

Revised Application for Renewal of Title V Air Operation Permit Applications Permit No. 0570261-006-AV

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DIVISION OF AIR
RESOURCE MANAGEMENT

Client: Hillsborough County

Date: December 2011





1715 North Westshore Boulevard, Suite 87: Tampa, Florida 33607 tel: +1 813 281-2900 fax: +1 813 288-8787

December 20, 2011

Mr. Scott M. Sheplak, P.E.
DEP - Division of Air Resource Management Office of Permitting and Compliance
Key Industries - Minerals & Metals
Mail Station #5505
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject:

Revised Application for Renewal of Title V Air Operation Permit Applications

Permit No. 0570261-006-AV

Hillsborough County Resource Recovery Facility (HCRRF)

Dear Mr. Sheplak:

Camp Dresser & McKee Inc. (CDM) on behalf of the Hillsborough County Public Utilities Department (County) is pleased to submit the revised DEP Application Form 62-210.900(1) in response to the request for additional information (RAI), dated September 22, 2011 for Title V permit renewal. The revised application contains all the information requested as follows:

- Completed emissions unit subsection III. (pages 15-28) of the DEP Form 62-210.900(1) for the existing emissions units at the HCRRF;
- Specific facility-wide additional information from subsection I.C. (page 13) of DEP Form 62-210.900(1):
 - a. List of Insignificant Activities;
 - b. Identification of Applicable Requirements; and
 - c. Compliance Report and Plan.
- In addition to the above, the revised Title V application includes two new RICE emission units (diesel driven fire pump at the HCRRF and four (4) emergency diesel-fired generators at the adjacent Falkenburg AWWTP) due to the recently promulgated NESHAP standards.

Please do not hesitate to contact me at (813) 281-2900 if you have any questions or need additional information.

Sincerely,

Paul Hauck, P.E. Project Manager

Camp Dresser & McKee Inc.

cc: Patricia Berry, Interim Manger, Solid Waste Management Group, Nate Johnson, Disposal Process Management Section Manager

> Dan Strobridge, CDM Hari Kapalavai, CDM

Jason Gorrie, Covanta Hillsborough Inc.

File

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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.

1. Facility Owner/Company Name: Hillsborough County

To ensure accuracy, please see form instructions.

Identification of Facility

2.	Site Name: Hillsborough County Resource I	Recovery Facility			
3.	Facility Identification Number: 0570261				
4.	Facility Location				
	Street Address or Other Locator: 350 N. Fall	kenburg Road			
	City: Tampa County: H	illsborough Zip Code: 33619			
5.	Relocatable Facility?	6. Existing Title V Permitted Facility?			
	Yes X No.	X Yes No			
Ap	oplication Contact				
1.	Application Contact Name: Paul Hauck P.E	•			
2.	Application Contact Mailing Address				
	Organization/Firm: CDM				
	Street Address: 1715 N. Westshore Boulevard, Suite 875				
	City: Tampa Sta	te: Florida Zip Code: 33607			
3.	Application Contact Telephone Numbers				
	Telephone: (813) 262 - 8860 ext. Fax: (813) 288 - 8787				
4.	. Application Contact E-mail Address: hauckpl@cdm.com				
Ap	Application Processing Information (DEP Use)				
1.	Date of Receipt of Application:	3. PSD Number (if applicable):			

2. Project Number(s):

4. Siting Number (if applicable):

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)
Air Construction Permit
☐ 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.
X Air construction permit and Title V permit renewal, incorporating the proposed project.
Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:
I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is a minor revision to administratively combine Title V operations renewal (File No. 0570261-012-AV) and amend Permit Conditions pursuant to meeting conducted at FDEP office on April 6, 2011. The applicant is requesting one (1) year extension to install continuous mercury (Hg) monitor on Combustion Unit No. 4 under Permit No. 0570261-010-AC, PSD-FL-369B. The applicant is also requesting relief from 95% availability requirement for Hg CEM.

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001	Municipal Waste Combustor – Unit 1	AV05	\$0
002	Municipal Waste Combustor – Unit 2	AV05	\$0
003	Municipal Waste Combustor – Unit 3	AV05	\$0
100	Ash Building and Handling System with Baghouse	AV05	\$0
101	Lime Storage Silo	AV05	\$0
102	Activated Carbon Storage Silo	AV05	\$0
107	Municipal Waste Combustor – Unit 4	AV05	\$0
108	Pebble Lime Storage Silo – Unit 4	AV05	\$0
110	Activated Carbon Storage Silo – Unit 4	AV05	\$0
113	Diesel Driven Fire Pump	AV05	\$0
114	Diesel Emergency Generator No. 1 at Falkenburg Advanced Wastewater Treatment Plant	AV05	\$0
115	Diesel Emergency Generator Nos. 2, 3 and 4 at Falkenburg Advanced Wastewater Treatment Plant	AV05	\$0

DEP Form No. 62-210.900(1) - Form

Owner/Authorized Representative Statement

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

- 1. Owner/Authorized Representative Name: Patricia V. Berry, Interim Manager, Solid Waste Management Group
- 2. Owner/Authorized Representative Mailing Address...

Organization/Firm: Hillsborough County Public Utilities Department

Street Address: 925 Twiggs Street

City: Tampa

State: Florida

Zip Code: 33602

3. Owner/Authorized Representative Telephone Numbers...

Telephone: (813) 272 - 5977

ext. 43338 Fax: (813)272 -6224

12/19/11

- 4. Owner/Authorized Representative E-mail Address: berryp@hillsboroughcounty.org
- 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.

Jam V. Sen

DEP Form No. 62-210.900(1) - Form

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."

	Application Responsible Official Name: Patricia V. Berry, Interim Manager, Solid Waste anagement Group				
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: Hillsborough County Public Utilities Department				
	Street Address: 925 Twiggs Street				
	City: Tampa State: Florida Zip Code: 33602				
4.	Application Responsible Official Telephone Numbers Telephone: (813) 272 -5977 ext. 43338 Fax: (813) 272 -6224				
5.	Application Responsible Official E-mail Address: berryp@hillsboroughcounty.org				

DEP Form No. 62-210.900(1) – Form

- 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

12/19/11

DEP Form No. 62-210.900(1) - Form

Professional Engineer Certification

_=	
1.	Professional Engineer Name: Paul Hauck, P.E.
	Registration Number: 50892
2.	Professional Engineer Mailing Address
	Organization/Firm: CDM
	Street Address: 1715 N. Westshore Boulevard, Suite 875
	City: Tampa State: Florida Zip Code: 33607
3.	Professional Engineer Telephone Numbers
	Telephone: (813) 262 - 8860 ext. Fax: (813) 288 - 8787
4.	Professional Engineer E-mail Address: hauckpl@cdm.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.
	aul J. Jaudi 12-20-11
	Signature Date
	(seal)

* Attach any exception to certification statement.

DEP Form No. 62-210.900(1) - Form

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates Zone East (km) 369.38 North (km) 3092.69			2.	Facility Latitude/Lo Latitude (DD/MM/ Longitude (DD/MM	SS) 27/57/16
3. Governmental Facility Code: Code: A		5.	Facility Major Group SIC Code: 49	6. Facility SIC(s): 4953	
7.	Facility Comment:				

Facility Contact

- 1. Facility Contact Name: Glenn Hoag
- 2. Facility Contact Mailing Address...

