC., PLANT CITY PHOS	33	0	549	159	0	NO	NO
0570006	YUENGLING BREWING CO.	9.6	0	3.2	0		NO	NO
0570008	MOSAIC FERTILIZER, LLC	11	113	335	437	0	YES	YES
0570013	CEMEX, INC.	15	0	5.0			NO	NO
0570014	EASTERN ASSOCIATED TERMINALS CO., LLC	6.3	0	95			NO	NO
0570016	CITGO PETROLEUM CORPORATION	7.4			20		NO	NO
0570018	FLORIDA ROCK INDUSTRIES, INC.	7.0	4	322	0	0	YES	NO
0570021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	6.2	0	147	89	0	YES	NO
0570024	KINDER MORGAN OLP "C"	6.9	2	193			YES	NO
0570025	TRADEMARK NITROGEN CORP	3.4	0	1463	68		YES	NO
0570028	NEW NGC, INC.	19	0	236	137	0	NO	NO
0570031	HOLCIM (US) INC.	8.0	8	43			NO	NO
0570032	CEMEX, INC.	4.3	0	18			NO	NO
0570033	CSX TRANSPORTATION, INC.	5.2	0	145			YES	NO
0570039	TAMPA ELECTRIC COMPANY	19	0	9204	80665	0	YES	YES
0570040	TAMPA ELECTRIC COMPANY	7.0	368	368	1416		YES	YES
0570041	FLORIDA HEALTH SCIENCES CTR, INC	8.2	0.6	1.2	15	0	NO	NO
0570047	FLORIDA ROCK INDUSTRIES INC	17	0	22			NO	NO
0570051	CF INDUSTRIES	6.4	0	13			NO	NO
0570052	FLORIDA ROCK INDUSTRIES	4.1	0	21			NO	NO
0570053	OLDCASTLE DBA PAVER SYSTEMS, LLC	9.9	0	0			NO	NO
0570055	CHEVRON U.S.A. INC.	20	0	0.1	5.8		NO	NO
0570056	GAF MATERIALS CORPORATION	6.9	0	130	0		NO	NO
0570057	ENVIROFOCUS TECHNOLOGIES, LLC	0.4	4	35	88	1.6	YES	YES
0570061	TAMPA ARMATURE WORKS	2.6	0.3	2.3	15	0	NO	NO
0570065	CEMEX CONSTRUCTION MATERIALS LP	17	0	63	0		NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
0570069	INDUSTRIAL GALVANIZERS AMERICA, INC.	4.4	0	51	0		NO	NO
0570077	VERLITE COMPANY	4.0	0	8.8	3.0	0	NO	NO
0570079	CEMEX	4.7	0	1.0			NO	NO
0570080	MARATHON PETROLEUM COMPANY LLC	5.1	0	0.6	7.6		NO	NO
0570081	TRANSMONTAIGNE PRODUCT SERVICES INC.	7.7			0		NO	NO
0570082	GULF SULPHUR SERVICES LTD., LLP	7.2	0	1.0	0		NO	NO
0570083	BP PRODUCTS NORTH AMERICA INC	6.6			0		NO	NO
0570085	CENTRAL FLORIDA PIPELINE	7.8			0		NO	NO
0570087	CORESLAB STRUCTURES(TAMPA),INC.	4.6	0	1.1	0		NO	NO
0570088	HALEY, JAMES A. VETERAN'S HOSPITAL TAMPA	11	0	0	0		NO	NO
0570089	ST. JOSEPH'S HOSPITAL	11	0.4	3.8	81	0.1	NO	NO
0570090	MASTER - HALCO, INC.	4.2	15	14	0		NO	NO
0570092	KINDER MORGAN PORT SUTTON TERMINAL, LLC	7.0	28	77			NO	NO
0570094	MOSAIC FERTILIZER, LLC	18	0	32			NO	NO
0570097	OLDCASTLE RETAIL, INC. D/B/A BONSAL AMER	4.3	0	30	6.6	0	NO	NO
0570100	GULF SULPHUR SERVICES LTD., LLP	7.6	0	6.0	0		NO	NO
0570103	CARGILL, INC. - GRAIN DIVISION	5.0	0	48			NO	NO
0570119	GULF COAST METALS, INC.	0.6	0	3.2	6.7		NO	NO
0570121	CEMEX	19	0	31			NO	NO
0570124	RINKER MATERIALS CORPORATION	29	0	1.0			NO	NO
0570127	CITY OF TAMPA	4.2	0	52	679	0.8	NO	YES
0570136	VERLITE CO	4.4	0	30	0		NO	NO
0570141	US AIR FORCE (MACDILL AFB)	16	1.5	3	11	0	NO	NO
0570150	CARMEUSE LIME & STONE, INC.	9.2	0	8			NO	NO
0570160	BALL METAL BEVERAGE CONTAINER CORP.	9.6	0	0.9	0	0	NO	NO
0570163	GRIFFIN INDUSTRIES	2.6	0	0.0	0		NO	NO
0570171	SPEEDLING, INC.	33	0	0.8	7.9	0	NO	NO
0570180	FECP/CAST CRETE DIVISION	9.5	0	6			NO	NO
0570185	PREFERRED MATERIALS, INC.	4.3	0	15			NO	NO
0570220	HYDRO CONDUIT DIVISION OF RINKER	27	0	14			NO	NO
0570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	4.3	2.1	17	67	0	NO	NO
0570224	HARSCO CORPORATION	8.6	0	54	7.8	0	NO	NO
0570226	BRENNTAG MID-SOUTH, INC.	4.0	2.1	2.1			NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
0570229	GENERAL CHEMICAL LLC	4.5	0	22			NO	NO
0570230	FLORIDA BRICK & CLAY CO	21	0	3.2			NO	NO
0570237	STANDARD CONCRETE	20	0	7.7			NO	NO
0570238	PREFERRED MATERIALS, INC., TAMPA KEYS	1.1	0	6.5			NO	NO
0570240	CEMEX	3.1	0	3.8			NO	NO
0570241	PREFERRED MATERIALS, INC., RIVERVIEW	9.5	0	3.0			NO	NO
0570247	CEMEX, INC.	9.9	0	0			NO	NO
0570249	GOLDEN ALUMINUM EXTRUSION - PLANT CITY,	22	0	13	39	0	NO	NO
0570251	CONAGRA FOODS, INC.	7.2	0	95			NO	NO
0570254	VERTIS, INC.	16	0	0	0	0	NO	NO
0570255	LEHIGH CEMENT COMPANY	7.8	0	3.8			NO	NO
0570259	CEMEX	4.8	0	4.0			NO	NO
0570260	TIN, INC. D/B/A TEMPLE-INLAND	3.8	0	5.7			NO	NO
0570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	5.4	0	169	768	0.9	NO [b]	YES
0570262	CHROMALLOY CASTINGS TAMPA, CORPORATION	16	0	81	0	0	NO	NO
0570276	TARMAC AMERICA LLC	18	0	7.0			NO	NO
0570279	FLORIDA ROCK INDUSTRIES, INC.	9.0	0	22			NO	NO
0570280	CEMEX	3.2	0	2.0			NO	NO
0570281	TARMAC AMERICA LLC	28	0	3.9			NO	NO
0570286	TAMPA BAY SHIPBUILDING & REPAIR COMPANY	7.8	0	158	188	0	YES	YES
0570289	MEDIA GENERAL OPERATIONS, INC.	8.1	0	2.6			NO	NO
0570290	E.A. MARIANI ASPHALT CO.	6.2	0	3.9	0		NO	NO
0570293	CORY PACKAGING, INC DBA MASTER PACKAGING	12		0	0	0	NO	NO
0570296	US FILTER RECOVERY SERVICES, INC.	25	0	2.2	22	0	NO	NO
0570297	DAVIS CONCRETE INC.	17	0	8.8			NO	NO
0570298	TAMPA BULK SERVICES INC.	20	0	45			NO	NO
0570299	MASONITE CORPORATION	2.4	0	67			YES	NO
0570318	CEMEX, INC.	26	0	0.8			NO	NO
0570320	DART CONTAINER CORPORATION OF FLORIDA	21	0	1.4	24	0	NO	NO
0570321	MANTUA MANUFACTURING CO.	1.5	0	0.9	13		NO	NO
0570324	TAMPA STEEL ERECTING COMPANY	5.1	0	30	0	0	NO	NO
0570340	HERITAGE PLASTICS SOUTH	15	0	7.7			NO	NO
0570342	ZIPPERER`S AGAPE MORTUARY SERVICE	29	0	0	0		NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
0570344	TAMPA TANK, INC.	6.1	0	44			NO	NO
0570364	MANNA PRO CORPORATION	1.4	23	21			NO	NO
0570370	PARADISE, INC.	25	0	0.2	3		NO	NO
0570373	CITY OF TAMPA-WASTEWATER DEPT.	4.4	5.5	63	91	0	NO	YES
0570374	SOUTHERN GROUTS & MORTARS	22	0	5.1			NO	NO
0570377	KINDER MORGAN BULK TERMINAL, INC	7.8	0	98			NO	NO
0570388	WARREN EQUPMENT, INC.	29	0	1.6			NO	NO
0570401	FLORIDA MEGA-MIX, INC.	0.6	0	7.7			NO	NO
0570405	WINGFOOT COMMERCIAL TIRE SYSTEMS, LLC	2.4	0	10			NO	NO
0570412	VULCAN/ICA COMPANY	8.6	0	0	0		NO	NO
0570415	NEBRASKA PRINTING COMPANY INC.	13	0	0	0		NO	NO
0570431	FLORIDA MORTUARY	6.0	0	0	0		NO	NO
0570437	NEWSPAPER PRINTING COMPANY, INC.	16	0	0	0		NO	NO
0570438	FLORIDA GAS TRANSMISSION COMPANY	31	0	2.3	46		NO	NO
0570442	GULF MARINE REPAIR CORPORATION	4.3	0	103	127	0	YES	YES
0570446	TRADEMARK METALS RECYCLING, LLC	7.7	0	681			YES	NO
0570455	PASCO TERMINALS, INC.	8.5	0	4.8	3.7	0	NO	NO
0570459	BAUSCH & LOMB INCORPORATED	12	0	0.6	18	0	NO	NO
0570460	JAMES HARDIE BUILDING PRODUCTS, INC.	23	0	33	62	0	NO	NO
0570461	BLACKLIDGE EMULSIONS INCORPORATED	4.6	0	4.2	4.1		NO	NO
0570466	TRANSFLO TERMINAL SERVICES, INC. (TTSI)	4.1	0	15			NO	NO
0570474	T-R DRUM & FREIGHT CO.	32	1.0	3.4	0.2		NO	NO
0570477	MARTIN GAS SALES, INC.	8.7	2.3	2.6			NO	NO
0570480	UNIVERSITY OF SOUTH FLORIDA (USF)	11	0	0	0	0	NO	NO
0570854	HILLSBOROUGH COUNTY SOLID WASTE MGT DEPT	29	0	0	0		NO	NO
0571016	CUSTOM FABRICATION, INC.	29	0	5.5			NO	NO
0571021	DUNCO ROCK & GRAVEL INC	23	4.6	4.6			NO	NO
0571029	WEYERHAEUSER COMPANY	27	0	3.5	4.6		NO	NO
0571130	BRANDON REGIONAL MEDICAL CENTER	11	0	0	0		NO	NO
0571147	SMITHFIELD PACKING COMPANY, INC.	26	0	4.2	60		NO	NO
0571151	WEYERHAEUSER COMPANY	4.6	0	9.3	13	0	NO	NO
0571160	EXPORT METALS, LLC	7.8		0			NO	NO
0571173	FLORIDA CEMETERIES	11		0			NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
0571205	STOROPACK, INC.	1.0	0	0	0		NO	NO
0571209	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	7.2	0	38	0		NO	NO
0571214	MARTIN MARIETTA MATERIALS, INC.	8.5		81			NO	NO
0571217	SEA 3 OF FLORIDA, INC.	7.8	0	5.0	51		NO	NO
0571227	MASONITE CORPORATION	2.5	0	0			NO	NO
0571240	CARGILL INC.- SALT DIVISION	5.6	0	64	0		NO	NO
0571242	NEW NGC, INC., D/B/A NATIONAL GYPSUM COM	18	0	88	96	0	NO	NO
0571255	HYNICK TRUCKING INC.	0.9	0	0			NO	NO
0571258	HANSON PIPE & PRECAST, INC.	17	0	4.5			NO	NO
0571263	COMMERCIAL CONCRETE PRODUCTS, INC.	32	3.6	3.6			NO	NO
0571268	QWEST COMMUNICATIONS INTERNATIONAL INC.	3.7	0	0	0	0	NO	NO
0571269	H. LEE MOFFITT CANCER CENTER	12	0	0	0	0	NO	NO
0571274	MARIGOLD LAND COMPANY	7.3	0	91			NO	NO
0571279	FLORIDA GAS TRANSMISSION COMPANY	12	0	3.5	50		NO	NO
0571286	AMC INDUSTRIES	8.3	0	23			NO	NO
0571289	TRADEMARK METALS RECYCLING LLC	7.5		0			NO	NO
0571290	TARMAC AMERICA, LLC (TITAN AMERICA BUS.)	7.3	53	55	500	0	NO	YES
0571294	KUEI TYAN LLC/PREMIUM PROCESSORS, INC.	5.1		3.0			NO	NO
0571298	MODTECH HOLDINGS, INC.	23		5.7			NO	NO
0571301	L.V. THOMPSON, INC. (TAMCO)	3.0	0	0	0		NO	NO
0571303	TARMAC	25	0	0			NO	NO
0571307	CEMEX CONSTRUCTION MATERIAL L.P.	7.8	0	99	23	0	NO	NO
0571312	HENDRY CORPORATION	6.7	0	5.1	0		NO	NO
0571314	GAETANO CACCIATORE, INC.	7.6	0	57			NO	NO
0571316	FLORIDA ENVIRONMENTAL RESOURCES CORP	3.3	0	20	80		NO	YES
0571317	FLORIDA BLOCK & READY MIX LAND CO. LLC	5.4	0	0			NO	NO
0571320	HILLSBOROUGH COUNTY WATER DEPARTMENT	25		18	18		NO	NO
0571321	PORT SUTTON ENVIROFUELS, LLC	7.1	68	68	98	0	NO	NO
0571323	FARKAS LAND CLEARING & DEVELOPMENT	21	0	44	67		NO	NO
0571325	GARDEN OF MEMORIES, INC.	10		0			NO	NO
0571326	SEPARATION TECHNOLOGIES, LLC	19		15	52		NO	NO
0571328	MISENER MARINE CONSTRUCTION, INC.	18	0	24	0		NO	NO
0571334	RINKER MATERIALS	27		0			NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
0571337	TAMPA PAVEMENT CONSTRUCTORS, INC	3.8		52			NO	NO
0571339	TRINITY MATERIALS, LLC	7.2	0	240	115	0	YES	NO
0571341	YBOR FUNERAL AND CREAMTION CENTER	3.4		3.7			NO	NO
0571342	BLACKLIDGE EMULSIONS, INC.	6.5	0	1.0	0		NO	NO
0571347	DOUBLE BRANCH LUMBER COMPANY	26	0	19			NO	NO
0571348	D.H. GRIFFIN WRECKING CO., INC.	52	0	0	0		NO	NO
0571349	GEORGE BERNICO/PALLET SERVICES, INC	21	0	14	21		NO	NO
0810001	COASTAL TERMINALS LLC	40	7.1	7.1	40	0	NO	NO
0810004	KINDER MORGAN PORT MANATEE TERMINAL, LLC	40	0	12			NO	NO
0810010	FLORIDA POWER & LIGHT (PMT)	40	228	15383	24588	0	YES	YES
0810011	FLORIDA CEMENT (FL ROCK INDUSTRIES, INC)	40	5.0	77		0	NO	NO
0810024	FLORIDA POWER & LIGHT COMPANY	40	4.3	5.1	28	0	NO	NO
0810045	MANATEE COUNTY GOVERNMENT - ANIMAL SERV	51		0.6	2.9		NO	NO
0810053	EASTERN CEMENT CORP	40	11	11			NO	NO
0810059	TARMAC AMERICA LLC	50	0	1.0			NO	NO
0810063	AJAX PAVING INDUSTRIES, INC.	41	0	17	0	0	NO	NO
0810067	ATLAS-TRANSOIL INTERNATIONAL, INC.	39	0	21	0		NO	NO
0810089	KINDER MORGAN BULK TERMINALS, INC.	40	0	4.5			NO	NO
0810183	ILLINOIS TOOL WORKS	42	0	2.3			NO	NO
0810213	UNITED STATES ENVIROFUELS, LLC	40	0	0	0	0	NO	NO
0810215	GULFSTREAM NATURAL GAS SYSTEM LLC	40	7.3	0	73		NO	NO
1010002	VITALITY FOODSERVICE INC	49	50	50	1.2		NO	NO
1010005	FLORIDA ROCK INDUSTRIES, INC.	53	0	0			NO	NO
1010017	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	47	0.9	8894	0	0	YES	NO
1010018	CEMEX CONSTRUCTION MATERIALS, L.P.	43	0	0.2			NO	NO
1010027	AJAX PAVING INDUSTRIES, INC.	33	0	20	0		NO	NO
1010035	CEMEX, INC.	41	0	0.3			NO	NO
1010036	CEMEX CONSTRUCTION MATERIALS, L.P.	41	0	0.3			NO	NO
1010038	B.E.T.-ER MIX, INC.	54	0	0.3			NO	NO
1010041	APAC- SOUTHEAST, INC., CENTRAL FL. DIV	35	0	15	0		NO	NO
1010042	SCI FUNERAL SERVICES OF FLORIDA INC	52	0	1.7	5.2		NO	NO
1010045	HODGES FAMILY FUNERAL HOME.	45		0.3	4.4		NO	NO
1010056	PASCO COUNTY	48	0	214	2015	1.9	NO	YES

