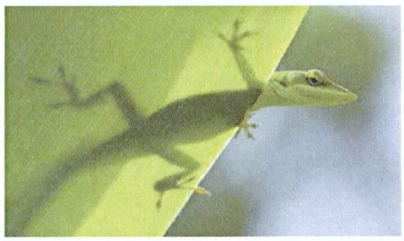
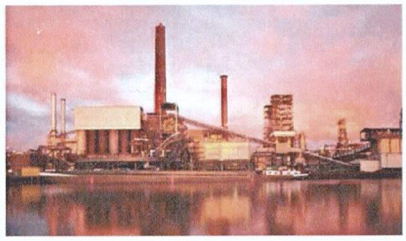
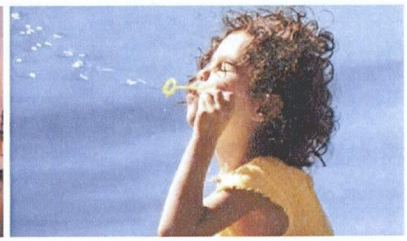




Permit Application for Sulfur Dioxide Reallocation and Additional Ventilation

Prepared for:
EnviroFocus Technologies, LLC
Tampa, Florida

Prepared by:
ENVIRON International Corporation
Asheville, North Carolina

Date:
July 2012

Project Number:
07-15422D

ENVIRON

Contents

1 Introduction

In August 2008 EnviroFocus Technologies, LLC (EFT) submitted a PSD permit application to the Florida Department of Environmental Protection (DEP) for an expansion of their battery recycling plant in Tampa, Florida. DEP issued a PSD Permit (Air Permit No. PSD-FL-404, DEP File No. 0570057-020-AC) on October 22, 2009 authorizing the expansion. EFT is currently in the process of constructing the modifications authorized by the PSD permit and has determined the need for two changes to the PSD permit. The first change is a reallocation of some of the permitted sulfur dioxide emissions from the process stack to the hygiene stack. No increase in overall sulfur dioxide emissions is being requested. The second change is the addition of new baghouse capacity to increase the ventilation of the process enclosure. This additional air flow is needed to reduce building heat load and ensure compliance with the enclosure ventilation requirements of the Secondary Lead NESHAP. Additional details describing the proposed changes and their regulatory implications are presented in the following sections. The applicable state-approved application forms were completed for all emission units involved in this permitting action and are presented in Appendix A.

2 Sulfur Dioxide Reallocation

The PSD permit application submitted by EFT in 2008 proposed a plant-wide limit on sulfur dioxide emissions in order to avoid PSD applicability for that pollutant. The major portion of the sulfur dioxide emissions was attributed to the process stack, which exhausts the reverb furnace (EU ID No. 023), blast furnace (EU ID No. 001), and feed dryer (EU ID No. 022). A smaller portion was allotted to the hygiene stack. The emissions from the hygiene stack, which serves the furnace tapping, furnace charging, and lead refining emissions (EU ID No. 011) were estimated based on the sulfur dioxide produced by the introduction of sulfur-containing materials into the refining kettles. The remaining allowable sulfur dioxide emissions under the plant-wide PSD avoidance limit were allotted to the process stack, providing ample compliance margin for the sulfur dioxide emissions from the furnaces using a reasonably well design scrubber.

However, during the construction of the expansion project it was noted that a small amount of sulfur dioxide escapes the direct furnace exhausts, which go to the process stack, and is captured by the tapping and charging hooding, which is routed to the hygiene stack. In order to account for this unanticipated distribution of sulfur dioxide emissions, EFT is requesting that the PSD-avoidance limits on the process stack and hygiene stack be revised.