Organization/Firm: Covanta Hillsborough Inc. Street Address: 350 N. Falkenburg Road

City: Tampa State: Florida Zip Code: 33619

3. Facility Contact Telephone Numbers:

Telephone: (813) 684 - 5688 ext. 3013

Fax: () -

4. Facility Contact E-mail Address: ghoag@covantaenergy.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: Glenn Hoag
- 2. Facility Primary Responsible Official Mailing Address...

Organization/Firm: Covanta Hillsborough Inc.

Street Address: 350 N. Falkenburg Road

City: Tampa State: Florida Zip Code: 33619

3. Facility Primary Responsible Official Telephone Numbers...

Telephone: (813) 684 - 5688 ext. 3013 Fax: (813) 684 - 7964

4. Facility Primary Responsible Official E-mail Address: ghoag@covantaenergy.com

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. X Title V Source
4. X Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)
5. Synthetic Minor Source of Air Pollutants, Other than HAPs
6. X Major Source of Hazardous Air Pollutants (HAPs)
7. Synthetic Minor Source of HAPs
8. X One or More Emissions Units Subject to NSPS (40 CFR Part 60)
9.
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:
·

DEP Form No. 62-210.900(1) – Form

List of Pollutants Emitted by Facility

2. Pollutant Classification	3. Emissions Cap [Y or N]?
A	N
A	N
A	N
A	N
A	N
A	N
A	N
A	N
A	N
A	n N
A	N
A	N
A	N
A	N
	A A A A A A A A A A A A A A A A A A A

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

Facility-wide or Multi-Unit Emissions Caps					
1. Pollutant	2. Facility-	3. Emissions	4. Hourly	5. Annual	6. Basis for
Subject to	Wide Cap	Unit ID's	Cap	Cap	Emissions
Emissions	[Y or N]?	Under Cap	(lb/hr)	(ton/yr)	Cap
Cap	(all units)	(if not all units)			
		-			
		_			
,					
7. Facility-Wi	ide or Multi-Unit l	Emissions Cap Com	ment:		•
		•			

DEP Form No. 62-210.900(1) – Form

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: Appendix K Previously Submitted, Date:
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date:
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix J Previously Submitted, Date:
<u>A</u> (dditional 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): Attached, Document ID:
3.	Rule Applicability Analysis: Attached, Document ID:
	List of Exempt Emissions Units: Attached, Document ID: Not Applicable (no exempt units at facility)
	Fugitive Emissions Identification: Attached, Document ID: X Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): Attached, Document ID: X Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): Attached, Document ID: X Not Applicable
	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): Attached, Document ID: X Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): Attached, Document ID: X Not Applicable
10.	. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): Attached, Document ID: Not Applicable

DEP Form No. 62-210.900(1) – Form

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1.	List of Exempt Emissions Units: Attached, Document ID: X Not Applicable (no exempt units at facility)					
A	Additional Requirements for Title V Air Operation Permit Applications					
1.	List of Insignificant Activities: (Required for initial/renewal applications only) X Attached, Document ID: Appendix A 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) X Attached, Document ID: Appendix B					
	☐ Not Applicable (revision application with no change in applicable requirements)					
3.	Compliance Report and Plan: (Required for all initial/revision/renewal applications) X Attached, Document ID: Appendix I 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: X Not Applicable					
6.	Requested Changes to Current Title V Air Operation Permit: Attached, Document ID: X Not Applicable					

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e: 03/11/2010 13

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

	Acid Rain Program Forms:
	Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
	Attached, Document ID: Previously Submitted, Date:
	X 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:
	X 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:
	X Not Applicable (not a CAIR source)
A -I	Hitianal Dagningments Comment
AO	ditional Requirements Comment
	1
1	

Section [1] **of** [12]

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.

DEP Form No. 62-210.900(1) – Form

EMISSIONS UNIT INFORMATION Section [1] of [12]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

	THE PERSON NAMED OF THE PE	d i ti mit Emissions en			
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.)				
	regulated emis				
	The emissions unregulated en	unit addressed in this Entissions unit.	missions Unit Information	on Section is an	
En	nissions Unit Descr	ription and Status		-	
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)		
	X This Emission	s Unit Information Sect	ion addresses, as a singl	le emissions unit, a	
	~ .	or production unit, or ac			
	pollutants and	which has at least one do	efinable emission point	(stack or vent).	
				e emissions unit, a group	
		roduction units and activ		one definable emission	
	• •	vent) but may also prod	•		
		s Unit Information Sections or production units and a	,	e emissions unit, one or fugitive emissions only.	
2.	Description of Emi	issions Unit Addressed i	n this Section: MWC U	Jnit 1	
3.	Emissions Unit Ide	entification Number: 00	1		
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit	
	Status Code:	Construction	Date:	Major Group SIC Code:	
	Α	Date:	12/18/1986	49	
Q		pplicability: (Check all		- T	
0.	Acid Rain Unit		шат арргу)	•	
	CAIR Unit				
	<u> </u>				
9.	Package Unit: Manufacturer: D.F.	Riley Inc Model N	umber: Mass Burner W	aterwall Boiler	
10		ate Rating: 29 MW	unioci. Muss Burier W	- Toner	
		mment: MWC Units 1,	2 and 3 share a commo	on steam turbine	
	nerator rated at 29 N		, 2, and 3 share a commit	on seam turome	
		,			

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EMISSIONS UNIT INFORMATION Section [1] of [12]

Emissions	Unit	Control	Equi	pment/Method:	Control 1	of 4	

Control Equipment/Method Description:
 Activated Carbon Injection

 Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 2_ of 4_

- Control Equipment/Method Description:
 Selective Noncatalytic Reduction (SNCR)
- 2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 3_ of 4_

- Control Equipment/Method Description:
 Spray Dryer Absorber
- 2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 4_ of 4_

- 1. Control Equipment/Method Description: Fabric Filter Baghouse
- 2. Control Device or Method Code:

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Effective: 03/11/2010

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Section [1]

of [12]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	. Maximum Process or Throughput Rate: 102,000 lbs of steam per hour			
2.	Maximum Production Rate: N/A			
3.	3. Maximum Heat Input Rate: 172.5 million Btu/hr			
4.	. Maximum Incineration Rate: pounds/hr 36,666 lbs/hr of reference waste			
	tons/day	460 tons/day of reference waste		
5.	5. Requested Maximum Operating Schedule:			
	24 hours/day 7 days/week			
	52 weeks/year 8760 hours/year			

6. Operating Capacity/Schedule Comment:

1380 tons per day MWC throughput for entire facility but no more than 1200 tons per day on an annual (52 week rolling average) basis.

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Section [1]

of [12]

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: Stack		2. Emission Point	Гуре Code: 1	
	Descriptions of Emission Flue No. 1	·		Ü	
	ID Numbers or Descriptio N/A	ns of Emission Ur	nits with this Emission	a Point in Common:	
5.	Discharge Type Code: V	Stack Height feet	: 220	7. Exit Diameter: 5.1 feet	
8.	Exit Temperature: ~290 °F	9. Actual Volum ~89,000 acfm	netric Flow Rate:	10. Water Vapor: ~15 %	
11.	Maximum Dry Standard F ~53,000 dscfm	low Rate:	12. Nonstack Emission Point Height: feet		
13.	Emission Point UTM Coo		14. Emission Point Latitude/Longitude		
	Zone: 17 East (km): North (km)	368.2 : 3092.7	Latitude (DD/MM/SS) 27/57/16 Longitude (DD/MM/SS) 82/21/12		
15.	15. Emission Point Comment: MWC Unit 1flue is enclosed within a common stack annulus with three other flues.				