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT	Screening Total PM_{10} Emissions [a]	Screening Total PM Emissions [a]	Screening Total NOx Emissions [a]	Screening Total Pb Emissions [a]	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
		(km)	(tpy)	(tpy)	(tpy)	(tpy)		
1010071	PASCO COGEN LIMITED	49	0	22	405	0	NO	NO
1010075	OLDCASTLE COASTAL CONCRETE PRODUCTS	35	0	0.3			NO	NO
1010076	CENTRAL STATE AGGREGATES LLC	36	1	6.0			NO	NO
1010326	PREFERRED MATERIALS INC	33	0	0.1			NO	NO
1010327	COASTAL LANDFILL DISPOSAL OF FL, LLC	54	0	49	0		NO	NO
1010335	PALL AEROPOWER CORP	43	0	0			NO	NO
1010349	THOMAS B. DOBIES FUNERAL HOME, INC.	50	0	0.2	0		NO	NO
1010360	M K G CARE INC	42	0	0.2	0		NO	NO
1010365	TRINITY MEMORIAL CEMETARY INC	34	0	1.4	0		NO	NO
1010373	SHADY HILLS POWER COMPANY, L.L.C.	48	123	123	1512	0	NO	NO [b]
1010378	PAW MATERIALS, INC.	32	0	41	45		NO	NO
1010492	HODGES FAMILY FUNERAL HOME INC./PET CREM	36	0	2.0	3.3		NO	NO
1010496	SURECRETE DESIGN PRODUCTS	50	0	0			NO	NO
1010498	VIKING POOLS, LLC	39	6.0	6.0			NO	NO
1030008	FLORIDA ROCK INDUSTRIES, INC.	39	0	21			NO	NO
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	23	603	4923	17842	0	YES	YES
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	28	0	373	5064	0	NO	YES
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	34	0	283	3838	0	NO	YES
1030017	CEMETERY MANAGEMENT, INC	34	0	1.4	4.6		NO	NO
1030018	PINELLAS COUNTY ANIMAL SERVICES	43	0	0.1	3.1		NO	NO
1030019	HONEYWELL INTERNATIONAL	35	0	0			NO	NO
1030020	SPCA TAMPA BAY	39	0	2.5	0.2		NO	NO
1030026	R.E. PURCELL CONSTRUCTION CO., INC.	38	0.4	21	39		NO	NO
1030032	CEMEX, INC.	36	0	33			NO	NO
1030035	DIRECTORS SERVICES INC	33	0	3.3	1.1		NO	NO
1030036	CEMEX CONSTRUCTION MATERIALS LP	38	0	33			NO	NO
1030037	CEMEX CONSTRUCTION MATERIALS, L.P.	28	0	0.9	0		NO	NO
1030044	SUNCOAST PAVING, INC.	45	13	13	27	0	NO	NO
1030045	CEMEX CONSTRUCTION MATERIALS, L.P.	39	0	13	0		NO	NO
1030047	SCI FUNERAL SERVICES OF FLORIDA INC	35		0.7	9.1		NO	NO
1030060	CITY OF LARGO - WWTP	32	0	49	6.2	0	NO	NO
1030063	FLORIDA ROCK INDUSTRIES, INC.	44	0	0.5			NO	NO
1030077	TIMES PUBLISHING CO.	35	3.5	7.6			NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
1030078	FLORIDA ROCK INDUSTRIES, INC.	30	0	0.9	0		NO	NO
1030085	FLORIDA ROCK INDUSTRIES, INC.	37	0	36			NO	NO
1030088	HERCULES OF FLORIDA, INC.	37	0	0			NO	NO
1030091	MORTON PLANT MEASE HEALTH CARE	41	2.1	2.1	80		NO	NO
1030095	BAYFRONT-ST. ANTHONY'S HEALTH CARE	34	2.8	1.3	18	0	NO	NO
1030096	CURLEW HILLS MEMORY GARDENS INC	38		0.1			NO	NO
1030107	CITY OF ST. PETERSBURG	34	0	0.4			NO	NO
1030112	CATALENT PHARMA SOLUTIONS, LLC	30	0	0	0		NO	NO
1030113	DAVIS CONCRETE, INC.	40	0	0.3	0		NO	NO
1030114	MI METALS, INC./METAL INDUSTRIES, INC.	29	0	18	8.3		NO	NO
1030117	PINELLAS CO. BOARD OF CO. COMMISSIONERS	30	189	337	2801	3.0	NO	YES
1030118	SCHNELLER LLC	33	0		0		NO	NO
1030119	FILM TECHNOLOGIES INT, INC	36	0	0	0		NO	NO
1030124	HETRO CORPORATION	32	0	0			NO	NO
1030127	METAL CULVERTS, INC.	35	0.1	0.1	1.3		NO	NO
1030129	PINELLAS MEMORIAL PET CEMETERY	36	0	1.3	0.9		NO	NO
1030131	E JAMES REESE FUNERAL HOME	42	0	0	0		NO	NO
1030132	ONESOURCE COIL COATERS, LLC.	32	0	3.5	9.2		NO	NO
1030136	PET ANGEL WORLD SERVICES (FLORIDA) LLC	36		0.7	2.9		NO	NO
1030139	PREFERRED MATERIALS INC	31	0	0			NO	NO
1030147	SONNY GLASBRENNER, INC.	31	3.2	47	43		NO	NO
1030153	HOWCO ENVIRONMENTAL SERVICES, INC.	38	0	0	0	0	NO	NO
1030165	JACOBSEN MANUFACTURING, INC.	31	0	0	0		NO	NO
1030166	IRWIN YACHT & MARINE CORP.	32	0	0	0		NO	NO
1030172	WATKINS YACHT, INC.	32	0	0	0		NO	NO
1030175	GAGNE WALLCOVERINGS	36	0	0	0		NO	NO
1030180	INTERPRINT, INC.	30	0		0	0	NO	NO
1030183	PATRICK MEDIA GROUP, INC.	33	0	0			NO	NO
1030209	TRANSITIONS OPTICAL, INC.	37	0	5.8			NO	NO
1030214	LIFE-LIKE ACQUISITIONS, INC.	40	0.8		8.6		NO	NO
1030216	CARPENTER TECHNOLOGY CORPORATION	32	15	15			NO	NO
1030217	ETERNAL REST FUNERAL/SUNCOAST CREM, INC.	37	0	2.0	1.7		NO	NO
1030218	M C GRAPHICS, INC., DBA, SANDY ALEXANDER	29	0	0	0		NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
1030223	CATALINA YACHTS, MORGAN DIVISION	37	0	6.1			NO	NO
1030227	CITY OF CLEARWATER	32	0	0	0		NO	NO
1030228	CITY OF CLEARWATER	40	0	0	0		NO	NO
1030229	CITY OF CLEARWATER	33	0	0	0		NO	NO
1030230	CITY OF DUNEDIN	38	0	0	0		NO	NO
1030231	CITY OF LARGO	32	0	0	0		NO	NO
1030232	PINELLAS COUNTY GOVERNMENT	46	0	0	0		NO	NO
1030233	PINELLAS COUNTY GOVERNMENT	42	0	0	0		NO	NO
1030234	PINELLAS COUNTY GOVERNMENT	39	0	23	6.4	0	NO	NO
1030235	CITY OF ST. PETERSBURG	33	0	0	0		NO	NO
1030236	CITY OF ST. PETERSBURG	28	0	0	0		NO	NO
1030237	CITY OF ST. PETERSBURG	40	0	0	0		NO	NO
1030238	CITY OF ST. PETERSBURG	41	0	0	0		NO	NO
1030239	KARDOL INC.	34	0	0			NO	NO
1030240	COX TARGET MEDIA, INC.	38	0	0	0		NO	NO
1030248	NEW YORK DRY CLEANERS & TAILORS	42	0	0	0		NO	NO
1030250	NTU ELECTRONICS, INC.	37				0.06	NO	NO
1030280	HOME BUILDING MATERIALS, INC.	34	0	0			NO	NO
1030282	ANDERSON-MCQUEEN COMPANY	40	0	2.5	2.3		NO	NO
1030288	BAY LINEN, INC.	32	0	0.6	14		NO	NO
1030443	LORAD CHEMICAL CORPORATION	34			2.4		NO	NO
1030473	LIGHTHOUSE FUNERAL SERVICES, LLC	31		3.0	2.2		NO	NO
1030480	DUCKWORTH STEEL BOATS, INC.	43	0				NO	NO
1030488	AAA PRINTING INC	36			0		NO	NO
1030501	ITW FIBRE GLASS-EVERCOAT	34	49	85			NO	NO
1030509	COX TARGET MEDIA, INC	30			9.8		NO	NO
1030510	MARSHFIELD DOORSYSTEMS, INC.	36	0	3.0			NO	NO
1030512	VETERANS FUNERAL CARE	32		2.2	0.7		NO	NO
1030516	RICHARD E. SORENSEN FUNERAL HOME INC.	33		1.9	1.9		NO	NO
1030518	LANTMANNEN UNIBAKE USA, INC.	35		0			NO	NO
1030527	GULFSTREAM NATURAL GAS, L.L.C.	24	0	0	0		NO	NO
1050003	LAKELAND ELECTRIC	46	510	1022	4069	0	NO [b]	YES
1050004	LAKELAND ELECTRIC	47	2779	5810	28375	0	YES	YES