2.1 Revised Hygiene Stack Emissions Estimate

As shown in the 2008 PSD application, the uncontrolled sulfur dioxide emissions from the reverb furnace and blast furnace were estimated based on an emission factor of 80 pounds of sulfur dioxide per ton of lead produced. The maximum process rates for the two furnaces are 40 ton/hr and 7.5 ton/hr, respectively. The desulfurization process employed at the facility reduces the potential sulfur dioxide emissions by approximately 60 percent. Therefore, the maximum sulfur dioxide produced in the furnaces and can be estimated as follows:

SO2 Emissions (before scrubber) = 80 lb/ton x (40 + 7.5 ton/hr) x (1 – 60%) = 1520 lb/hr

It has been determined, based on observations made at the plant, that as much as 2% of these emissions may escape the direct evacuation of gases from the furnace and be captured in by the fugitive (hygiene) hooding. Therefore, the additional sulfur dioxide emissions that may be emitted from the hygiene stack are calculated as shown:

SO2 Emissions (furnace fugitives) = 1520 lb/hr x 2% = 30.4 lb/hr

The sulfur dioxide from the use of sulfur-containing materials in the refining kettles has already been estimated (and included as the current PSD permit limit on the hygiene stack) as 7.94 lb/hr (Condition C.9). Therefore, EFT requests that this limit be increased to the sum of these two values shown below:

New SO2 Emissions Limit (hygiene stack) = 30.4 lb/hr + 7.94 lb/hr = **38.34 lb/hr**

2.2 Revised Process Stack Emissions Estimate

In order to maintain compliance with the plant-wide PSD avoidance limit, EFT proposes to reduce the sulfur dioxide limit on the process stack, which is currently 194.3 lb/hr (Condition

B.15), by the same amount that was added to the hygiene stack. Therefore, the new sulfur dioxide limit for the process stack is calculated as follows:

New SO2 Emissions Limit (process stack) = 194.3 lb/hr – 30.4 lb/hr = **163.9 lb/hr**

The sulfur dioxide scrubber on the furnace emissions is expected to be approximately 90 percent efficient resulting in an anticipated sulfur dioxide emission rate of 152 pounds per hour, so this reduced limit on the process stack provides ample margin of compliance.

3 Additional Ventilation

In addition to the sulfur dioxide emissions reallocation, EFT has determined that additional ventilation capacity will be needed on the building housing the furnaces in order to meet the enclosure requirements of the Secondary Lead NESHAP. The 2008 PSD permit application proposed the installation of a 195,000 cfm Torit cartridge collector to provide the general building ventilation (EU ID No. 15). During construction of the expansion, it was determined that additional air flow is needed. EFT is proposing to install a new 160,000 cfm cartridge collector to increase the negative pressure within the building. Additionally, to provide additional control of lead emissions, EFT will include a high efficiency particulate air (HEPA) filter downstream of the cartridge collector.

3.1 BACT Considerations

As noted in the PSD permit, Best Available Control Technology (BACT) for building ventilation was determined to be 0.005 gr/dscf for particulate matter emissions and 0.05 mg/dscm (0.000022 gr/dscf) for lead emissions (Conditions G.6 & G.7). EFT proposes to maintain these BACT limits for the additional air flow of the new cartridge collector. The particulate matter emissions can therefore be estimated as follows:

PM Emissions (Torit Stack 2) = 0.005 gr/dscf x 160,000 dscfm x 60 min/hr / 7000 gr/lb

= **6.86 lb/hr**

The lead emissions can be determined in a similar fashion using its BACT limit:

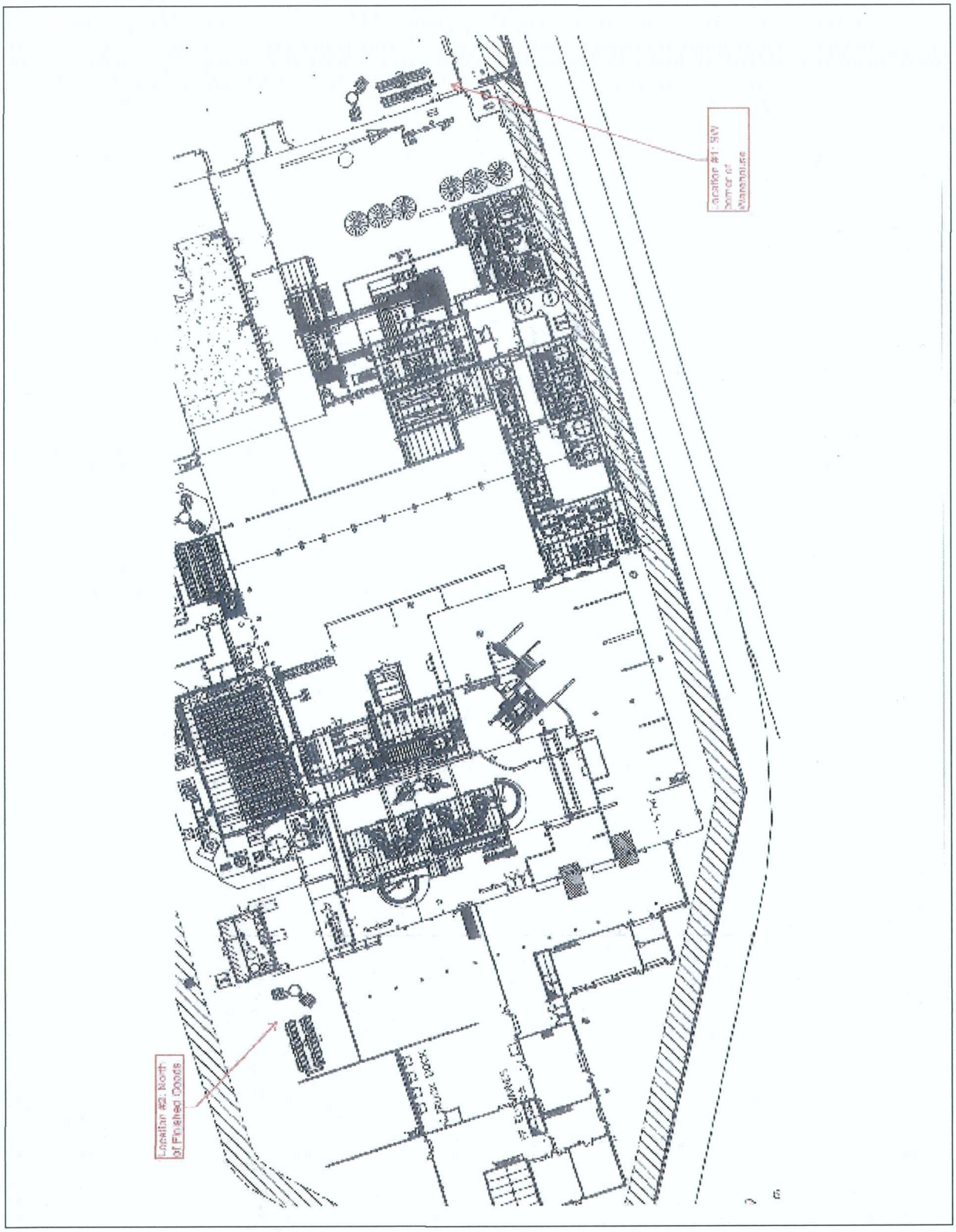
Pb Emissions (Torit Stack 2) = 0.000022 gr/dscf x 160,000 dscfm x 60 min/hr / 7000 gr/lb

= **0.030 lb/hr**

3.2 Modeling Considerations

The 2008 PSD permit application included modeling of particulate matter and lead emissions in order to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS). Because the new Torit stack will emit particulate matter and lead, the modeling that was submitted with the 2008 PSD permit application isbeing revised. The revised modeling report, which will become Appendix B of this document, will be submitted within the next few weeks. The location of the new Torit collector and its stack have not yet been determined, but they are currently expected to be installed at one of two locations as shown in the figure on the following page.

Figure 1. Proposed Locations for New Cartridge Collector and Stack



Appendix A

Application Forms

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 an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- 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, or renewal Title V air operation permit.