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 2_

	Segment Description (Process/Fuel Type): Municipal Solid Waste				
	ource Classification Code 0101201	e (SCC):	3. SCC Units:		-
	Taximum Hourly Rate: 28.333	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:
	Taximum % Sulfur: .3	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit: 9
	egment Comment: 460 T ity of 36,666 lbs/hr as sta		•	s ba	sed upon boiler loading
Segm	ent Description and Ra	te: Segment 2_	of <u>2</u>		
	Segment Description (Process/Fuel Type): Natural gas (auxiliary burner)				
	ource Classification Code 0100602	e (SCC):	3. SCC Units:		
4. M	aximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:
7. M	aximum % Sulfur:	8. Maximum 9	6 Ash:	9.	Million Btu per SCC Unit: 1000
	egment Comment: uel for auxiliary burner.		,		

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

Segment Description and Rate: Segment _ of _

1. Segment	1. Segment Description (Process/Fuel Type):				
2. Source (Classification Cod	e (SCC):	3. SCC Units	s:	
4. Maximu	m Hourly Rate:	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:
7. Maximu	m % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:
10. Segment	Comment:				
Segment De	scription and Ra	ite: Segment _	of_		
1. Segment	1. Segment Description (Process/Fuel Type):				
2. Source C	lassification Code	e (SCC):	3. SCC Units	:	
4. Maximui	n Hourly Rate:	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:
7. Maximu	n % Sulfur:	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit:
10. Segment	Comment:				

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Pollutant Emitted 2. Primary Control Device Code		4. Pollutant Regulatory Code	
PM 017		Device Code	EL EL	
SO2	202		EL	
NOx	107		EL	
Pb	017		EL	
Fl	202		EL	
Hg	207		EL	
Be	017		EL	
Cd	017		EL	
HCl	202		EL	
PCDD/PCDF	207		EL	
СО			EL	
VOC	202		EL	
SAM	202		EL	
· · · · · · · · · · · · · · · · · · ·				

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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	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.1 lb/hour 17.96	4. Synthetically Limited? 5 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.012 gr/dscf @ 7% O2	7. Emissions Method Code:
Reference: existing permit limit	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permi	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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.

Basis for Allowable Emissions Code:
 RULE
 Substitute Effective Date of Allowable Emissions:
 Subs

6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(1)(i)

Allowable Emissions Allowable Emissions of

Allowable Emissions Allowable Emissions 1_ of 1_

 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):

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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: 32.86 lb/hour 143.9	4. Synthetically Limited? Utons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 29 ppmdv@7% O2	7. Emissions Method Code:
Reference: existing permit limit	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Co	omment:

EMISSIONS UNIT INFORMATION Section [1] of [12]

POLLUTANT DETAIL INFORMATION Page [4] of [26]

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.

<u>A</u>	lowable Emissions Allowable Emissions I_	of 2	<u>'</u>		
1.	Basis for Allowable Emissions Code: RULE	2.	2. Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 29 ppmdv @ 7% O2	4.	Equivalent Allowable Emissions: lb/hour 143.9 tons/year		
5.	Method of Compliance: CEMS				
6.	6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(i)				
<u>Al</u>	lowable Emissions Allowable Emissions 2_	of 2	_		
1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 75% reduction	4.	Equivalent Allowable Emissions: lb/hour tons/year		
5.	Method of Compliance: CEMS				
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b (b)(3)(i)					
Al	lowable 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.	6. Allowable Emissions Comment (Description of Operating Method):				

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POLLUTANT DETAIL INFORMATION
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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

Totalian, Estimated Tagletve, and Baseline to 110 octob return Estimated				
1. Pollutant Emitted: NOx	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:	4. Synth	netically Limited?		
		es X No		
	y tons, y car			
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year				
6. Emission Factor: 205 ppmdv@7% O2		7. Emissions Method Code:		
Reference: existing permit limit		Memod Code.		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:		
tons/year	From:	o:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
tons/year	5 years 10 years			
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit				
11. Potential, Fugitive, and Actual Emissions Comment:				

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POLLUTANT DETAIL INFORMATION Page [6] of [26]

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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.

to a numerical emissions limitation.				
Allowable Emissions 1_ of 1_				
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 205 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 256 tons/year			
5. Method of Compliance: CEMS				
6. Allowable Emissions Comment (Description 40 CFR 60.33b(d)	of Operating Method):			
Allowable Emissions of 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	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):				

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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:			
3. Potential Emissions: 0.065 lb/hour 0.288	4. Synthetically Limited? B tons/year Yes X No			
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 0.44 mg/dscm@7% O2	7. Emissions Method Code:			
Reference: existing permit limit				
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:			
tons/year	From: To:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
tons/year	☐ 5 years ☐ 10 years			
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit				
11. Potential, Fugitive, and Actual Emissions Comment:				
	, .			

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POLLUTANT DETAIL INFORMATION
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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_

7 1	The street of th	01 1	-		
1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:		
3.	Allowable Emissions and Units: 0.44 mg/dscm @ 7% O2	4.	Equivalent Allowable Emissions: lb/hour 0.288 tons/year		
5.	Method of Compliance: Annual Stack Test	•			
6.	Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(4)				
<u>Al</u>	lowable Emissions Allowable Emissions	of_	<u> </u>		
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.	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):		

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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: Fl	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions: 1.0 lb/hour 4.43		netically Limited?		
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year				
6. Emission Factor: 6.74 mg/dscm @7% O2		7. Emissions Method Code:		
Reference: existing permit limit				
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:			
tons/year	From: To:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
tons/year	5 years 10 years			
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	·			
11. Potential, Fugitive, and Actual Emissions Comment:				

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POLLUTANT DETAIL INFORMATION
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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: 2. Future Effective Date of Allowable **OTHER Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 6.74 mg/dscm @ 7% O2 4.43 tons/year lb/hour 5. Method of Compliance: Annual Stack Test 6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-121C 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):

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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:	2. Total Percent Efficiency of Control:			
Hg				
3. Potential Emissions:	4. Synth	netically Limited?		
	7 tons/year	es X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 0.07 mg/dscm @7% O2		7. Emissions Method Code:		
Reference: existing permit limit		_		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:		
tons/year	From:	To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
tons/year	☐ 5 years ☐ 10 years			
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit				
11. Potential, Fugitive, and Actual Emissions Comment:				

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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 Emiss	ions 1_ of 2		
Basis for Allowable Emissions Code RULE	: 2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 0.070 mg/dscm @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 0.087 tons/year		
5. Method of Compliance: Annual Stack Test			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(3)			
Allowable Emissions Allowable Emissi	ions 2_ of 2		
Basis for Allowable Emissions Code RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 85% reduction	4. Equivalent Allowable Emissions: lb/hour tons/year		
5. Method of Compliance: Annual Stack Test			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(3)			
Allowable Emissions Allowable Emissi	ons 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 (Desc	cription of Operating Method):		

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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: Be	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 2.18E-04 lb/hour 9.6E-04	4. Synthetically Limited? 1 tons/year Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	
6. Emission Factor: 1.48 μg/dscm@7% O2	7. Emissions Method Code:	
Reference: existing permit condition		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	☐ 5 years ☐ 10 years	
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit		
11. Potential, Fugitive, and Actual Emissions Comment:		

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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.

to a numerical emissions minitation.	
Allowable Emissions 1_	_of 1
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.48 µg/dscm @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 9.6E-04 tons/year
5. Method of Compliance: Annual Stack Test	
6. Allowable Emissions Comment (Description PSD-FL-121C	n of Operating Method):
Allowable Emissions Allowable Emissions	
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	n of Operating Method):
Allowable Emissions Allowable Emissions	of
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	n of Operating Method):