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
1050015	US BEVERAGE PACKING LAKELAND PLANT	36	0	1.1	21	0	NO	NO
1050021	ASHLAND INC.	48	0.6	0.6	4.8		NO	NO
1050034	MOSAIC FERTILIZER LLC	39	0	0.9	0	0	NO	NO
1050046	MOSAIC FERTILIZER, LLC	46	272	377	276	0	NO	NO
1050047	AGRIFOS MINING, L.L.C.	35	0	557	311		NO	NO
1050053	MOSAIC FERTILIZER, LLC	47	99	461	143		NO	NO
1050055	MOSAIC FERTILIZER LLC	48	0.3	770	209	0	NO	NO
1050059	MOSAIC FERTILIZER LLC	36	107	1224	550		YES	NO
1050066	K.C. INDUSTRIES, L.L.C. (PREV KAISER)	38	0	16			NO	NO
1050073	RINKER MATERIALS OF FLORIDA INC	48	0	38			NO	NO
1050081	THE QUIKRETE COMPANIES, INC.	48	0.3	11	0		NO	NO
1050095	LAKELAND REGIONAL MEDICAL CENTER	44	0	2.0	27	0	NO	NO
1050097	ARRMAZ CUSTOM CHEMICALS	45	0	1.9	1.6	0	NO	NO
1050099	AOC, L.L.C.	40	36	38	46		NO	NO
1050100	HEXION SPECIALTY CHEMICALS, INCORPORATED	47	0	0.9	17	0	NO	NO
1050114	CEMEX CONSTRUCTION MATERIALS, L.P.	35	0	0.4			NO	NO
1050125	CHEMICAL LIME CO. OF ALABAMA, INC.	35	4.8	94	22		NO	NO
1050127	JUICE BOWL PRODUCTS	46	0	0.8	109		NO	NO
1050134	HEATH FUNERAL CHAPEL, INC.	45	0	0.1	0.6		NO	NO
1050139	SCHWARZ PARTNERS	38	0	12	0		NO	NO
1050143	CITY OF LAKELAND	41	0	3.0			NO	NO
1050148	FLANDERS ELECTRIC MOTOR SERVICE, INC	47	0	0.3	1.3		NO	NO
1050151	CENTRAL FLORIDA HOT MIX, A DIV. OF LANE	49	7.9	21	27		NO	NO
1050157	PURINA MILLS, LLC.	38	28	41			NO	NO
1050169	METALCOAT INC OF FLORIDA	41	0	0.3	2.5	0	NO	NO
1050174	PEPPERIDGE FARM, INC	41	0	1.0	35		NO	NO
1050177	PUBLIX SUPER MARKETS	37	0	6.9			NO	NO
1050192	CARPENTER CO., INSULATION DIVISION	33	0	0	0		NO	NO
1050197	CEMEX CONSTRUCTION MATERIALS, L.P.	39	0	0			NO	NO
1050210	AMERICOAT CORPORATION	47			0		NO	NO
1050215	WOOD MULCH PRODUCTS, INC.	50	0	23	26		NO	NO
1050217	POLK POWER PARTNERS, L.P.	51	0	0	880		NO	NO
1050226	POP'S PAINTING, INC.	35	0	1.3			NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT	Screening Total PM_{10} Emissions [a]	Screening Total PM Emissions [a]	Screening Total NOx Emissions [a]	Screening Total Pb Emissions [a]	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
		(km)	(tpy)	(tpy)	(tpy)	(tpy)		
1050227	CENTRAL FLORIDA CREMATORY OF POLK CO.	44	0	1.7	0		NO	NO
1050230	KEY AUTOMOTIVE OF FLORIDA, INC.	34	0	19			NO	NO
1050233	TAMPA ELECTRIC COMPANY	47	307	325	3487	0.2	NO	YES
1050254	CTL DISTRIBUTION, INC.	45	0	11			NO	NO
1050283	HENRY COMPANY	49	0	9.5			NO	NO
1050294	CITY OF LAKELAND	47		0			NO	NO
1050312	MASTER CONTAINERS, INC.	41	0	1.5	16	0	NO	NO
1050314	SUPERMAG, LLC	48	0.1	0.6			NO	NO
1050316	MCGEE TIRE STORES, INC.	50	0	9.3			NO	NO
1050319	CLARK ENVIRONMENTAL INC	39	0	30	99		NO	NO
1050320	KEYMARK CORP OF FLORIDA	40		1.7	17		NO	NO
1050324	WASTEQUIP MANUFACTURING CO	47	0	0			NO	NO
1050325	SOUTHERN BAKERIES, INC.	41		81	0		NO	NO
1050330	FORT MEADE FOREST PRODUCTS	47	10	21	9.7		NO	NO
1050341	TURNER COATINGS INC.	39	20	21	11		NO	NO
1050352	LAKELAND ELECTRIC	37	340		750		NO	NO [b]
1050354	LEW HALL AND ASSOCIATES	43		0.5	1.2		NO	NO
1050364	RUBBER APPLICATIONS	38	0	1.0			NO	NO
1050365	LAKELAND ANIMAL NUTRITION INC.	47	0	4.3			NO	NO
1050369	MORGAN TRUCK BODY, LLC	50		0.1	1.7		NO	NO
1050375	FIBERTEK INSULATION LLC	41	0	80	0		NO	NO
1050390	CONRAD YELVINGTON DISTRIBUTORS, INC.	45	7.0	7.0			NO	NO
1050393	KINDER MORGAN OPERATING LP "C"	46	22	45			NO	NO
1050394	LASTING PAWS PET CREMATION, INC.	40	0	0.6	2.5		NO	NO
1050395	TBEI, INC.	35	0	0	0		NO	NO
1050400	THE LANE CONSTRUCTION CORPORATION	41	10	33	17		NO	NO
7770073	APAC-SOUTHEAST INC., CENTRAL FL DIVISION	31	4.5	18	26		NO	NO
7770262	ANGELO'S AGGREGATE MATERIALS	39	0	8.0			NO	NO
7770473	CONRAD YELVINGTON DISTRIBUTORS	3.8	0	81			YES	NO
7771101	WOODRUFF & SONS, INC.	1.1	5.1	13	5.7		NO	NO
7774801	FLORIDA SOIL CEMENT, LLC	37	0	0			NO	NO
7774804	CENTRAL FLORIDA HOT MIX, A DIV OF LANE C	49	6.1	26	15		NO	NO
7775019	INDEPENDENCE RECYCLING INC	50	0	0			NO	NO

Table 5-14
Summary of Facilities Within 50 km of Significant Impact Area
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Distance from EFT (km)	Screening Total PM_{10} Emissions [a] (tpy)	Screening Total PM Emissions [a] (tpy)	Screening Total NOx Emissions [a] (tpy)	Screening Total Pb Emissions [a] (tpy)	Within 50 km of PM_{10} SIA and PM_{10} or PM Emissions over 20D?	Within 50 km of NO_X SIA and NOx Emissions over 20D ?
7775055	WOODRUFF & SONS, INC.	43	7.3	7.3	3.9		NO	NO
7775089	WOODRUFF & SONS, INC.	41	0.6	7.6	0	0	NO	NO
7775092	ANGELO'S RECYCLED MATERIALS, INC.	15		0			NO	NO
7775159	WOODRUFF & SONS, INC.	0.7	7.0	7.0			NO	NO
7775202	THE LANE CONSTRUCTION CORPORATION	43	1.3	3.7	0		NO	NO
7775209	HAYWARD BAKER, INC.	45	0	1.3			NO	NO
7775229	CRUSH-IT, INC.	3.8	0	0	0		NO	NO
7775350	THE LANE CONSTRUCTION CORPORATION	42	0	0	0		NO	NO
7775375	SUMMERS CONCRETE CONTRACTING, INC	30	0	0			NO	NO
7775424	AJAX PAVING INDUSTRIES, INC.	8.3	0	0			NO	NO
7775493	PRINCE CONTRACTING COMPANY, INC	3.3	0	0			NO	NO

Note:
[a] Duplicate records are included.
[b] Once duplicate records are removed, the emissions fall below 20D.

Table 5-15
Summary of Lead AAQS Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
0570127	CITY OF TAMPA	1_103	360200	3092210	0.91	5.67E-03	61	430	22	1.28
		1_104	360200	3092210	0.91	5.67E-03	61	430	22	1.28
		1_105	360200	3092210	0.91	5.67E-03	61	430	22	1.28
		1_106	360200	3092210	0.91	5.67E-03	61	430	22	1.28
0570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	2_1	369380	3092690	16	8.19E-03	67	416	22	1.55
		2_2	369380	3092690	16	8.19E-03	67	416	22	1.55
		2_3	369380	3092690	16	8.19E-03	67	416	22	1.55
1010056	PASCO COUNTY	3_1	347110	3139210	15	1.10E-02	84	394	25	1.43
		3_2	347110	3139210	15	1.10E-02	84	394	25	1.43
		3_3	347110	3139210	15	1.10E-02	84	394	25	1.43
1030117	PINELLAS CO. BOARD OF CO. COMMISSIONERS	4_1	335270	3084310	2.7	2.90E-02	50	405	22	2.59
		4_2	335270	3084310	2.7	2.90E-02	50	405	22	2.59
		4_3	335270	3084310	2.7	2.90E-02	50	405	22	2.59
1050003	LAKELAND ELECTRIC	5_8	409260	3103020	42	8.63E-04	47	523	26	4.88
1050233	TAMPA ELECTRIC COMPANY	6_1	402440	3067360	42	3.74E-03	46	444	23	5.79
0570001	JOHNSON CONTROLS BATTERY GROUP, INC	7_2	359900	3102500	14	6.55E-03	11	308	10	0.91
		7_5	359900	3102500	14	1.61E-03	11	350	42	0.24
		7_14	359900	3102500	14	6.04E-04	24	311	15	0.25
		7_15	359900	3102500	14	8.05E-04	21	311	12	0.30
		7_17	359900	3102500	14	2.65E-03	10	316	11	0.82
		7_18	359900	3102500	14	7.06E-03	10	305	6.1	1.22
		7_20	359900	3102500	14	1.00E-02	9.4	314	14	1.22
		7_22	359900	3102500	14	5.64E-03	12	311	11	0.82
		7_41	359900	3102500	14	5.04E-05	12	589	4.8	0.12
		7_42	359900	3102500	14	1.89E-03	21	380	18	0.40
		7_43	359900	3102500	14	7.56E-04	12	350	13	0.30
		7_33	359900	3102500	14	3.62E-03	9.1	316	14	0.61
		7_34	359900	3102500	14	6.76E-03	15	315	16	0.76
		7_35	359900	3102500	14	6.30E-04	11	311	14	0.41
		7_45	359900	3102500	14	3.00E-02	15	303	15	0.76
0570089	ST. JOSEPH'S HOSPITAL	8_2	353300	3095900	10	2.32E-03	24	478	13	0.58
0570249	GOLDEN ALUMINUM EXTRUSION - PLANT CITY,	9_11	385600	3097000	46	1.61E-06	24	308	15	1.01
		9_14	385600	3097000	46	2.70E-06	23	439	10	1.22
		9_15	385600	3097000	46	1.15E-06	6.7	422	10	0.76
0570460	JAMES HARDIE BUILDING PRODUCTS, INC.	10_4	387060	3089520	25	1.55E-06	9.1	519	15	0.61
1030095	BAYFRONT-ST. ANTHONY'S HEALTH CARE	11_2	338040	3072120	11	1.26E-03	10.7	333	41	0.61
1030250	NTU ELECTRONICS, INC.	12_1	328910	3083790	3.4	1.59E-03	7.9	300	13	0.81
0570001	JOHNSON CONTROLS BATTERY GROUP, INC	13_46[a]	NA	NA	NA	NA	NA	NA	NA	NA
		13_47[a]	NA	NA	NA	NA	NA	NA	NA	NA

Note:
[a] Not modeled due to incomplete source information.