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... **1901 N. 66th Street** Street Address or Other Locator: 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** Street Address: **685 Yankee Doodle Road** City: **Eagan** State: **MN** Zip Code: **55121**
3. Application Contact Telephone Numbers... Telephone: **(651) 405 - 2213** ext. Fax: ( ) -
4. Application Contact E-mail Address: **steve.yates@gopherresource.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 5-1-12	3. PSD Number (if applicable):
2. Project Number(s): 0570057-027-AC	4. Siting Number (if applicable):

PSD 404B

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being 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

The purpose of this application is to reallocate SO2 emissions and construct additional enclosure ventilation.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
022	Feed Dryer	ACIA	$7500
023	Reverb Furnace	ACIA	$7500
001	Blast Furnace	ACIA	$7500
011	Refining Kettles and Furnace Fugitives	ACIA	$7500
024A	Building Ventilation A	ACIA	$7500
024B	Building Ventilation B	ACIA	$7500

Application Processing Fee

Check one: [x] Attached - Amount: $ 7500 [ ] 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 E-mail Address: **john.tapper@gopherresource.com**

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.

Signature

Date 7/30/12

APPLICATION INFORMATION

Application Responsible Official Certification

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

1. Application Responsible Official Name: **NA**
2. 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 or CAIR 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 E-mail Address:

APPLICATION INFORMATION

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: **Frank Burbach**
   Registration Number:
2. Professional Engineer Mailing Address...
   Organization/Firm: **ENVIRON International Corporation**
   Street Address: **1 Page Avenue**
   City: **Asheville** State: **NC** Zip Code: **28801**
3. Professional Engineer Telephone Numbers...
   Telephone: (**828**) **254** - **0015** ext. Fax: (**828**) **254** - **0501**
4. Professional Engineer E-mail Address: **fburbach@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 7-31-12
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **364.1** North (km) **3093.7**		2. 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: **Angela Fogerty**
2. Facility Contact Mailing Address... Organization/Firm: **EnviroFocus Technologies, LLC** Street Address: **6505 Jewel Avenue** City: **Tampa** State: **Florida** Zip Code: **33619**
3. Facility Contact Telephone Numbers: Telephone: (**813**)**744 - 5006** ext. Fax: (**813**) **620 - 3505**
4. Facility Contact E-mail Address: **angela.fogerty@gopherresource.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: **6505 Jewel Avenue** 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 E-mail Address: **john.tapper@gopherresource.com**

FACILITY INFORMATION

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:	

FACILITY INFORMATION

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	**B**	**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'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:

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)
   [ ] Attached, Document ID:_____ [x] Previously Submitted, Date: **9/2008**

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: **See Text**

3. Rule Applicability Analysis:
   [x] Attached, Document ID: **See Text**

4. List of Exempt Emissions Units:
   [ ] Attached, Document ID:_____ [x] Not Applicable (no exempt units at facility)

5. Fugitive Emissions Identification:
   [ ] Attached, Document ID:_____ [x] Not Applicable

6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   [x] Attached, Document ID:_____ [ ] Not Applicable

7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   [x] Attached, Document ID: **Appendix B** [ ] Not Applicable

8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   [ ] Attached, Document ID:_____ [ ] Not Applicable

9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   [ ] Attached, Document ID:_____ [ ] Not Applicable

10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    [ ] Attached, Document ID:_____ [ ] Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
   ☐ 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 Onsite 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

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Not Applicable (not a CAIR source)

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

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:

4. Emissions Unit Status Code: **C**	5. Commence Construction Date: **10/2009**	6. Initial Startup Date: **Unknown**	7. Emissions Unit Major Group SIC Code: **33**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

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.