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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: Cd	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6.00E-03 lb/hour 0.026	4. Synthetically Limited? 5 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	
6. Emission Factor: 0.040 mg/dscm @7% O2 Reference: existing permit condition	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 2. Future Effective Date of Allowable 1. Basis for Allowable Emissions Code: **RULE Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 0.040 mg/dscm @ 7% O2 0.026 tons/year lb/hour 5. Method of Compliance: **Annual Stack Test** 6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(2)(i) 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):

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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

Pollutant Emitted: HCl	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 17.00 lb/hour 74.43	4. Synthetically Limited? B tons/year Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year		
6. Emission Factor: 29 ppmdv@7% O2	7. Emissions Method Code:	
Reference: existing permit limit		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	5 years 10 years	
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

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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 1_	of 2		
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 29 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 74.43 tons/year		
5. Method of Compliance: Annual Stack Test			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(ii)			
Allowable Emissions 2_	of 2		
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 95% reduction	4. Equivalent Allowable Emissions: lb/hour tons/year		
5. Method of Compliance: Annual Stack Test			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(ii)			
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):		

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EMISSI	ONS	UNIT	INF	ORI	MATI	ON
Section	[1	1	of	ſ	121	

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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

Pollutant Emitted: PCDD/PCDF	2. Total Percent Efficiency of Control:		
3. Potential Emissions: 4.5E-06 lb/hour 1.96E-05	4. Synthetically Limited? 5 tons/year Yes X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 30 ng/dscm@7% O2	7. Emissions Method Code:		
Reference: existing permit condition			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:		
tons/year	From: To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	☐ 5 years ☐ 10 years		
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

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POLLUTANT DETAIL INFORMATION Page [20] of [26]

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 1	_ of 1
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 30 ng/dscm @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 1.96E-05 tons/year
5. Method of Compliance: Annual Stack Test	
6. Allowable Emissions Comment (Descripti 40 CFR 60.33b(c)(1)(ii)	on 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 (Descripti	on 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	on of Operating Method):

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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

Pollutant Emitted: CO	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 17.4 lb/hour 76.26	4. Synthetically Limited? 5 tons/year Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year		
6. Emission Factor: 100 ppmdv @7% O2	7. Emissions Method Code:	
Reference: existing permit condition	<u> </u>	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	5 years 10 years	
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

POLLUTANT DETAIL INFORMATION
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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	s 1_ of 1		
1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:		
100 ppmdv @ 7% O2	lb/hour 76.26 tons/year		
5. Method of Compliance: CEMS			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.34+b(a)			
Allowable Emissions Allowable Emissions	s 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			
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 (Descrip	tion of Operating Method):		

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POLLUTANT DETAIL INFORMATION Page [23] of [26]

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

Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 3.83 lb/hour 16.8	4. Synthetically Limited? B tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.01 gr/dscf @12% CO2 Reference: existing permit condition	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	☐ 5 years ☐ 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permi	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 1_ of 2_

	·		
1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.01 gr/dscf @ 12% CO2	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: Annual Stack Test		
6.	Allowable Emissions Comment (Description PSD-FL-104 and PSD-FL-121C	of (Operating Method):
<u>Al</u>	lowable Emissions Allowable Emissions 2_	of 2	—
1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.2 lb/ton	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: Annual Stack Test		
6.	Allowable Emissions Comment (Description PSD-FL-104 and PSD-FL-121C	of C	Operating Method):
Al	lowable Emissions Allowable Emissions	of _	_
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:

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3. Allowable Emissions and Units:

6. Allowable Emissions Comment (Description of Operating Method):

5. Method of Compliance:

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tons/year

4. Equivalent Allowable Emissions:

lb/hour

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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: SAM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 24.6 lb/hour 107.7	4. Synthetically Limited? 7 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.072 gr/dscf @12% CO2 Reference: existing permit condition	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Co	omment:
· .	

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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 En	nissions	1	of 2
----------------------------------	----------	---	------

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Da Emissions:	te of Allowable
3.	Allowable Emissions and Units: 0.072 gr/dscf @ 12% CO2	4.	Equivalent Allowab lb/hour	ole Emissions: tons/year
5.	Method of Compliance: Annual Stack Test			
6.	Allowable Emissions Comment (Description PSD-FL-121C	of (Operating Method):	

Allowable Emissions 2_ of 2_

Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.2 lb/ton	4. Equivalent Allowable Emissions: 1b/hour tons/year
5. Method of Compliance: Annual Stack Test	
6. Allowable Emissions Comment (Description PSD-FL-121C	of Operating Method):

Allowable Emissions Allowable Emissions __ of __

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):

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EMISSIONS UNIT INFORMATION Section [1] of [12] 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: VE10 2. Basis for Allowable Opacity: ☐ Other X Rule 3. Allowable Opacity: Normal Conditions: 10 % **Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: 6 min/hour 4. Method of Compliance: 40 CFR60.33(b)(a)(1)(iii) 5. Visible Emissions Comment: Visible Emissions Limitation: Visible Emissions Limitation __ of __ 2. Basis for Allowable Opacity: 1. Visible Emissions Subtype: ☐ Rule ☐ Other 3. Allowable Opacity: Normal Conditions: % **Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance:

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5. Visible Emissions Comment:

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H. CONTINUOUS MONITOR INFORMATION

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

<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor 1 of 8
1.	Parameter Code:	2. Pollutant(s):
	O2	O2(inlet)
3.	CMS Requirement:	X Rule Other
4.	Monitor Information	
	Manufacturer: M&C	
	Model Number: PMA-22	Serial Number: 98-11-044
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
		•
Co	ntinuous Monitoring System: Continuous	Monitor 2 of 8
	Parameter Code:	2. Pollutant(s):
1.	Parameter Code:	2. Pollutant(s):
3.	Parameter Code: EM CMS Requirement: Monitor Information	2. Pollutant(s): SO2(inlet)
3.	Parameter Code: EM CMS Requirement:	2. Pollutant(s): SO2(inlet)
 3. 4. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2. Pollutant(s): SO2(inlet) X Rule Other
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61446-331 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61446-331 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61446-331 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61446-331 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61446-331 6. Performance Specification Test Date:

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

<u>Continuous Monitoring System:</u> Continuous Monitor 3_ of 8_

1.	Parameter Code:	2. Pollutant(s):
	EM	CO
3.	CMS Requirement:	X Rule Other
4.	Monitor Information Manufacturer: TECO	
	Model Number: 48C	Serial Number: 48C-61474-331
5.	Installation Date:	6. Performance Specification Test Date: 2/6/2003
7.	Continuous Monitor Comment:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 4 of 8
1.	Parameter Code:	2. Pollutant(s):
1.	Parameter Code: CO2	2. Pollutant(s): CO2
	CO2 CMS Requirement: Monitor Information	CO2
3.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI	CO2 X Rule Other
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1	CO2 X Rule Other Serial Number: A7P2736T
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI	CO2 X Rule Other
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1	CO2 X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	CO2 X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	CO2 X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	CO2 X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
3. 4.	CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	CO2 X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 5_ of 8_

	Parameter Code: EM	2. Pollutant(s): SO2
3.	CMS Requirement:	X Rule Other
4.	Monitor Information Manufacturer: TECO	
	Model Number: 43 CHL	Serial Number: 43CHL-61445-331
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
Co	ntinuous Monitoring System: Continuous	Monitor 6_ of 8_
1.	Parameter Code:	2. Pollutant(s):
	EM	NOx
3.		1
	EM CMS Requirement: Monitor Information Manufacturer: TECO	NOx Rule Other
4.	EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL	NOx X Rule Other
4.	EM CMS Requirement: Monitor Information Manufacturer: TECO	NOx Rule Other