Table 5-16
Summary of NO_2 AAQS Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
0570008	MOSAIC FERTILIZER, LLC	1_4	364590	3082380	0	2.01E+00	46	340	13	2.3
		1_43	364590	3082380	0	6.41E+00	6.1	489	16	1.2
		1_55	364590	3082380	0	2.52E+00	41	315	15	2.1
		1_78	364590	3082380	0	8.18E-01	38	339	20	1.8
		1_103	364590	3082380	0	8.18E-01	38	339	17	1.8
0570039	TAMPA ELECTRIC COMPANY	2_1	363150	3074910	2	3.76E+02	149	419	35	7.3
		2_2	363150	3074910	2	3.72E+02	149	325	27	7.3
		2_3	363150	3074910	2	3.63E+02	149	426	16	7.3
		2_4	363150	3074910	2	3.27E+02	149	326	18	7.3
		2_5	363150	3074910	2	5.63E+01	23	771	19	4.3
		2_6	363150	3074910	2	5.63E+01	23	771	19	4.3
		2_7	363150	3074910	2	1.61E+01	11	816	28	3.4
0570040	TAMPA ELECTRIC COMPANY	3_20	361100	3087500	0.87	2.91E+00	46	373	18	5.8
		3_21	361100	3087500	0.87	2.91E+00	460	373	18	5.8
		3_22	361100	3087500	0.87	2.91E+00	46	373	18	5.8
		3_23	361100	3087500	0.87	2.91E+00	46	266	0.15	65
		3_24	361100	3087500	0.87	2.91E+00	46	373	18	5.8
		3_25	361100	3087500	0.87	2.91E+00	46	373	18	5.8
		3_26	361100	3087500	0.87	2.91E+00	46	373	18	5.8
0570127	CITY OF TAMPA	4_103	360200	3092210	0.91	4.88E+00	61	430	22	1.3
		4_104	360200	3092210	0.91	4.88E+00	61	430	22	1.3
		4_105	360200	3092210	0.91	4.88E+00	61	430	22	1.3
		4_106	360200	3092210	0.91	4.88E+00	61	430	22	1.3
0570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	5_1	369380	3092690	16	7.36E+00	67	416	22	1.6
		5_2	369380	3092690	16	7.36E+00	67	416	22	1.6
		5_3	369380	3092690	16	7.36E+00	67	416	22	1.6
0570373	CITY OF TAMPA-WASTEWATER DEPT.	6_17	364000	3089500	4.2	1.31E+00	11	661	28	0.70
		6_18	364000	3089500	4.2	1.31E+00	11	661	28	0.70
0810010	FLORIDA POWER & LIGHT (PMT)	7_1	367150	3054230	17	3.27E+02	152	446	24	8.3
		7_2	367150	3054230	17	3.27E+02	152	436	25	8.0
		7_5	367150	3054230	17	2.98E+00	37	875	32	6.7
		7_6	367150	3054230	17	2.98E+00	37	368	18	5.8
		7_7	367150	3054230	17	2.98E+00	37	368	18	5.8
		7_8	367150	3054230	17	2.98E+00	37	368	18	5.8
1010056	PASCO COUNTY	8_1	347110	3139210	15	9.65E+00	84	394	25	1.4
		8_2	347110	3139210	15	9.65E+00	84	394	25	1.4
		8_3	347110	3139210	15	9.65E+00	84	394	25	1.4

Table 5-16
Summary of NO_2 AAQS Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
		8_5	347110	3139210	15	3.78E-02	9.1	450	5.8	0.30
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	9_1	343870	3082690	0	6.63E+01	91	429	36	2.7
		9_2	343870	3082690	0	4.65E+01	91	425	31	2.7
		9_3	343870	3082690	0	7.80E+01	91	408	34	3.4
		9_4	343870	3082690	0	2.77E-01	9.1	541	5.2	0.9
		9_5	343870	3082690	0	6.28E+01	14	772	21	5.5
		9_6	343870	3082690	0	6.28E+01	14	772	21	5.5
		9_7	343870	3082690	0	6.28E+01	14	772	21	5.5
		9_8	343870	3082690	0	6.28E+01	14	772	21	5.5
		9_38	343870	3082690	0	1.41E+01	37	361	21	5.5
		9_39	343870	3082690	0	1.41E+01	37	361	21	5.5
		9_40	343870	3082690	0	1.41E+01	37	361	21	5.5
		9_41	343870	3082690	0	1.41E+01	37	361	21	5.5
		9_42	343870	3082690	0	1.47E+01	37	835	35	6.7
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	10_4	336620	3098660	1.5	3.44E+01	17	728	28	4.6
		10_5	336620	3098660	1.5	3.44E+01	17	728	28	4.6
		10_6	336620	3098660	1.5	3.84E+01	17	728	28	4.6
		10_7	336620	3098660	1.5	3.84E+01	17	728	28	4.6
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FL	11_1	338850	3071420	0.61	2.84E+01	12	755	6.4	7.0
		11_2	338850	3071420	0.61	2.92E+01	12	755	6.4	7.0
		11_3	338850	3071420	0.61	2.69E+01	12	755	6.4	7.0
		11_4	338850	3071420	0.61	2.60E+01	12	755	6.4	7.0
1030117	PINELLAS CO. BOARD OF CO. COMMISSIONERS	12_1	335270	3084310	2.7	2.59E+01	50	405	22	2.6
		12_2	335270	3084310	2.7	2.59E+01	50	405	22	2.6
		12_3	335270	3084310	2.7	2.58E+01	50	405	22	2.6
1050003	LAKELAND ELECTRIC	13_3	409260	3103020	42	1.94E+01	50	444	6.4	3.0
		13_4	409260	3103020	42	4.17E+01	50	444	6.7	3.0
		13_5	409260	3103020	42	1.84E+01	9.4	700	31	3.6
		13_6	409260	3103020	42	1.84E+01	9.4	700	31	3.6
		13_8	409260	3103020	42	1.22E+01	47	523	26	4.9
1050004	LAKELAND ELECTRIC	14_1	408790	3106860	42	6.67E+01	46	409	25	2.7
		14_2	408790	3106860	42	1.09E+01	6.1	653	23	0.79
		14_3	408790	3106860	42	1.09E+01	6.1	653	23	0.79
		14_4	408790	3106860	42	2.81E+01	11	755	24	4.1
		14_5	408790	3106860	42	4.21E+01	48	409	22	3.2
		14_6	408790	3106860	42	3.21E+02	76	348	25	5.5
		14_28	408790	3106860	42	3.30E+01	26	864	25	8.5

Table 5-16
Summary of NO_2 AAQS Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
1050233	TAMPA ELECTRIC COMPANY	15_1	402440	3067360	42	1.78E+01	46	444	23	5.8
		15_3	402440	3067360	42	5.18E-01	23	464	15	1.1
		15_9	402440	3067360	42	3.72E+00	35	876	18	8.8
		15_10	402440	3067360	42	3.72E+00	35	876	18	8.8
		15_13	402440	3067360	42	3.84E+00	35	876	48	5.5
		15_14	402440	3067360	42	3.84E+00	35	876	48	5.5
0570025	TRADEMARK NITROGEN CORP	16_1	367300	3092600	8	1.96E+00	15	450	33	0.52
0570119	GULF COAST METALS, INC.	17_5	364700	3093600	6	4.79E-02	15	365	20	1.2
		17_6	364700	3093600	6	7.18E-02	15	365	20	1.2
0570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	18_2	364000	3098100	20	1.51E+00	10	436	19	1.4
0570321	MANTUA MANUFACTURING CO.	19_2	364700	3092500	4	3.68E-01	6	1033	4	0.23
0570286	TAMPA BAY SHIPBUILDING & REPAIR COMPANY	20_5[a]	NA	NA	NA	NA	NA	NA	NA	NA
0570442	GULF MARINE REPAIR CORPORATION	21_3[a]	NA	NA	NA	NA	NA	NA	NA	NA
0571290	TARMAC AMERICA, LLC (TITAN AMERICA BUS.)	22_9[a]	NA	NA	NA	NA	NA	NA	NA	NA
		22_10[a]	NA	NA	NA	NA	NA	NA	NA	NA
0571316	FLORIDA ENVIRONMENTAL RESOURCES CORP	23_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
1030117	PINELLAS CO. BOARD OF CO. COMMISSIONERS	24_14[b]	NA	NA	NA	NA	NA	NA	NA	NA
0570119	GULF COAST METALS, INC.	25_4[b]	NA	NA	NA	NA	NA	NA	NA	NA
0570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	26_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		26_104[a]	NA	NA	NA	NA	NA	NA	NA	NA
		26_101[a]	NA	NA	NA	NA	NA	NA	NA	NA
		26_102[a]	NA	NA	NA	NA	NA	NA	NA	NA
7771101	WOODRUFF & SONS, INC.	27_2[a]	NA	NA	NA	NA	NA	NA	NA	NA

Note:
[a] Not modeled due to incomplete source information.
[b] Not modeled as these sources are not in operation, according to Deborah Nelson's email on on June 18 and July 24, 2008.

Table 5-17
Summary of PM_{10} AAQS and Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Increment Modeling	SourceID	Coordinates		Elevation	Potential Emission Rate		Stack Height	Exit Temperature	Velocity	Diameter
				UTMx (m)	UTMy (m)	(m)	Long Term (g/s)	Short Term (g/s)	(m)	(K)	(m/s)	(m)
0570008	MOSAIC FERTILIZER, LLC	post-baseline	1_7	364590	3082380	0	1.51E+00	1.51E+00	38	329	11	2.4
		post-baseline	1_43	364590	3082380	0	1.64E+00	1.64E+00	6.1	489	16	1.2
		post-baseline	1_55	364590	3082380	0	1.39E+00	1.46E-01	41	315	15	2.1
		post-baseline	1_66[a]	364590	3082380	NA	8.63E-03	1.46E-01	NA	NA	NA	NA
		post-baseline	1_67[a]	364590	3082380	NA	8.63E-03	3.91E-01	NA	NA	NA	NA
		post-baseline	1_68[a]	364590	3082380	NA	8.63E-03	1.39E+00	NA	NA	NA	NA
		post-baseline	1_78	364590	3082380	0	1.64E+00	7.81E-02	41	339	20	1.8
		post-baseline	1_103	364590	3082380	0	1.64E+00	7.81E-02	38	339	17	1.8
		post-baseline	1_51	364590	3082380	0	1.32E-01	1.50E-01	9.1	299	13	1.1
		post-baseline	1_52	364590	3082380	0	1.32E-01	1.26E-02	12	298	11	0.46
		post-baseline	1_53	364590	3082380	0	3.57E-01	1.69E-02	15	304	12	0.76
		post-baseline	1_58	364590	3082380	0	3.57E-02	5.04E-02	9.1	299	16	0.37
		post-baseline	1_59	364590	3082380	0	5.47E-02	5.04E-02	14	299	16	0.37
		post-baseline	1_60	364590	3082380	0	1.04E-01	5.04E-02	23	299	12	0.58
		post-baseline	1_61[a]	364590	3082380	NA	1.21E-02	1.69E-02	NA	NA	NA	NA
		post-baseline	1_63	364590	3082380	0	9.49E-03	1.64E+00	9.1	316	5.3	0.24
		post-baseline	1_74	364590	3082380	0	1.69E-02	6.68E-03	7.3	313	3.1	0.52
		post-baseline	1_79	364590	3082380	0	6.62E-03	1.51E-02	20	305	1.7	0.46
		post-baseline	1_80	364590	3082380	0	1.50E-02	2.60E-01	26	305	2.3	0.46
		post-baseline	1_81	364590	3082380	0	1.12E-01	1.64E+00	4.6	305	17	0.64
0570018	FLORIDA ROCK INDUSTRIES, INC.	post-baseline	2_1	357890	3090700	1.2	1.55E-01	1.55E-01	30	298	12	0.49
		post-baseline	2_2	357890	3090700	1.2	1.55E-01	1.55E-01	30	298	12	0.49
		post-baseline	2_3	357890	3090700	1.2	3.53E-01	3.53E-01	31	298	20	0.58
		post-baseline	2_5	357890	3090700	1.2	4.60E-03	3.91E-01	30	298	12	0.76
		post-baseline	2_6	357890	3090700	1.2	1.90E-01	1.94E-01	45	298	13	0.52
		post-baseline	2_7	357890	3090700	1.2	1.90E-01	1.94E-01	45	298	13	0.52
		post-baseline	2_8	357890	3090700	1.2	1.90E-01	1.94E-01	45	298	13	0.52
		post-baseline	2_9	357890	3090700	1.2	1.55E-01	1.55E-01	52	298	26	0.34
		post-baseline	2_12	357890	3090700	1.2	6.47E-01	6.48E-01	25	298	24	0.70
		post-baseline	2_13	357890	3090700	1.2	1.10E+00	1.10E+00	25	298	19	1.0
		post-baseline	2_16	357890	3090700	1.2	1.09E+00	1.10E+00	25	298	19	1.0
		post-baseline	2_17	357890	3090700	1.2	4.20E-01	4.21E-01	27	298	27	0.34
		post-baseline	2_18	357890	3090700	1.2	4.86E-01	4.86E-01	4.9	298	17	0.73
		post-baseline	2_19	357890	3090700	1.2	1.10E+00	1.10E+00	25	298	19	1.0
		post-baseline	2_20	357890	3090700	1.2	4.20E-01	4.21E-01	17	298	17	0.67
		post-baseline	2_21	357890	3090700	1.2	4.86E-01	4.86E-01	9.1	298	17	0.73
		post-baseline	2_23	357890	3090700	1.2	2.59E-01	2.60E-01	15	298	11	0.67
		post-baseline	2_24	357890	3090700	1.2	2.59E-01	2.60E-01	15	298	11	0.67
		post-baseline	2_25	357890	3090700	1.2	2.59E-01	2.60E-01	22	298	81	0.24
		post-baseline	2_42	357890	3090700	1.2	5.12E-02	5.83E-01	53	298	23	0.46
		post-baseline	2_43	357890	3090700	1.2	6.33E-02	3.89E-01	53	298	29	0.46
		post-baseline	2_44	357890	3090700	1.2	3.39E-02	3.89E-01	18	298	34	0.30
		post-baseline	2_66[a]	357890	3090700	NA	1.64E-05	2.58E-01	NA	NA	NA	NA
		post-baseline	2_60	357890	3090700	1.2	5.47E-02	2.94E-01	6.1	298	24	0.67
		post-baseline	2_61	357890	3090700	1.2	5.47E-02	1.71E-01	6.1	298	8.2	0.67
		post-baseline	2_27	357890	3090700	1.2	1.15E-01	1.71E-01	6.1	298	29	0.61