Emissions Unit Control Equipment/Method:

1. Control Equipment/Method 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: **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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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 Subsection F2 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.013** lb/hour **0.058** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.3 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 Subsection F2 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: **0.3 mg/dscm**	4. Equivalent Allowable Emissions: **0.013** lb/hour **0.058** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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/mm Btu** 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 Subsection F2 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/mm Btu**	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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **0.084** 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/mm Btu** 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 Subsection F2 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: **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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **0.17** lb/hour **0.72** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.0165 lb/mm Btu** 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 Subsection F2 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: **163.9 lb/hr**	4. Equivalent Allowable Emissions: **163.9** lb/hour **717.9** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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/mm Btu** 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 Subsection F2 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 Subsection G 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: **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 Subsection H 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)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **8/2008**

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: _____ ☒ Previously Submitted, Date **8/2008**

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: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 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

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)

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

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

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

2. Description of Emissions Unit Addressed in this Section:

Reverb Furnace

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code: **C**	5. Commence Construction Date: **10/2008**	6. Initial Startup Date: **7/2009**	7. Emissions Unit Major Group SIC Code: **33**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

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.

Emissions Unit Control Equipment/Method:

1. Control Equipment/Method 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 = 265 gal/hr

2. Control Device or Method Code: **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 Furniture**		
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 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.71** lb/hour **3.13** 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 Subsection F2 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: **0.71** lb/hour **3.13** 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: **3.14** lb/hour **13.75** 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: **4.28** lb/hour **18.75** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.019** lb/hour **0.082** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.3 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 Subsection F2 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: **0.3 mg/dscm**	4. Equivalent Allowable Emissions: **0.019** lb/hour **0.082** 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: **2mg/dscm**	4. Equivalent Allowable Emissions: **0.125** lb/hour **0.55** 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: **1.43** lb/hour **6.25** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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 form the Process Stack.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 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: **0.60 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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/mm/Btu** 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 Subsection F2 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **96 (desulfurization & scrubber)**
3. Potential Emissions: **128.0** lb/hour **560.6** 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 Subsection F2 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: **163.9 lb/hr**	4. Equivalent Allowable Emissions: **163.9** lb/hour **717.9** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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 Subsection F2 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 Subsection G 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: **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: [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: **40 CFR 60 Subpart L**	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H 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)

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

1. Parameter Code: **TEMP**	2. Pollutant(s): **CO & VOC**
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date:	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)
   ☐ Attached, Document ID: _____ [x] Previously Submitted, Date **8/2008**_____

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_____ [x] Previously Submitted, Date **8/2008**_____

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: _____ [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 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

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)

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

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

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

3. Description of Emissions Unit Addressed in this Section:

Blast Furnace

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

4. Emissions Unit Status Code: **A**	5. Commence Construction Date: **10/2009**	6. Initial Startup Date: **Unknown**	7. Emissions Unit Major Group SIC Code: **33**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

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.

Emissions Unit Control Equipment/Method:

1. Control Equipment/Method 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 afcm
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: **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: **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 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:		

EMISSIONS UNIT INFORMATION
Section 3 of 6

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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.71** lb/hour **3.13** 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 Subsection F2 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: **0.71** lb/hour **3.13** 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:
3. Allowable Emissions and Units: **0.022 gr/dscf**	4. Equivalent Allowable Emissions: **3.14** lb/hour **13.75** 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:
3. Allowable Emissions and Units: **0.03 gr/dscf**	4. Equivalent Allowable Emissions: **4.28** lb/hour **18.75** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.019** lb/hour **0.083** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.3 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 Subsection F2 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: **0.3 mg/dscm**	4. Equivalent Allowable Emissions: **0.019** lb/hour **0.083** 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: **0.13** lb/hour **0.55** 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: **1.43** lb/hour **6.25** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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:	
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 Subsection F2 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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 Subsection F2 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **96 (desulfurization & scrubber)**
3. Potential Emissions: **24.0** lb/hour **105.1** tons/year	4. Synthetically Limited? [X] 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 Subsection F2 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: **163.9 lb/hr**	4. Equivalent Allowable Emissions: **163.9** lb/hour **717.9** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.40** lb/hour **6.15** tons/year	4. Synthetically Limited? [x] 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 Subsection F2 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: **1.40** 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 Subsection G 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**	
4. 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 Subsection H 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 XO@ 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)

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

1. Parameter Code: **TEMP**	2. Pollutant(s): **CO & VOC**
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: **TBD** Model Number: **TBD**	Serial Number:
5. Installation Date:	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)
   ☐ Attached, Document ID:_____ [x] Previously Submitted, Date **8/2008**

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: _____ [x] Previously Submitted, Date **8/2008**

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: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 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

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:

4. Emissions Unit Status Code: **C**	5. Commence Construction Date: **10/2009**	6. Initial Startup Date: **Unknown**	7. Emissions Unit Major Group SIC Code: **33**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

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.