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 7_ of 8_

1.	Parameter Code:	2. Pollutant(s):
	O2	O2 (outlet)
3.	CMS Requirement:	X Rule Other
4.	Monitor Information Manufacturer: M&C	
	Model Number: PMA-22	Serial Number: 98-11-045
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
)		
- Co	ntinuous Monitoring System: Continuous	Monitor 8 of 8
	Parameter Code:	2. Pollutant(s):
	Parameter Code:	2. Pollutant(s):
1.	Parameter Code: VE CMS Requirement: Monitor Information	2. Pollutant(s): Opacity
3.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems	2. Pollutant(s): Opacity X Rule Other
3.	Parameter Code: VE CMS Requirement: Monitor Information	2. Pollutant(s): Opacity
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems	2. Pollutant(s): Opacity X Rule Other
 3. 4. 5. 	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41	2. Pollutant(s): Opacity X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:
 3. 4. 5. 	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: A7P2736T 6. Performance Specification Test Date:

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I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix D 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: Appendix E 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) X Attached, Document ID: Appendix F 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) X Attached, Document ID: Appendix G Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records:
0.	Attached, Document ID:
	Test Date(s)/Pollutant(s) Tested:
	Description of Coloridad Detail Assessed 2011 Assessed in H
	X Previously Submitted, Date: August 2011, Appendix H
	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: X Not Applicable

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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:
X Attached, Document ID: Appendix B
2. Compliance Assurance Monitoring:
Attached, Document ID: Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: X Not Applicable
Additional Requirements Comment

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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 en			, , ,
En	nissions Unit Desc	ription and Status		
1.	Type of Emissions	S Unit Addressed in this	Section: (Check one)	
		ns Unit Information Sect	•	
		or production unit, or ac which has at least one d		
				le emissions unit, a group
		roduction units and activent) but may also prod		t one definable emission
				e emissions unit, one or fugitive emissions only.
2.	Description of Em	issions Unit Addressed	in this Section: MWC	Unit 2
		entification Number: 00	1	
4.	Emissions Unit Status Code:	5. Commence Construction	6. Initial Startup Date:	7. Emissions Unit
	Status Code.	Date:	Date.	Major Group SIC Code:
	Α	2	12/18/86	49
8.	Federal Program A	applicability: (Check all	that apply)	
	Acid Rain Unit	t		
	CAIR Unit			
9.	Package Unit:			
	Manufacturer: D.B Riley, Inc. Model Number: Mass Burner Waterwall Boiler			Vaterwall Boiler
		ate Rating: 29 MW		
	Emissions Unit Co nerator rated at 29 l	mment: MWC Units 1, MW (TG-1).	2, and 3 share a comm	on steam turbine
Ì				

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Emissions	Unit Control	Equipment/Method:	Control 1_	of 4_

Control Equipment/Method Description:
 Activated Carbon Injection

 Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 2_ of 4_

- 1. Control Equipment/Method Description: Selective Noncatalytic Reduction
- 2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 3_ of 4_

- 1. Control Equipment/Method Description: Spray Dryer Absorber
- 2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 4_ of 4_

- 1. Control Equipment/Method Description: Fabric Filter Baghouse
- 2. Control Device or Method Code:

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	1. Maximum Process or Throughput Rate: 102,000 lbs of steam per hour		
2.	Maximum Production Rate: N/A		
3.	Maximum Heat Input Rate: 172.5 million	Btu/hr	
4.	Maximum Incineration Rate: pounds/hr	36,666 lbs/hr of reference	ce waste
	tons/day	460 tons/day of reference	ce waste
5.	1 1 0		
	24 hours	/day	7 days/week
	52 weeks	/year	8760 hours/year
	Operating Capacity/Schedule Comment: 1380 tons per day MWC throughput for en an annual (52 week rolling average) basis.	tire facility but no more the	nan 1200 tons per day

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

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: Stack	Plot Plan or	2. Emission Point	Гуре Code: 1
3.	Descriptions of Emission Flue No. 2	Points Comprising	this Emissions Unit	for VE Tracking:
4.	4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5.	Discharge Type Code: V	6. Stack Height feet	: 220	7. Exit Diameter: 5.1 feet
8.	Exit Temperature: ~290 °F	9. Actual Volum ~89,000 acfm	netric Flow Rate:	10. Water Vapor: ~15 %
11.	Maximum Dry Standard F ~53,000 dscfm	low Rate:	12. Nonstack Emission Point Height: feet	
13.	13. Emission Point UTM Coordinates Zone: 17 East (km): 368.2 North (km): 3092.7		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) 27/57/16 Longitude (DD/MM/SS) 82/21/12	
15.	Emission Point Comment: MWC Unit 2 is enclosed v	l	stack annulus with thr	ee other flues.

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 2_

Segment Description (Process/Fuel Type): Municipal Solid Waste				
2. Source Classification Code 10101201	e (SCC):	3. SCC Units:		
4. Maximum Hourly Rate: 128.333	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:	
7. Maximum % Sulfur: 0.3	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit: 9	
10. Segment Comment: Maxin lbs/hr as stated in PSD-FL-12			oiler loading capacity of 36,666	
Segment Description and Ra	ite: Segment 2_	of <u>2</u>		
Segment Description (Process/Fuel Type): Natural gas (auxiliary burner)				
2. Source Classification Code (SCC): 3. SCC Units: 10100602				
4. Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6. Estimated Annual Activity Factor:	
7. Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit: 1000	
10. Segment Comment: Fuel for auxiliary burner.				

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant
	Device Code	Device Code	Regulatory Code
PM	017		EL
SO2	202		EL
NOx	107		EL
Pb	017		EL
Fl	202		EL
Hg	207		EL
Be	017		EL
Cd	017		EL
HCl	202		EL
PCDD/PCDF	207		EL
СО			EL
VOC	202		EL
SAM	202		EL

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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 otential, Estimated Fugitive, and Dasenne e	t i lojected lictual Emissions
Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions:	4. Synthetically Limited?
	5 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.012 gr/dscf @ 7% O2	7. Emissions Method Code:
Reference: existing permit limit	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permi	it.
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 1_ of 1_

1.	Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	27 mg/dscm @ 7% O2	lb/hour 17.96 tons/year
5.	Method of Compliance: Annual Stack Test	
6.	Allowable Emissions Comment (Description 40 CFR 60.33b(a)(1)(i)	of Operating Method):
All	lowable 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
	Method of Compliance: Allowable Emissions Comment (Description	of Operating Method):
All	owable 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):

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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 Efficient	ency of Control:
3. Potential Emissions:	4. Syntl	netically Limited?
	-	<u>-</u>
<u>.</u>	tons, year	
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):	
6. Emission Factor: 29 ppmdv@ 7% O2		7. Emissions
o. Emission ractor. 25 pp.mar & 770 02		Method Code:
Deference, evicting name it limit		Wichiod Code.
Reference: existing permit limit		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	Го:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:
tons/year	·	0 years
10. Calculation of Emissions:		
	_	
Refer to Table 1-1 of existing Title V permi	ι.	
		,
11. Potential, Fugitive, and Actual Emissions Co	omment:	
	•	
	and a	

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4. Equivalent Allowable Emissions:

tons/year

65

lb/hour

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 1 of 2

Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 29 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 143.9 tons/year		
5. Method of Compliance: CEMS			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(i)			
Allowable Emissions 2_ of 2_			
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable		