Table 5-17
Summary of PM_{10} AAQS and Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Increment Modeling	SourceID	Coordinates		Elevation	Potential Emission Rate		Stack Height	Exit Temperature	Velocity	Diameter
				UTMx (m)	UTMy (m)	(m)	Long Term (g/s)	Short Term (g/s)	(m)	(K)	(m/s)	(m)
		post-baseline	2_31	357890	3090700	1.2	3.88E-01	1.34E+00	15	298	19	0.61
		post-baseline	2_32	357890	3090700	1.2	3.88E-01	3.88E-01	22	298	23	0.58
		post-baseline	2_45	357890	3090700	1.2	3.39E-02	2.27E-01	18	298	34	0.30
		post-baseline	2_54[a]	357890	3090700	NA	1.01E-01	2.27E-01	NA	NA	NA	NA
		post-baseline	2_57[a]	357890	3090700	NA	4.46E-02	1.64E-04	NA	NA	NA	NA
		post-baseline	2_64[a]	357890	3090700	NA	1.64E-04	1.64E-05	NA	NA	NA	NA
		post-baseline	2_65[a]	357890	3090700	NA	1.64E-05	1.64E-05	NA	NA	NA	NA
0570021	INTERNATIONAL SHIP REPAIR & MARINE SERV.	post-baseline	3_1[a]	358030	3092750	NA	4.23E+00	4.23E+00	NA	298	NA	NA
0570024	KINDER MORGAN OLP "C"	post-baseline	4_2	361480	3087490	1.0	3.24E+00	3.24E+00	20	316	20	1.8
		post-baseline	4_3	361480	3087490	1.0	2.91E-01	2.91E-01	10	328	6.5	0.91
		post-baseline	4_4	361480	3087490	1.0	1.94E-01	1.94E-01	2.1	322	32	0.34
		post-baseline	4_5	361480	3087490	1.0	2.27E-01	2.27E-01	10	322	18	0.52
		post-baseline	4_6	361480	3087490	1.0	1.94E-01	1.94E-01	8.2	328	32	0.34
		post-baseline	4_7	361480	3087490	1.0	1.94E-01	1.94E-01	12	328	32	0.34
		post-baseline	4_8	361480	3087490	1.0	1.73E-02	6.30E-02	30	328	18	0.34
		post-baseline	4_9	361480	3087490	1.0	1.32E-01	1.39E-01	28	328	19	0.40
		post-baseline	4_12	361480	3087490	1.0	7.48E-01	7.48E-01	3.7	322	40	0.61
		post-baseline	4_102[a]	361480	3087490	NA	6.35E-02	6.35E-02	NA	NA	NA	NA
0570025	TRADEMARK NITROGEN CORP	post-baseline	5_1	367300	3092600	7.6	4.21E+01	4.21E+01	15	450	33	0.52
0570033	CSX TRANSPORTATION, INC.	pre-baseline	6_1	362390	3088990	2.4	1.28E+00	3.69E+00	14	300	13	2.4
		pre-baseline	6_2	362390	3088990	2.4	1.50E-01	4.30E-01	0.9	300	377	0.15
		pre-baseline	6_3	362390	3088990	2.4	1.49E+00	4.29E+00	12	300	21	2.0
		pre-baseline	6_4	362390	3088990	2.4	1.55E-01	4.46E-01	12	300	20	0.67
		pre-baseline	6_5	362390	3088990	2.4	9.72E-02	2.80E-01	12	300	19	0.55
		pre-baseline	6_6	362390	3088990	2.4	4.31E-02	1.23E-01	1.2	300	108	0.15
		pre-baseline	6_7	362390	3088990	2.4	3.48E-02	9.95E-02	0.9	300	88	0.15
		pre-baseline	6_8	362390	3088990	2.4	3.48E-02	9.95E-02	0.9	300	88	0.15
		pre-baseline	6_9	362390	3088990	2.4	2.68E-01	7.69E-01	11	300	15	1.0
		pre-baseline	6_10	362390	3088990	2.4	5.56E-01	1.60E+00	16	300	10	1.8
		pre-baseline	6_13	362390	3088990	2.4	4.31E-02	1.23E-01	1.8	300	16	0.40
0570039	TAMPA ELECTRIC COMPANY	pre-baseline	7_1	363150	3074910	2	5.09E+01	5.09E+01	149	419	35	7.3
		pre-baseline	7_2	363150	3074910	2	5.03E+01	5.03E+01	149	325	27	7.3
		pre-baseline	7_3	363150	3074910	2	5.18E+01	5.18E+01	149	426	16	7.3
		post-baseline	7_4	363150	3074910	2	5.46E+00	5.46E+00	149	326	18	7.3
		pre-baseline	7_5	363150	3074910	2	4.16E+00	4.16E+00	23	771	19	4.3
		pre-baseline	7_6	363150	3074910	2	4.16E+00	4.16E+00	23	771	19	4.3
		pre-baseline	7_7	363150	3074910	2	4.16E+00	4.16E+00	11	816	28	3.4
		pre-baseline	7_8	363150	3074910	2	6.50E-01	6.50E-01	31	394	16	0.76
		pre-baseline	7_9	363150	3074910	2	3.74E-01	3.78E-01	34	394	124	0.27
		pre-baseline	7_10	363150	3074910	2	3.49E+01	3.49E+01	34	394	19	0.24
		pre-baseline	7_11	363150	3074910	2	8.19E-02	8.19E-02	55	298	22	0.51
		pre-baseline	7_13	363150	3074910	2	5.75E-03	6.30E-03	31	339	14	0.15
		post-baseline	7_14	363150	3074910	2	2.52E-02	2.52E-02	42	333	18	0.49
		pre-baseline	7_15	363150	3074910	2	2.85E-02	6.05E-02	55	299	21	0.52
		pre-baseline	7_16	363150	3074910	2	2.85E-02	6.05E-02	55	299	21	0.52
		pre-baseline	7_17	363150	3074910	2	2.85E-02	6.05E-02	55	299	21	0.52

Table 5-17
Summary of PM_{10} AAQS and Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Increment Modeling	SourceID	Coordinates		Elevation	Potential Emission Rate		Stack Height	Exit Temperature	Velocity	Diameter
				UTMx (m)	UTMy (m)	(m)	Long Term (g/s)	Short Term (g/s)	(m)	(K)	(m/s)	(m)
		pre-baseline	7_20	363150	3074910	2	1.35E-01	1.36E-01	3.0	298	42	0.30
		post-baseline	7_21	363150	3074910	2	1.64E-02	1.64E-02	3.0	298	3.5	0.30
		pre-baseline	7_22	363150	3074910	2	2.85E-02	3.78E-02	3.0	298	8.5	0.30
		pre-baseline	7_23[a]	363150	3074910	NA	8.19E-02	8.19E-02	NA	NA	NA	NA
		post-baseline	7_39[a]	363150	3074910	NA	2.85E-02	6.05E-02	9.1	NA	NA	0.52
0570040	TAMPA ELECTRIC COMPANY	pre-baseline	8_8[a]	361100	3087500	NA	1.47E-02	6.10E-01	NA	298	NA	NA
		post-baseline	8_20	361100	3087500	0.87	1.51E+00	1.51E+00	46	373	18	5.8
		post-baseline	8_21	361100	3087500	0.87	1.51E+00	1.51E+00	46	373	18	5.8
		post-baseline	8_22	361100	3087500	0.87	1.51E+00	1.51E+00	46	373	18	5.8
		post-baseline	8_23	361100	3087500	0.87	1.51E+00	1.51E+00	46	266	0.15	65
		post-baseline	8_24	361100	3087500	0.87	1.51E+00	1.51E+00	46	373	18	5.8
		post-baseline	8_25	361100	3087500	0.87	1.51E+00	1.51E+00	46	373	18	5.8
		post-baseline	8_26	361100	3087500	0.87	1.51E+00	1.51E+00	46	373	18	5.8
0570286	TAMPA BAY SHIPBUILDING & REPAIR COMPANY	post-baseline	9_2[a]	358000	3089000	NA	2.30E-02	2.52E-02	NA	NA	NA	NA
		post-baseline	9_3[a]	358000	3089000	NA	2.30E-02	2.52E-02	NA	NA	NA	NA
		post-baseline	9_4[a]	358000	3089000	NA	3.71E+00	3.71E+00	NA	NA	NA	NA
		post-baseline	9_5[a]	358000	3089000	NA	3.80E-01	3.80E-01	3.0	NA	45	0.15
		post-baseline	9_102	358000	3089000	0.03	3.97E-01	3.97E-01	3.4	300	15	1.2
0570299	MASONITE CORPORATION	post-baseline	10_1[a]	362100	3092500	NA	1.94E+00	1.94E+00	4.6	NA	6.1	2.4
0570442	GULF MARINE REPAIR CORPORATION	post-baseline	11_3[a]	360300	3091900	NA	2.95E+00	2.95E+00	NA	NA	NA	NA
		post-baseline	11_4[a]	360300	3091900	NA	2.59E-02	2.59E-02	NA	NA	NA	NA
0570446	TRADEMARK METALS RECYCLING, LLC	post-baseline	12_1[a]	358040	3089090	NA	1.91E+01	1.91E+01	NA	NA	NA	NA
		post-baseline	12_2[a]	358040	3089090	NA	4.86E-01	4.86E-01	NA	NA	NA	NA
0571339	TRINITY MATERIALS, LLC	post-baseline	13_1[a]	360310	3087720	NA	3.39E+00	3.39E+00	NA	NA	NA	NA
		post-baseline	13_3[a]	360310	3087720	NA	1.07E+00	1.07E+00	NA	NA	NA	NA
		post-baseline	13_4[a]	360310	3087720	NA	6.62E-02	6.62E-02	NA	294	NA	NA
		post-baseline	13_5[a]	360310	3087720	NA	8.92E-01	8.92E-01	NA	294	NA	NA
		post-baseline	13_7[a]	360310	3087720	NA	7.62E-01	7.62E-01	21	294	NA	NA
		post-baseline	13_8[a]	360310	3087720	NA	2.59E-01	2.59E-01	6.1	294	NA	NA
		post-baseline	13_9[a]	360310	3087720	NA	8.92E-02	8.92E-02	21	294	NA	NA
		post-baseline	13_10[a]	360310	3087720	NA	1.32E-01	1.32E-01	7.6	294	NA	NA
		post-baseline	13_11[a]	360310	3087720	NA	2.36E-01	2.36E-01	NA	NA	NA	NA
0810010	FLORIDA POWER & LIGHT (PMT)	pre-baseline	14_1	367150	3054230	17	1.09E+02	1.09E+02	152	446	24	8.3
		pre-baseline	14_2	367150	3054230	17	1.09E+02	1.09E+02	152	436	25	8.0
		post-baseline	14_5	367150	3054230	17	1.64E+00	2.17E+00	37	875	32	6.7
		post-baseline	14_6	367150	3054230	17	1.64E+00	2.17E+00	37	368	18	5.8
		post-baseline	14_7	367150	3054230	17	1.64E+00	2.17E+00	37	368	18	5.8
		post-baseline	14_8	367150	3054230	17	1.64E+00	2.17E+00	37	368	18	5.8
1010017	FLORIDA POWER CORPDBAPROGRESS ENERGY F	pre-baseline	15_1	324440	3118930	2.9	6.39E+01	6.39E+01	152	433	19	7.3
		pre-baseline	15_2	324440	3118930	2.9	6.25E+01	6.25E+01	152	433	19	7.3
		pre-baseline	15_7[a]	324440	3118930	NA	2.52E-02	2.52E-02	NA	NA	NA	NA
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY F	pre-baseline	16_1[b]	343870	3082690	0	1.54E+01	1.54E+01	91	429	36	2.7
		pre-baseline	16_2[b]	343870	3082690	0	1.66E+01	1.66E+01	91	425	31	2.7
		pre-baseline	16_3[b]	343870	3082690	0	2.79E+01	2.79E+01	91	408	34	3.4