Emissions Unit Control Equipment/Method:

1. Control Equipment/Method 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: **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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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 Subsection F2 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.05** lb/hour **0.21** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.2 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 Subsection F2 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: **0.2 mg/dscm**	4. Equivalent Allowable Emissions: **0.05** lb/hour **0.21** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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 Subsection F2 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **38.34** lb/hour **167.93** 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 + 2% furnace emissions** 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 Subsection F2 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: **38.34 lb/hr**	4. Equivalent Allowable Emissions: **38.34** lb/hour **167.93** 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 Subsection G 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	
5. Method of Compliance: **EPA Reference Method 9**	
6. Visible Emissions Comment: **Rule 62-296.603.FAC**	

Visible Emissions Limitation: Visible Emissions Limitation __ of ____

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 Subsection H 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)
   ☐ Attached, Document ID: _____ [x] Previously Submitted, Date **8/2008**

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: _____ [x] Previously Submitted, Date **8/2008**

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 (Rules 62-212.400(4)(d) and 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

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 1

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**10/2009**	**Unknown**	**33**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

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.

Emissions Unit Control Equipment/Method:

1. Control Equipment/Method 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: **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 1**	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: **97** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

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? [x] 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 Subsection F2 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: **8.36** lb/hour **36.60** 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: **50.14** lb/hour **219.63**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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.037** lb/hour **0.160** tons/year	4. Synthetically Limited? [x] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 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 Subsection F2 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: **0.05 mg/dscm**	4. Equivalent Allowable Emissions: **0.037** lb/hour **0.160** 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 Subsection G 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: 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 Subsection H 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:	[x] 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)
   ☐ Attached, Document ID: _____ [x] Previously Submitted, Date **8/2008**

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: _____ [x] Previously Submitted, Date **8/2008**

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:_____ [x] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 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

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 2

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
C	**8/2012**	**10/2012**	**33**

8. Federal Program Applicability: (Check all that apply)

☐ Acid Rain Unit

☐ CAIR Unit

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 followed by a HEPA filter.

Emissions Unit Control Equipment/Method:

1. Control Equipment/Method Description:

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

Torit Cartridge Collector Specifications:

160,000 acfm
160,000 dscfm
Ambient Temperature
Negligible Moisture

2 Modules
Pulse-jet cleaning system

2. Control Device or Method Code: **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**	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: **100** feet	7. Exit Diameter: **8.0** feet
8. Exit Temperature: **Ambient** °F	9. Actual Volumetric Flow Rate: **160,000** acfm	10. Water Vapor: **Negligible** %
11. Maximum Dry Standard Flow Rate: **160,000** 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: **Stack height may change depending upon modeling results.**		

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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PM/PM10/PM2.5**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **6.86** lb/hour **30.03** tons/year	4. Synthetically Limited? [x] 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 Subsection F2 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: **6.86** lb/hour **30.03** 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: **41.14** lb/hour **180.21** 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.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **PB**	2. Total Percent Efficiency of Control: **99.9**
3. Potential Emissions: **0.030** lb/hour **0.132** tons/year	4. Synthetically Limited? [x] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 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 Subsection F2 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: **0.05 mg/dscm**	4. Equivalent Allowable Emissions: **0.30** lb/hour **0.132** 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: **1.21** lb/hour **5.29** 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 Subsection G 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: 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 Subsection H if this emissions unit is or would be subject to continuous monitoring.

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

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)
   ☐ Attached, Document ID: _____ [x] Previously Submitted, Date **8/2008**

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: **See Text** ☐ 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: **See Text** [ ] Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 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

Additional Requirements Comment

Appendix B

Modeling Results