Allowable Emissions Allowable Emissions of ___

6. Allowable Emissions Comment (Description of Operating Method):

3. Allowable Emissions and Units:

75% reduction

CEMS

5. Method of Compliance:

40 CFR 60.33b(b)(3)(i)

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	on of Operating Method):

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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

Pollutant Emitted: NOx	2. Total Percent Efficie	ency of Control:
3. Potential Emissions: 58.63 lb/hour 256		netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: 205 ppmdv @ 7% O2		7. Emissions Method Code:
Reference: existing permit limit		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From:	Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	•	0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.		
11. Potential, Fugitive, and Actual Emissions Comment:		

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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.

to a numerical emissions limitation.		
Allowable Emissions 1_	of 1_	
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:	
3. Allowable Emissions and Units: 205 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 256 tons/year	
5. Method of Compliance: CEMS		
6. Allowable Emissions Comment (Description 40 CFR 60.33b(d)	n of Operating Method):	
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: 1b/hour tons/year	
5. Method of Compliance:		
6. Allowable Emissions Comment (Description	of Operating Method):	

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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:	
3. Potential Emissions: 0.065 lb/hour 0.288	4. Synthetically Limited? 8 tons/year Yes X No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year		
6. Emission Factor: 0.44 mg/dscm @ 7% O2	7. Emissions Method Code:	
Reference: existing permit limit		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	5 years 10 years	
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.		
11. Potential, Fugitive, and Actual Emissions Comment:		

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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.

to a numerical emissions limitation.				
Allowable Emissions 1_ of 1_				
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable			
RULE	Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
0.44 mg/dscm @ 7% O2	lb/hour 0.288 tons/year			
5. Method of Compliance: Annual Stack Test	•			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(4)				
Allowable Emissions of				
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 of				
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):				

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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: Fl	2. Total Percent Efficiency of Control:
3. Potential Emissions: 1.0 lb/hour 4.43	4. Synthetically Limited? B tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):
6. Emission Factor: 6.74 mg/dscm @ 7% O2	7. Emissions Method Code:
Reference: existing permit limit	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permi	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 1_ of 1_				
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
6.74 mg/dscm @ 7% O2	lb/hour 4.43 tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-121C				
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 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):				

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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: Hg	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.02 lb/hour 0.08	4. Synthetically Limited? 7 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):
6. Emission Factor: 0.07 mg/dscm @ 7% O2 Reference: existing permit limit	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	
<u> </u>	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 1_ of 2_

THOWADIC EMISSIONS THOWADIC EMISSIONS I_	<u> </u>	
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:	
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:	
0.070 mg/dscm @ 7% O2	lb/hour 0.087 tons/year	
5. Method of Compliance: Annual Stack Test		
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(3)		
Allowable Emissions Allowable Emissions 2_	of 2	
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:	
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:	
85% reduction	lb/hour tons/year	
5. Method of Compliance:		
Annual Stack Test		

Allowable Emissions Allowable Emissions of

40 CFR 60.33b(a)(3)

6. Allowable Emissions Comment (Description of Operating Method):

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):

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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

Pollutant Emitted: Be	2. Total Percen	nt Efficie	ency of Control:
3. Potential Emissions:	4 tons/year	-	netically Limited?
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 1.48 μg/dscm @ 7% O2			7. Emissions Method Code:
Reference: existing permit condition			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24	1-month	Period:
tons/year	From:	Т	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected M	/onitorii	ng Period:
tons/year	5 years		0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.			
11. Potential, Fugitive, and Actual Emissions Comment:			

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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 1_ of 1_				
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
1.48 μg/dscm @ 7% O2	lb/hour 9.6E-04 tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-121C				
Allowable Emissions Allowable Emissions	of			
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):			

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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

Pollutant Emitted: Cd	2. Total Percent Efficie	ency of Control:
3. Potential Emissions: 6.00E-03 lb/hour 0.026		netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	,	
6. Emission Factor: 0.040 mg/dscm @ 7% O2		7. Emissions Method Code:
Reference: existing permit condition		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From: T	Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoria	ng Period:
tons/year	_	0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

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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 2. Future Effective Date of Allowable 1. Basis for Allowable Emissions Code: **RULE Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 0.040 mg/dscm @ 7% O2 0.026 tons/year lb/hour 5. Method of Compliance: **Annual Stack Test** 6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(2)(i) 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):

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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: HCl	2. Total Percent Efficie	ency of Control:
3. Potential Emissions: 17.00 lb/hour 74.43		netically Limited? Tes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	
6. Emission Factor: 29 ppmdv@ 7% O2 Reference: existing permit limit		7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoria	ng Period:
tons/year	_	0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.		
11. Potential, Fugitive, and Actual Emissions Comment:		

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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 1 of 1

-			
1.	Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions:	
	29 ppmdv @ 7% O2	lb/hour 74.43 tons/year	
5.	Method of Compliance:		
	Annual Stack Test		
6.	6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(ii)		
<u>Al</u>	lowable Emissions Allowable Emissions 2_	of 2_	
1.	Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable	
	RULE	Emissions:	
3.	Allowable Emissions and Units:	4. Equivalent Allowable Emissions:	
	95% reduction	lb/hour tons/year	
5.	Method of Compliance: Annual Stack Test	•	
6.	Allowable Emissions Comment (Description 40 CFR 60.33b(b)(3)(ii)	of Operating Method):	
Al	lowable 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):	

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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

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1. Pollutant Emitted: PCDD/PCDF	2. Total Percent Efficient	ency of Control:
3. Potential Emissions:	4. Syntl	netically Limited?
	5 tons/year	es X No
5. Range of Estimated Fugitive Emissions (as		
to tons/year		
6. Emission Factor: 30 ng/dscm @ 7% O2		7. Emissions Method Code:
Reference: existing permit condition		Wichiod Code.
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:
tons/year		0 years
10. Calculation of Emissions:		
Refer to Table 1-1 of existing Title V perm	it.	
•		
11. Potential, Fugitive, and Actual Emissions Co	omment.	
11. 1 overlius, 1 agrir e, and Notaal Dimosions Of	VALUE AND	

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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: 2. Future Effective Date of Allowable **RULE Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 30 ng/dscm @ 7% O2 1.96E-05 tons/year lb/hour 5. Method of Compliance: **Annual Stack Test** 6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(c)(1)(ii) Allowable Emissions Allowable Emissions of 2. Future Effective Date of Allowable 1. Basis for Allowable Emissions Code: **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:** 4. Equivalent Allowable Emissions: 3. Allowable Emissions and Units: lb/hour tons/year 5. Method of Compliance: 6. Allowable Emissions Comment (Description of Operating Method):

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POLLUTANT DETAIL INFORMATION
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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

Pollutant Emitted: CO	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 17.4 lb/hour 76.26	4. Synthetically Limited? 5 tons/year Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	
6. Emission Factor: 100 ppmdv @ 7% O2	7. Emissions Method Code:	
Reference: existing permit condition		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	5 years 10 years	
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.		
11. Potential, Fugitive, and Actual Emissions Comment:		

POLLUTANT DETAIL INFORMATION
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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.