Table 5-17
Summary of PM_{10} AAQS and Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Increment Modeling	SourceID	Coordinates		Elevation	Potential Emission Rate		Stack Height	Exit Temperature	Velocity	Diameter
				UTMx (m)	UTMy (m)	(m)	Long Term (g/s)	Short Term (g/s)	(m)	(K)	(m/s)	(m)
		pre-baseline	16_4	343870	3082690	0	2.76E-02	2.77E-02	9.1	541	5.2	0.91
		pre-baseline	16_5	343870	3082690	0	2.63E+00	2.63E+00	14	772	21	5.5
		pre-baseline	16_6	343870	3082690	0	2.63E+00	2.63E+00	14	772	21	5.5
		pre-baseline	16_7	343870	3082690	0	2.63E+00	2.63E+00	14	772	21	5.5
		pre-baseline	16_8	343870	3082690	0	2.63E+00	2.63E+00	14	772	21	5.5
		post-baseline	16_38	343870	3082690	0	1.41E+00	1.41E+00	37	361	21	5.5
		post-baseline	16_39	343870	3082690	0	1.41E+00	1.41E+00	37	361	21	5.5
		post-baseline	16_40	343870	3082690	0	1.41E+00	1.41E+00	37	361	21	5.5
		post-baseline	16_41	343870	3082690	0	1.41E+00	1.41E+00	37	361	21	5.5
		post-baseline	16_42[a]	343870	3082690	NA	1.13E+00	1.13E+00	NA	NA	NA	NA
1050004	LAKELAND ELECTRIC	pre-baseline	17_1	408790	3106860	42	1.20E+01	1.20E+01	46	409	25	2.7
		pre-baseline	17_2	408790	3106860	42	2.19E-01	2.19E-01	6.1	653	23	0.79
		pre-baseline	17_3	408790	3106860	42	2.19E-01	2.19E-01	6.1	653	23	0.79
		pre-baseline	17_4	408790	3106860	42	1.53E+00	1.53E+00	11	755	24	4.1
		pre-baseline	17_5	408790	3106860	42	1.40E+01	1.40E+01	48	409	22	3.2
		post-baseline	17_6	408790	3106860	42	3.44E+01	3.44E+01	76	348	25	5.5
		post-baseline	17_28	408790	3106860	42	1.76E+01	1.76E+01	26	864	25	8.5
1050059	MOSAIC FERTILIZER LLC	pre-baseline	18_2	396670	3079300	47	1.57E+00	1.57E+00	61	350	15	2.6
		pre-baseline	18_3	396670	3079300	47	6.05E-01	6.05E-01	61	350	15	2.6
		pre-baseline	18_4	396670	3079300	47	6.05E-01	6.05E-01	61	350	15	2.6
		pre-baseline	18_9	396670	3079300	47	3.60E+00	3.60E+00	41	314	15	2.1
		pre-baseline	18_11	396670	3079300	47	1.89E+00	1.89E+00	37	341	17	1.2
		pre-baseline	18_12	396670	3079300	47	3.62E+00	3.62E+00	41	315	19	1.8
		pre-baseline	18_15	396670	3079300	47	1.36E-01	1.36E-01	20	314	52	0.30
		pre-baseline	18_23	396670	3079300	47	5.98E-01	5.98E-01	35	314	10	0.30
		pre-baseline	18_24	396670	3079300	47	4.54E-01	4.54E-01	31	314	43	0.30
		pre-baseline	18_25	396670	3079300	47	4.54E-01	4.54E-01	36	314	39	0.30
		pre-baseline	18_26	396670	3079300	47	2.01E-01	2.02E-01	5.5	314	9.4	0.30
		pre-baseline	18_27	396670	3079300	47	9.41E-01	8.06E-01	52	328	20	2.4
		pre-baseline	18_28	396670	3079300	47	5.98E-01	9.45E-01	35	314	10	0.30
		pre-baseline	18_29	396670	3079300	47	5.90E-01	2.52E-02	41	305	13	0.91
		pre-baseline	18_31	396670	3079300	47	4.54E-01	5.32E-01	33	300	9.4	0.24
		pre-baseline	18_32	396670	3079300	47	9.69E-01	1.26E-01	26	378	79	0.46
		post-baseline	18_33	396670	3079300	47	9.69E-01	1.26E-02	26	408	69	0.46
		post-baseline	18_34	396670	3079300	47	1.18E-01	2.52E-02	22	325	27	0.52
		post-baseline	18_35	396670	3079300	47	1.18E-01	2.52E-02	22	311	77	0.30
		post-baseline	18_36	396670	3079300	47	3.76E+00	1.26E-02	52	314	16	1.4
		post-baseline	18_37	396670	3079300	47	4.54E-01	2.52E-02	33	311	21	0.55
		post-baseline	18_38	396670	3079300	47	4.54E-01	5.98E-01	33	311	24	0.34
		post-baseline	18_41	396670	3079300	47	6.30E-01	5.92E-01	32	311	55	0.46
		post-baseline	18_43	396670	3079300	47	4.54E-01	4.54E-01	32	314	21	0.49
		post-baseline	18_45	396670	3079300	47	8.05E-01	5.98E-01	52	316	18	1.8
		post-baseline	18_46	396670	3079300	47	8.05E-01	9.70E-01	52	316	18	1.8
		post-baseline	18_47	396670	3079300	47	2.45E-01	1.26E-02	45	353	21	1.3
		post-baseline	18_48	396670	3079300	47	1.26E-01	8.82E-02	18	300	10	1.1
		pre-baseline	18_52	396670	3079300	47	5.98E-01	4.54E-01	35	314	10	0.30

Table 6-17
Summary of PM_{10} AAQS and Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Increment Modeling	SourceID	Coordinates		Elevation	Potential Emission Rate		Stack Height	Exit Temperature	Velocity	Diameter
				UTMx (m)	UTMy (m)	(m)	Long Term (g/s)	Short Term (g/s)	(m)	(K)	(m/s)	(m)
		post-baseline	18_55	396670	3079300	47	6.47E-01	9.70E-01	7.6	333	10	1.3
		post-baseline	18_56	396670	3079300	47	7.62E-01	6.48E-01	52	316	20	1.5
		post-baseline	18_59	396670	3079300	47	6.30E-01	6.30E-01	32	311	21	0.46
		pre-baseline	18_62	396670	3079300	47	3.16E-02	7.64E-01	12	389	0.13	0.61
		pre-baseline	18_63	396670	3079300	47	2.30E-02	4.54E-01	12	389	0.13	0.61
		pre-baseline	18_64	396670	3079300	47	8.63E-03	6.30E-01	12	389	0.13	0.61
		pre-baseline	18_65	396670	3079300	47	2.30E-02	7.56E-02	12	389	0.13	0.61
		pre-baseline	18_66	396670	3079300	47	1.15E-02	1.18E-01	12	389	0.13	0.61
		pre-baseline	18_67	396670	3079300	47	2.30E-02	1.18E-01	7.6	305	0	0
		pre-baseline	18_68	396670	3079300	47	2.30E-02	3.76E+00	7.6	305	0	0
		pre-baseline	18_69	396670	3079300	47	8.63E-03	4.28E-01	7.6	305	0	0
		post-baseline	18_70	396670	3079300	47	8.63E-02	2.39E-01	34	316	35	0.23
		pre-baseline	18_74	396670	3079300	47	4.28E-01	8.06E-01	52	314	21	1.4
		post-baseline	18_75	396670	3079300	47	2.39E-01	2.39E-01	26	394	32	0.91
		post-baseline	18_76	396670	3079300	47	2.39E-01	1.22E+00	27	328	35	0.46
		pre-baseline	18_78	396670	3079300	47	1.22E+00	4.54E-01	41	336	33	1.8
7770473	CONRAD YELVINGTON DISTRIBUTORS	NA	19_1[a]	361770	3096900	NA	4.46E-01	4.46E-01	NA	NA	NA	NA
		NA	19_2[a]	361770	3096900	NA	4.46E-01	4.46E-01	NA	NA	NA	NA
		NA	19_3[a]	361770	3096900	NA	4.46E-01	4.46E-01	NA	NA	NA	NA
		NA	19_4[a]	361770	3096900	NA	4.46E-01	4.46E-01	NA	NA	NA	NA
		NA	19_5[a]	361770	3096900	NA	4.46E-01	4.46E-01	NA	NA	NA	NA
		NA	19_6[a]	361770	3096900	NA	5.18E-02	5.18E-02	NA	NA	NA	NA
		NA	19_7[a]	361770	3096900	NA	5.18E-02	5.18E-02	NA	NA	NA	NA
0570056	GAF MATERIALS CORPORATION	post-baseline	20_1	362200	3087200	1	4.32E-01	4.32E-01	11	311	5.2	1.2
		post-baseline	20_2	362200	3087200	1	2.43E-01	2.43E-01	7.6	300	52	0.30
		post-baseline	20_3	362200	3087200	1	9.92E-02	9.92E-02	7.6	300	1.8	1.2
		post-baseline	20_4	362200	3087200	1	1.27E+00	1.27E+00	11	714	23	0.61
		post-baseline	20_5	362200	3087200	1	2.26E-01	2.26E-01	9.1	408	12	0.61
		post-baseline	20_6	362200	3087200	1	2.42E-02	4.21E-02	11	300	48	0.14
		post-baseline	20_7	362200	3087200	1	2.90E-02	2.90E-02	11	300	40	0.12
		post-baseline	20_8	362200	3087200	1	2.42E-02	4.21E-02	15	300	61	0.12
		post-baseline	20_9	362200	3087200	1	1.27E+00	1.27E+00	7.6	714	23	0.61
		post-baseline	20_100[a]	362200	3087200	NA	1.57E-02	1.57E-02	NA	NA	NA	NA
		post-baseline	20_102[a]	362200	3087200	NA	1.21E-02	1.21E-02	NA	NA	NA	NA
		post-baseline	20_101	362200	3087200	1	8.43E-02	2.46E-01	11	300	22	0.47
0570119	GULF COAST METALS, INC.	post-baseline	21_4[a]	364700	3093600	NA	1.12E-02	1.64E-02	7.6	NA	NA	0.21
		post-baseline	21_5	364700	3093600	8	4.03E-02	4.03E-02	15	365	20	1.2
		post-baseline	21_6	364700	3093600	8	4.03E-02	4.03E-02	15	365	20	1.2
0570238	PREFERRED MATERIALS, INC., TAMPA KEYS	post-baseline	22_1[c]	363200	3093300	NA	1.87E-01	6.30E-01	3.0	299	20	0.49
0570364	MANNA PRO CORPORATION	post-baseline	23_2[a]	364700	3092600	NA	1.93E-02	1.93E-02	NA	294	NA	NA
		post-baseline	23_3	364700	3092600	6	1.36E-01	2.86E-01	0.6	311	28	0.49
		post-baseline	23_4	364700	3092600	6	2.79E-01	2.86E-01	0.6	311	28	0.49
		post-baseline	23_5	364700	3092600	6	4.92E-02	2.07E-01	5.5	311	34	0.40
		post-baseline	23_6[a]	364700	3092600	NA	4.60E-02	1.59E-01	NA	NA	NA	NA
		post-baseline	23_7[a]	364700	3092600	NA	4.60E-02	1.59E-01	NA	NA	NA	NA

Table 5-17
Summary of PM_{10} AAQS and Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