Allo	wable Emissions 1_	of 1	_		
	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:		
3. A	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:		
	100 ppmdv @ 7% O2		lb/hour 76.26 tons/year		
	Method of Compliance: CEMS				
1	6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.34b(a)				
Allo	wable Emissions Allowable Emissions	of_	_		
1. F	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
3. A	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year		
5. N	Method of Compliance:				
6. A	6. Allowable Emissions Comment (Description of Operating Method):				
Allo	wable Emissions Allowable Emissions	of_	_		
1. E	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:		
3. A	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year		
5. N	Method of Compliance:				
6. A	Allowable Emissions Comment (Description	of C	Operating Method):		

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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 Perce	ent Efficie	ency of Control:
3. Potential Emissions: 3.83 lb/hour 16.8	3 tons/year	-	netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 0.01 gr/dscf @ 12% CO2 Reference: existing permit condition			7. Emissions Method Code:
	01 D 1	2.4 (1	D : 1
8.a. Baseline Actual Emissions (if required):	8.b. Baseline		
tons/year	From:	<u>T</u>	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:
tons/year	5 year	rs 🔲 1	0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permi	t.		
11. Potential, Fugitive, and Actual Emissions Co	omment:		

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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
--

7-1	IOWADIC EMISSIONS ANOWAUG EMISSIONS I_	OI Z	_
1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:
	0.01 gr/dscf @ 12% CO2		lb/hour tons/year
5.	Method of Compliance: Annual Stack Test		
6.	Allowable Emissions Comment (Description PSD-FL-104 and PSD-FL-121C	of (Operating Method):
<u>Al</u>	lowable Emissions Allowable Emissions 2_	of 2	_
1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.2 lb/ton	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: Annual Stack Test		
6.	Allowable Emissions Comment (Description PSD-FL-104 and PSD-FL-121C	of C	Operating Method):
Al	lowable 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 C	Operating Method):

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POLLUTANT DETAIL INFORMATION

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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: SAM	2. Total Percent Efficiency of Control:
3. Potential Emissions:	4. Synthetically Limited?
	m +
-	r tonsi year
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.072 gr/dscf@12% CO2	7. Emissions Method Code:
Reference: existing permit condition	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permits 11. Potential, Fugitive, and Actual Emissions Co.	

POLLUTANT DETAIL INFORMATION
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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 1_	of 2			
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 0.072 gr/dscf @ 12% CO2	4. Equivalent Allowable Emissions: lb/hour tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-121C				
Allowable Emissions 2_	of 2			
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 0.2 lb/ton	4. Equivalent Allowable Emissions: lb/hour tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-121C				
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):			

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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: VE10	2. Basis for Allowable Opacity: X Rule			
3. Allowable Opacity: Normal Conditions: 10 % Ex Maximum Period of Excess Opacity Allower	acceptional Conditions: % ed: 6 min/hour			
4. Method of Compliance: 40 CFR60.33(b)(a)(1)(iii)				
5. Visible Emissions Comment:				
Visible Emissions Limitation: Visible Emissi	one Limitation of			
Visible Emissions Limitation: Visible Emission				
Visible Emissions Subtype:	2. Basis for Allowable Opacity: Rule Other			
3. Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	ceptional Conditions: % ed: min/hour			
4. Method of Compliance:				
5. Visible Emissions Comment:				

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EMISSIONS UNIT INFORMATION

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H. CONTINUOUS MONITOR INFORMATION

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

<u>Co</u>	Continuous Monitoring System: Continuous Monitor 1_ of 8_				
1.	Parameter Code:	2. Pollutant(s):			
	O2	O2(inlet)			
3.	CMS Requirement:	X Rule Other			
4.	Monitor Information Manufacturer: M&C				
	Model Number: PMA-22	Serial Number: 98-11-046			
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000			
7.	Continuous Monitor Comment:	-			
l					
	_				
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 2 of 8			
	Parameter Code:	2. Pollutant(s):			
	Parameter Code: EM	2. Pollutant(s):			
1.	Parameter Code: EM	2. Pollutant(s): SO2(inlet)			
3.	Parameter Code: EM CMS Requirement: Monitor Information	2. Pollutant(s): SO2(inlet)			
3.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2. Pollutant(s): SO2(inlet) X Rule Other			
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61448-331 6. Performance Specification Test Date:			
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61448-331 6. Performance Specification Test Date:			
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61448-331 6. Performance Specification Test Date:			
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61448-331 6. Performance Specification Test Date:			
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 43 CHL Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61448-331 6. Performance Specification Test Date:			

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3_ of 8_

<u> </u>	Parameter Code:	2. Pollutant(s)	<u></u> !:
 ^ ·	EM	CO	•
3.	CMS Requirement:	X Rule	Other
4.	Monitor Information Manufacturer: TECO		
	Model Number: 48C	Samial N	(umber: 48CTL-63383-331
	Installation Date:	6. Performance 7/28/2000	e Specification Test Date:
7.	Continuous Monitor Comment:	_	-
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 4 of 8	<u> </u>
	Parameter Code:	2. Pollutar	
1.	Parameter Code:	2. Pollutar	
3.	Parameter Code: CO2 CMS Requirement: Monitor Information	2. Pollutar CO2	nt(s):
3.	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI	2. Pollutar CO2	Other
 3. 4. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1	2. Pollutar CO2 X Rule	umber: A7P2705T
 3. 4. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI	2. Pollutar CO2 X Rule	ott(s): Other umber: A7P2705T ance Specification Test Date:
 3. 4. 5. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1	2. Pollutar CO2 X Rule Serial N 6. Perform	ott(s): Other umber: A7P2705T ance Specification Test Date:
 3. 4. 5. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	2. Pollutar CO2 X Rule Serial N 6. Perform	ott(s): Other umber: A7P2705T ance Specification Test Date:
 3. 4. 5. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	2. Pollutar CO2 X Rule Serial N 6. Perform	ott(s): Other umber: A7P2705T ance Specification Test Date:
 3. 4. 5. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	2. Pollutar CO2 X Rule Serial N 6. Perform	ott(s): Other umber: A7P2705T ance Specification Test Date:
 3. 4. 5. 	Parameter Code: CO2 CMS Requirement: Monitor Information Manufacturer: FUJI Model Number: ZRH-1 Installation Date:	2. Pollutar CO2 X Rule Serial N 6. Perform	ott(s): Other umber: A7P2705T ance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 5_ of 8_

1.	Parameter Code:		Pollutant(s):
	EM		SO2	
3.	CMS Requirement:	X	Rule	☐ Other
4.	Monitor Information Manufacturer: TECO			
	Model Number: 43 CHL		Serial N	Jumber: 43CHL-61447-331
5.	Installation Date:		Performano 7/28/2000	e Specification Test Date:
7.	Continuous Monitor Comment:			
<u>Co</u>	ntinuous Monitoring System: Continuous	Moni	tor 6 of 8	3_
	Parameter Code:		2. Pollutai	
1.	Parameter Code:		2. Pollutai	
3.	Parameter Code: EM CMS Requirement: Monitor Information	2	2. Pollutai NOx	nt(s):
3.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2	2. Pollutar NOx Rule	nt(s):
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL	2	2. Pollutar NOx Rule	Other [umber: 42CHL-61611-332]
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2 X	2. Pollutar NOx Rule	Other Tumber: 42CHL-61611-332 Tance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL	2 X	2. Pollutar NOx Rule Serial N	Other Tumber: 42CHL-61611-332 Tance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2 X	2. Pollutar NOx Rule Serial N	Other Tumber: 42CHL-61611-332 Tance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2 X	2. Pollutar NOx Rule Serial N	Other Tumber: 42CHL-61611-332 Tance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2 X	2. Pollutar NOx Rule Serial N	Other Tumber: 42CHL-61611-332 Tance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2 X	2. Pollutar NOx Rule Serial N	Other Tumber: 42CHL-61611-332 Tance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 7_ of 8_