Facility ID	Company Name	Increment Modeling	SourceID	Coordinates		Elevation	Potential Emission Rate		Stack Height	Exit Temperature	Velocity	Diameter
				UTMx (m)	UTMy (m)	(m)	Long Term (g/s)	Short Term (g/s)	(m)	(K)	(m/s)	(m)
		post-baseline	23_8[a]	364700	3092600	NA	1.93E-02	1.93E-02	NA	294	NA	NA
0570373	CITY OF TAMPA-WASTEWATER DEPT.	post-baseline	24_1	364000	3089500	4	6.49E-01	6.49E-01	23	375	25.	0.91
		post-baseline	24_2	364000	3089500	4	6.49E-01	6.49E-01	23	375	8.8	1.5
		post-baseline	24_5[a]	364000	3089500	NA	3.25E-02	3.28E-02	NA	299	NA	NA
		post-baseline	24_6[a]	364000	3089500	NA	3.25E-02	3.28E-02	NA	299	NA	NA
		post-baseline	24_7[a]	364000	3089500	NA	3.25E-02	3.28E-02	NA	299	NA	NA
		post-baseline	24_8[a]	364000	3089500	NA	3.25E-02	3.28E-02	NA	299	NA	NA
		post-baseline	24_9[a]	364000	3089500	NA	3.25E-02	3.28E-02	NA	299	NA	NA
		post-baseline	24_10[a]	364000	3089500	NA	3.25E-02	3.28E-02	NA	299	NA	NA
		post-baseline	24_11[a]	364000	3089500	NA	1.02E-01	1.02E-01	NA	298	NA	0.30
		pre-baseline	24_12[a]	364000	3089500	NA	2.27E-02	2.27E-02	15	755	NA	0.46
		post-baseline	24_16[a]	364000	3089500	NA	1.02E-01	1.02E-01	NA	298	NA	NA
		post-baseline	24_17	364000	3089500	4	5.03E-02	5.03E-02	11	661	28	0.70
		post-baseline	24_18	364000	3089500	4	5.03E-02	1.13E-01	11	661	28	0.70
0570401	FLORIDA MEGA-MIX, INC.	post-baseline	25_1[c]	364500	3093400	NA	2.22E-01	6.24E-01	5.2	305	12	0.24
0571337	TAMPA PAVEMENT CONSTRUCTORS, INC	NA	26_5[a]	364300	3097640	NA	1.50E+00	1.50E+00	NA	NA	NA	NA
7771101	WOODRUFF & SONS, INC.	NA	27_1[a]	363510	3092970	NA	1.36E-01	5.75E-01	NA	298	NA	NA
		NA	27_2[a]	363510	3092970	NA	1.14E-02	4.81E-02	3.0	NA	NA	0.15
7775159	WOODRUFF & SONS, INC.	NA	28_1[a]	364380	3093180	NA	0.201366467	0.629989444	NA	NA	NA	NA

Note:
[a] Not modeled due to incomplete source information.
[b] Not modeled as these sources are shut down, according to Deborah Nelson's email on July 15, 2008.
[c] Removed as these sources have only opacity limits, according to Deborah Nelson's email on July 30, 2008.

Table 5-18
Summary of NO_2 Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
1030011	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	2_1	343870	3082690	0	-1.30E+01	91	429	36	2.7
		2_2	343870	3082690	0	-1.12E+01	91	425	31	2.7
		2_3	343870	3082690	0	-3.02E-01	91	408	34	3.4
		2_4	343870	3082690	0	1.11E-02	9.1	541	5.2	0.91
		2_5	343870	3082690	0	2.11E+00	14	772	21	5.5
		2_6	343870	3082690	0	1.70E+00	14	772	21	5.5
		2_7	343870	3082690	0	2.66E+00	14	772	21	5.5
		2_8	343870	3082690	0	2.28E+00	14	772	21	5.5
1030013	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	3_1	338850	3071420	0	3.06E+00	12	755	6.4	7.0
		3_2	338850	3071420	0	2.02E+00	12	755	6.4	7.0
		3_3	338850	3071420	0	2.32E+00	12	755	6.4	7.0
		3_4	338850	3071420	0	7.59E-01	12	755	6.4	7.0
0570040	TAMPA ELECTRIC COMPANY	4_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_2[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_3[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_4[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_5[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_6[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_7[a]	NA	NA	NA	NA	NA	NA	NA	NA
		4_20	361100	3087500	1.5	1.36E+00	46	373	18	5.8
		4_21	361100	3087500	1.5	1.96E+00	460	373	18	5.8
		4_22	361100	3087500	1.5	2.04E+00	46	373	18	5.8
		4_23	361100	3087500	1.5	1.97E+00	46	266	0	65
		4_24	361100	3087500	1.5	2.07E+00	46	373	18	5.8
		4_25	361100	3087500	1.5	2.03E+00	46	373	18	5.8
		4_26	361100	3087500	1.5	1.99E+00	46	373	18	5.8
0570039	TAMPA ELECTRIC COMPANY	5_1	363150	3074910	1.9	-3.27E+02	149	419	35	7.3
		5_2	363150	3074910	1.9	-1.26E+02	149	325	27	7.3
		5_3	363150	3074910	1.9	1.58E+00	149	426	16	7.3
		5_4	363150	3074910	1.9	-7.08E+01	149	326	18	7.3
		5_5	363150	3074910	1.9	-7.07E-01	23	771	19	4.3
		5_6	363150	3074910	1.9	-1.56E+00	23	771	19	4.3

Table 5-18
Summary of NO_2 Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
		5_7	363150	3074910	1.9	-1.66E-01	11	816	28	3.4
1050023	CUTRALE CITRUS JUICES USA,INC	6_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_2[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_3[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_4[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_8[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_9[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_13[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_15[a]	NA	NA	NA	NA	NA	NA	NA	NA
		6_18[a]	NA	NA	NA	NA	NA	NA	NA	NA
1030017	CEMETERY MANAGEMENT, INC	7_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		7_2[a]	NA	NA	NA	NA	NA	NA	NA	NA
		7_3[a]	NA	NA	NA	NA	NA	NA	NA	NA
0570373	CITY OF TAMPA-WASTEWATER DEPT.	8_1	364000	3089500	4.6	2.24E-01	23	375	25	0.91
		8_2	364000	3089500	4.6	7.77E-02	23	375	8.8	1.5
		8_12[a]	NA	NA	NA	NA	NA	NA	NA	NA
		8_17	364000	3089500	4.6	6.28E-02	11	661	28	0.70
		8_18	364000	3089500	4.6	5.87E-02	11	661	28	0.70
1030012	FLORIDA POWER CORPDBAPROGRESS ENERGY FLA	9_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		9_2[a]	NA	NA	NA	NA	NA	NA	NA	NA
		9_3[a]	NA	NA	NA	NA	NA	NA	NA	NA
		9_4	336620	3098660	2.2	9.18E-01	17	728	28	4.6
		9_5	336620	3098660	2.2	6.61E-01	17	728	28	4.6
		9_6	336620	3098660	2.2	1.26E+00	17	728	28	4.6
		9_7	336620	3098660	2.2	1.29E+00	17	728	28	4.6
0570261	HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.	10_1	369380	3092690	15	-1.05E+01	67	416	22	1.6
		10_2	369380	3092690	15	-1.10E+01	67	416	22	1.6
		10_3	369380	3092690	15	-1.06E+01	67	416	22	1.6
1050003	LAKELAND ELECTRIC	11_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		11_2[a]	NA	NA	NA	NA	NA	NA	NA	NA
		11_3	409260	3103020	40	-2.88E-03	50	444	6.4	3.0

Table 5-18
Summary of NO_2 Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
		11_4	409260	3103020	40	-2.88E-02	50	444	6.7	3.0
		11_5	409260	3103020	40	1.54E-02	9.4	700	31	3.6
		11_6	409260	3103020	40	2.07E-02	9.4	700	31	3.6
		11_7[a]	NA	NA	40	NA	NA	NA	NA	NA
		11_8	409260	3103020	40	1.77E+00	47	523	26	4.9
0810010	FLORIDA POWER & LIGHT (PMT)	12_1	367150	3054230	16	-3.80E+01	152	446	24	8.3
		12_2	367150	3054230	16	-9.95E+01	152	436	25	8.0
		12_3	367150	3054230	16	1.29E-02	4.9	650	48	0.37
		12_5	367150	3054230	16	1.53E+00	37	875	32	6.7
		12_6	367150	3054230	16	1.69E+00	37	368	18	5.8
		12_7	367150	3054230	16	1.53E+00	37	368	18	5.8
		12_8	367150	3054230	16	1.53E+00	37	368	18	5.8
1050004	LAKELAND ELECTRIC	13_1	408790	3106860	42	-1.52E+00	46	409	25	2.7
		13_2	408790	3106860	42	2.08E-02	6.1	653	23	0.79
		13_3	408790	3106860	42	1.99E-02	6.1	653	23	0.79
		13_4	408790	3106860	42	3.50E-02	11	755	24	4.1
		13_5	408790	3106860	42	-1.97E+01	48	409	22	3.2
		13_6	408790	3106860	42	4.83E+00	76	348	25	5.5
		13_12[a]	NA	NA	NA	NA	NA	NA	NA	NA
		13_13[a]	NA	NA	NA	NA	NA	NA	NA	NA
		13_28	408790	3106860	42	2.07E+00	26	864	25	8.5
0570127	CITY OF TAMPA	14_1[a]	NA	NA	NA	NA	NA	NA	NA	NA
		14_2[a]	NA	NA	NA	NA	NA	NA	NA	NA
		14_3[a]	NA	NA	NA	NA	NA	NA	NA	NA
		14_4[a]	NA	NA	NA	NA	NA	NA	NA	NA
		14_103	360200	3092210	1.2	2.83E+00	61	430	22	1.3
		14_104	360200	3092210	1.2	2.89E+00	61	430	22	1.3
		14_105	360200	3092210	1.2	2.58E+00	61	430	22	1.3
		14_106	360200	3092210	1.2	2.68E+00	61	430	22	1.3
0570008	MOSAIC FERTILIZER, LLC	15_4	364590	3082380	1.2	1.29E+00	46	340	13	2.3
		15_5	364590	3082380	1.2	1.28E+00	46	340	10	2.4
		15_6	364590	3082380	1.2	1.30E+00	46	350	13	2.7

Table 5-18
Summary of NO_2 Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
		15_7	364590	3082380	1.2	-2.41E-01	38	329	11	2.4
		15_22[a]	NA	NA	1.2	NA	NA	NA	NA	NA
		15_23[a]	NA	NA	NA	NA	NA	NA	NA	NA
		15_34[a]	NA	NA	NA	NA	NA	NA	NA	NA
		15_36[a]	NA	NA	NA	NA	NA	NA	NA	NA
		15_38[a]	NA	NA	NA	NA	NA	NA	NA	NA
		15_41[a]	NA	NA	NA	NA	NA	NA	NA	NA
		15_43	364590	3082380	1.2	-2.34E-02	6.1	489	16	1.2
		15_55	364590	3082380	1.2	4.90E-02	41	315	15	2.1
		15_78	364590	3082380	1.2	2.39E-01	38	339	0	1.8
		15_103	364590	3082380	1.2	3.18E-01	38	339	17	1.8
1010056	PASCO COUNTY	16_1	347110	3139210	15	7.96E+00	84	394	25	1.4
		16_2	347110	3139210	15	8.49E+00	84	394	25	1.4
		16_3	347110	3139210	15	7.54E+00	84	394	25	1.4
1050233	TAMPA ELECTRIC COMPANY	17_1	402440	3067360	42	1.15E+01	46	444	23	5.8
		17_3	402440	3067360	42	1.02E-02	23	464	15	1.1
		17_4[a]	NA	NA	NA	NA	NA	NA	NA	NA
		17_7[a]	NA	NA	NA	NA	NA	NA	NA	NA
		17_9	402440	3067360	42	6.62E-01	35	876	18	8.8
		17_10	402440	3067360	42	7.20E-01	35	876	18	8.8
0570442	GULF MARINE REPAIR CORPORATION	18_3[a]	360300	3091900	NA	1.32E+00	0	255	0	0
0571290	TARMAC AMERICA, LLC (TITAN AMERICA BUS.)	19_4[a]	359940	3087810	NA	1.17E+00	0	300	0	0
		19_8[a]	359940	3087810	NA	8.15E-01	0	255	0	0
		19_9[a]	359940	3087810	NA	1.17E-01	0	255	0	0
		19_10[a]	359940	3087810	NA	2.20E-01	0	255	0	0
		19_11[a]	NA	NA	NA	NA	NA	NA	NA	NA
		19_12[a]	NA	NA	NA	NA	NA	NA	NA	NA
0570286	TAMPA BAY SHIPBUILDING & REPAIR COMPANY	20_5[a]	358000	3089000	NA	8.40E-01	3.0	255	45	0.15
0570025	TRADEMARK NITROGEN CORP	21_1	367300	3092600	7.6	1.67E+00	15	450	33	0.52
0570119	GULF COAST METALS, INC.	22_5	364700	3093600	6.2	2.53E-02	15	365	20	1.2
0570119	GULF COAST METALS, INC.	22_6	364700	3093600	6.2	3.83E-02	15	365	20	1.2

Table 5-18
Summary of NO_2 Increment Modeling Inventory
EnviroFocus Technologies, LLC
Tampa, Florida

FACILITY ID	COMPANY NAME	SourceID	Coordinates		Elevation	Emission Rate	Stack Height	Exit Temperature	Velocity	Diameter
			UTMx (m)	UTMy (m)	(m)	(g/s)	(m)	(K)	(m/s)	(m)
0570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	23_2	364000	3098100	20	-1.71E-02	10	436	19	1.4
0570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	23_101[a]	NA	NA	NA	NA	NA	NA	NA	NA
0570223	APAC-SOUTHEAST, INC CENTRAL FLORIDA DIV.	23_104[a]	NA	NA	NA	NA	NA	NA	NA	NA
0570321	MANTUA MANUFACTURING CO.	24_2	364700	3092500	3.8	6.18E-04	6.1	1033	4	0.23

Note:
[a] Not modeled due to incomplete source information.

Table 5-19
Summary of Full Impact Analysis: Lead
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Averaging Period	Year	Quarter	Receptor		Maximum Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Violation of NAAQS?
				X	Y					
Lead	Quarterly	2001	1	364160	3093891	0.63	0.47	1.10	1.5	No
		2001	2	364160	3093891	0.56	0.47	1.03	1.5	No
		2001	3	364160	3093891	0.66	0.47	1.13	1.5	No
		2001	4	364023	3093704	0.74	0.47	1.21	1.5	No
		2002	1	364160	3093891	0.62	0.47	1.09	1.5	No
		2002	2	364160	3093891	0.62	0.47	1.09	1.5	No
		2002	3	364160	3093891	0.73	0.47	1.20	1.5	No
		2002	4	364085	3093693	0.69	0.47	1.16	1.5	No
		2003	1	364160	3093891	0.77	0.47	1.24	1.5	No
		2003	2	364160	3093891	0.78	0.47	1.25	1.5	No
		2003	3	364160	3093891	0.81	0.47	1.28	1.5	No
		2003	4	364035	3093693	0.75	0.47	1.22	1.5	No
		2004	1	364160	3093891	0.67	0.47	1.14	1.5	No
		2004	2	364160	3093891	0.68	0.47	1.15	1.5	No
		2004	3	364160	3093891	0.78	0.47	1.25	1.5	No
		2004	4	364023	3093704	0.67	0.47	1.14	1.5	No
		2005	1	364160	3093891	0.74	0.47	1.21	1.5	No
		2005	2	364160	3093891	0.60	0.47	1.07	1.5	No
		2005	3	364160	3093891	0.61	0.47	1.08	1.5	No
		2005	4	364023	3093704	0.78	0.47	1.25	1.5	No

Table 5-20
Summary of Full Impact Analysis: NO_2
EnviroFocus Technologies, LLC
Tampa, Florida

Pollutant	Averaging Period	Year	Receptor		Maximum Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Violation of NAAQS?
			X	Y					
NO_2	Annual	2001	364023	3093704	17.6	13.2	30.77	100	No
		2002	364023	3093704	16.7	13.2	29.93	100	No
		2003	364035	3093893	17.4	13.2	30.57	100	No
		2004	364023	3093704	16.8	13.2	30.02	100	No
		2005	364023	3093704	20.0	13.2	33.20	100	No

Pollutant	Averaging Period	Year	Receptor		Maximum Concentration (mg/m^3)	PSD Class II Increment	Exceed Class II Increment?
			X	Y			
NO_2	Annual	2001	364023	3093704	13.0	25	No
		2002	364035	3093893	11.8	25	No
		2003	364035	3093893	13.5	25	No
		2004	364023	3093704	11.7	25	No
		2005	364023	3093704	15.2	25	No

Notes:
[a] Modeled NO_2 concentrations was converted from NOx assuming a NO_2 to NO_X annual ratio of 0.75

Table 5-21
Summary of Full Impact Analysis: PM_{10}
EnviroFocus Technologies, LLC
Tampa, Florida

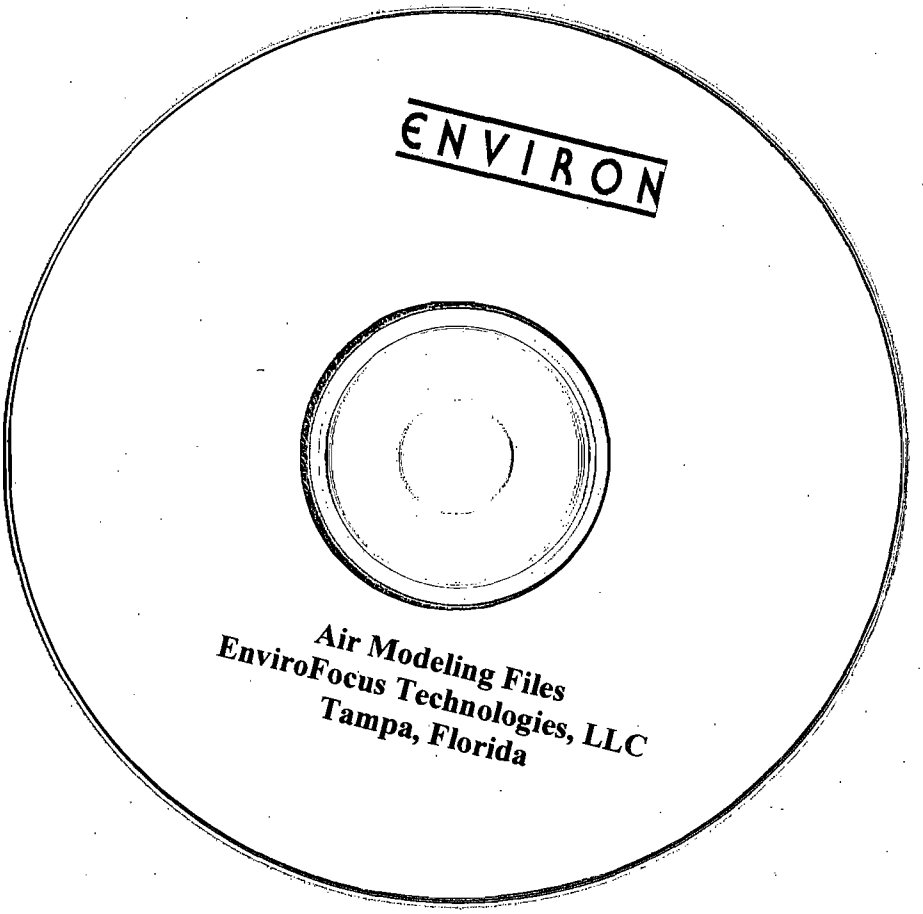
Pollutant	Averaging Period	Year	Receptor		Maximum Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	Violation of NAAQS?
			X	Y					
PM_{10}	Annual	2001	364735	3092593	10.5	27	37.5	50	No
		2002	364635	3092593	9.1	27	36.1	50	No
		2003	364735	3092593	10.4	27	37.4	50	No
		2004	364735	3092593	10.7	27	37.7	50	No
		2005	364735	3092593	11.3	27	38.3	50	No
	24-hour [a]	2001-2005	364185	3093893	32.2	76	108.2	150	No

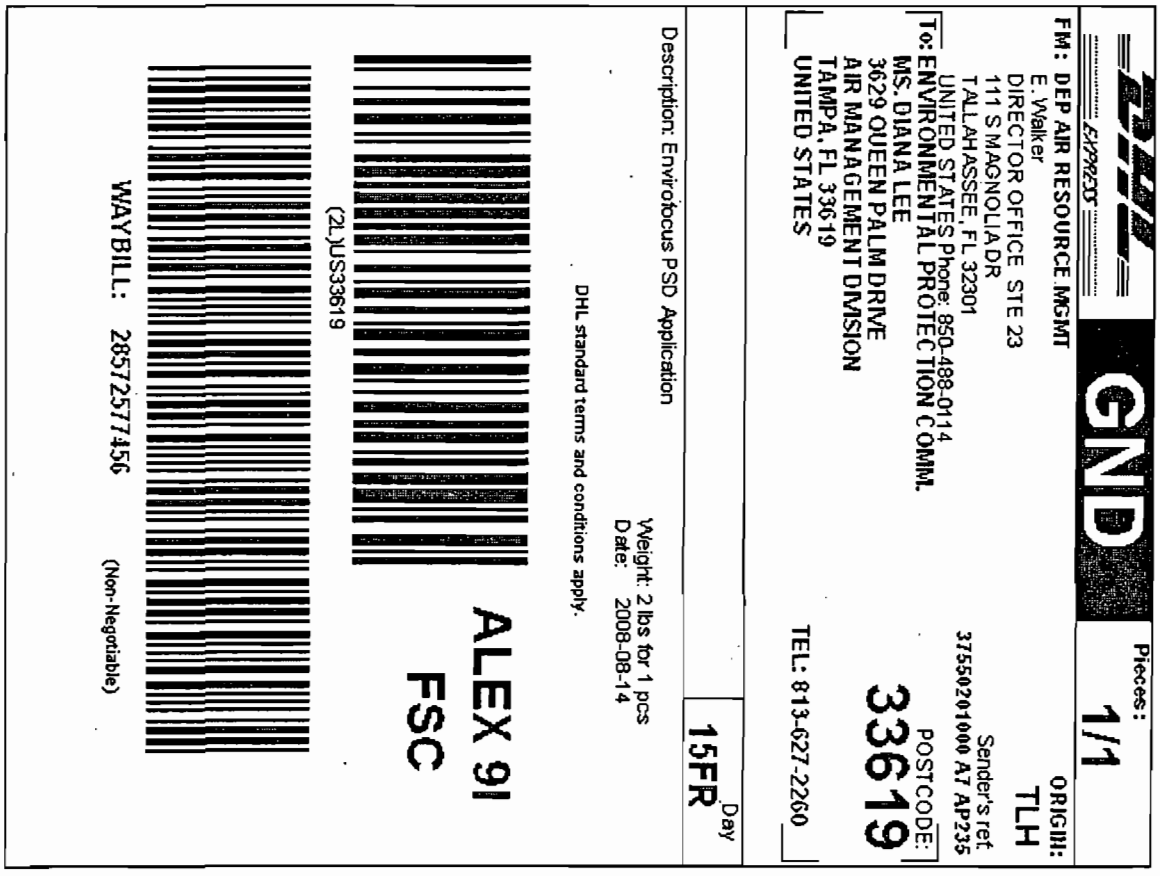
Pollutant	Averaging Period	Year	Receptor		Maximum Concentration	PSD Class II Increment	Exceed Class II Increment?
			X	Y			
PM_{10}	Annual	2001	364735	3092593	9.8	17	No
		2002	364635	3092593	8.3	17	No
		2003	364735	3092593	9.5	17	No
		2004	364735	3092593	9.8	17	No
		2005	364735	3092593	10.7	17	No
	24-hour [b]	2001	364035	3093693	20.3	30	No
		2002	-	-	<20[c]	30	No
		2003	364185	3093893	23.6	30	No
		2004	-	-	<20[c]	30	No
		2005	364185	3093893	22.7	30	No

Notes:
[a] PM10 24-hour concentrations are the highest 6th highest during the period of 2001 to 2005, excluding the days and receptors that are not significant.
[b] PM10 24-hour concentrations are the highest second highest each year, excluding the days and receptors that are not significant.
[c] Modeling output files indicate that no receptor has more than one incremental impact above 20 ug/m3, excluding the days and receptors that are not significant.

Table 5-22
Lead Monitoring Results
Gopher Resource Corporation - Eagan, MN

QUARTER	YEAR	AMBIENT LEAD CONCENTRATIONS (ug/m3)	
		SITE 1	SITE 2
3RD QUARTER	2005	0.39	0.19
4TH QUARTER	2005	0.17	0.11
1ST QUARTER	2006	0.15	0.12
2ND QUARTER	2006	0.12	0.25
3RD QUARTER	2006	0.31	0.22
4TH QUARTER	2006	0.30	0.15
1ST QUARTER	2007	0.29	0.23
2ND QUARTER	2007	0.30	0.38
3RD QUARTER	2007	0.38	0.17
4TH QUARTER	2007	0.46	0.05
1ST QUARTER	2008	0.54	0.08
2ND QUARTER	2008	0.26	0.45
	3-YEAR AVERAGE:	**0.31**	**0.20**


ENVIRON
Air Modeling Files
EnviroFocus Technologies, LLC
Tampa, Florida



Please fold or cut in half

DO NOT PHOTOCOPY

Using a photocopy could delay the delivery of your package and will result in additional shipping charge

SENDER'S RECEIPT
Waybill #: 28572577456

To(Company):
Environmental Protection Comm.
Air Management Division
3629 Queen Palm Drive

Tampa, FL 33619
UNITED STATES

Attention To: Ms. Diana Lee
Phone#: 813-627-2260

Sent By: E. Walker
Phone#: 850-488-0114

Rate Estimate: 3.38
Protection: Not Required
Description: Envirofocus PSD Application

Weight (lbs.): 2
Dimensions: 0 x 0 x 0

Ship Ref: 37550201000 A7 AP235
Service Level: Ground (Est. delivery in 1 business day(s))

Special Svc:

Date Printed: 8/13/2008
Bill Shipment To: Sender
Bill To Acct: 778941286

DHL Signature (optional) _____ Route _____ Date _____ Time _____

For Tracking, please go to www.dhl-usa.com or call 1-800-225-5345

Thank you for shipping with DHL

Create new shipment ▶ View pending shipments **Print waybill**