1.	Parameter Code: O2	2. Pollutant(s):
		O2 (outlet)
3.	CMS Requirement:	X Rule Other
4.	Monitor Information Manufacturer: M&C	
	Model Number: PMA-22	Serial Number: 98-11-047
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 8 of 8
1.	Parameter Code:	2. Pollutant(s):
	VE	Opacity
3.	CMS Requirement:	X Rule Other
4.	Monitor Information	
	Manufacturer: Spectrum Systems	
	Model Number: 41	Serial Number: 9820-8009
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	

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EMISSIONS UNIT INFORMATION

Section [2]

of [12] I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix D 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)
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) X Attached, Document ID: Appendix F 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) X Attached, Document ID: Appendix G Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: August 2011, Appendix H 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: X Not Applicable

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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:
X Attached, Document ID: Appendix B
2. Compliance Assurance Monitoring:
Attached, Document ID: X Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: X Not Applicable
Additional Requirements Comment

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EMISSIONS UNIT INFORMATION

Section [3]

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A. GENERAL EMISSIONS UNIT INFORMATION

<u>Title V Air Operation Permit Emissions Unit Classification</u>

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.)				
	X The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.				
•	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.				
<u>Er</u>	nissions Unit Descr	ription and Status			
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)		
	single process	as Unit Information Sect or production unit, or ac which has at least one d	tivity, which produces	one or more air	
	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 Em	issions Unit Addressed	in this Section: MWC	Unit 3	
3.	Emissions Unit Ide	entification Number: 00	3		
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit	
	Status Code:	Construction Date:	Date:	Major Group SIC Code:	
	Α	Date.	12/18/86	49	
8.	Federal Program A	pplicability: (Check all	that apply)		
	Acid Rain Unit				
	CAIR Unit				
9.	Package Unit: Manufacturer: D.F.	Riley, Inc. Model N	umber: Mass Burner V	Vaterwall Boiler	
10.	Generator Namepla	ate Rating: 29 MW			
	Emissions Unit Co nerator rated at 29 M	mment: MWC Units 1, MW (TG-1).	2, and 3 share a comm	on steam turbine	

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Emissions Unit Control Equipment/Method: Control 1_ of 4_	Emissions	Unit	Control	Equip	pment/Method:	Control 1_	of 4
--	------------------	------	----------------	-------	---------------	------------	------

1.	Control Equipment/Method Description:
	Activated Carbon Injection
	·
2.	Control Device or Method Code:
	Control Bevies of Niemou Code.
<u>En</u>	nissions Unit Control Equipment/Method: Control 2_ of 4_
1.	Control Equipment/Method Description:
	Selective Noncatalytic Reduction
2	Control Device or Method Code:
۷٠	Control Device of Method Code.
<u>En</u>	nissions Unit Control Equipment/Method: Control 3_ of 4_
1.	Control Equipment/Method Description:
	Spray Dryer Absorber
2.	Control Device or Method Code:
<u></u>	
<u>En</u>	nissions Unit Control Equipment/Method: Control 4_ of 4_
1.	Control Equipment/Method Description:
	Fabric Filter Baghouse
2.	Control Device or Method Code:
۷.	COHMOI DALIDA OL TITAMION COMO.

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EMISSIONS UNIT INFORMATION

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate: 102,000 lbs of steam per hour		
2.	Maximum Production Rate: N/A		
3.	Maximum Heat Input Rate: 172.5 million	Btu/hr	
4.	Maximum Incineration Rate: pounds/hr	36,666 lbs/hr of reference waste	
	tons/day	460 tons/day of reference waste	
5.	Requested Maximum Operating Schedule:		

24 hours

24 hours/day 7 days/week 52 weeks/year 8760 hours/year

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6. Operating Capacity/Schedule Comment:

1380 tons per day MWC throughput for entire facility but no more than 1200 tons per day on an annual (52 week rolling average) basis.

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EMISSIONS UNIT INFORMATION

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C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: Stack	Plot Plan or	2. Emission Point	Гуре Code: 1
3.	Descriptions of Emission Flue No. 3	Points Comprising	g this Emissions Unit	for VE Tracking:
4.	ID Numbers or Description N/A	ns of Emission Ur	nits with this Emission	
5.	Discharge Type Code: V	Stack Height feet	: 220	7. Exit Diameter: 5.1 feet
8.	Exit Temperature: ~290 °F	9. Actual Volum ~89,000 acfm	netric Flow Rate:	10. Water Vapor: ~15 %
11.	Maximum Dry Standard F ~53,000 dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13.	Emission Point UTM Coo Zone: 17 East (km): North (km)	368.2	14. Emission Point I Latitude (DD/MI Longitude (DD/M	Ū
15. Emission Point Comment: MWC Unit 3 flue is enclosed within a common stack annulus with three other flues.				
				·

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 2_

Municipal Solid Waste					
		·			
2. Source Classification Cod 10101201	e (SCC):	3. SCC Units	:		
4. Maximum Hourly Rate: 128.333	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:	
7. Maximum % Sulfur: 0.3	8. Maximum 22	% Ash:	9.	Million Btu per SCC Unit: 10	
10. Segment Comment: Maximum hourly rate is based upon boiler loading capacity of 36,666 lbs/hr as stated in PSD-FL-121(B). Heat content of waste varies. 460 TPD limit.					
Segment Description and Ra	ite: Segment 2_	of <u>2</u>			
 Segment Description (Process/Fuel Type): Natural gas (auxiliary burner) 					
2. Source Classification Code (SCC): 10100602		3. SCC Units	:		
4. Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:	
7. Maximum % Sulfur:	8. Maximum % Ash:		9.	Million Btu per SCC Unit: 1000	
10. Segment Comment: Fuel for auxiliary burner.					

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control	3. Secondary Control	4. Pollutant
, Device Code		Device Code	Regulatory Code
PM 017			EL
SO2 202			EL
NOx	107		EL
Pb	017		EL
Fl	202		EL
Hg	207		EL
Be 017 Cd 017 HCl 202 PCDD/PCDF CO VOC VOC			EL
			EL
SAM	202		EL
	_		

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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	2. Total Percent Efficiency of Control:		
3. Potential Emissions: 4.1 lb/hour 17.96	4. Synthetically Limited? Stons/year Yes X No		
5. Range of Estimated Fugitive Emissions (as to tons/year			
6. Emission Factor: 0.012 gr/dscf @ 7% O2	7. Emissions Method Code:		
Reference: existing permit limit			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:		
tons/year	From: To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	5 years 10 years		
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit.			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

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2. Future Effective Date of Allowable

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 1_ of 1_

1. Basis for Allowable Emissions Code:

	RULE		Emissions:	
3.	Allowable Emissions and Units: 27 mg/dscm @ 7% O2	4.		ssions: 7.96 tons/year
5.	Method of Compliance: Annual Stack Test			
6.	Allowable Emissions Comment (Description 40 CFR 60.33b(a)(1)(i)	n of	Operating Method):	
All	lowable Emissions Allowable Emissions	of_		
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of A Emissions:	llowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emi	ssions: ons/year
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description	n of	Operating Method):	
<u>All</u>	owable Emissions Allowable Emissions	of_	<u> </u>	
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of A Emissions:	llowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emis lb/hour to	ssions: ons/year
5.	Method of Compliance:	•		
6.	Allowable Emissions Comment (Description	n of	Operating Method):	

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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: 32.86 lb/hour 143.9	4. Synthetically Limited? Utons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 29 ppmdv@7% O2	7. Emissions Method Code:
Reference: existing permit limit	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	☐ 5 years ☐ 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	·
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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_

Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 29 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 143.9 tons/year		
5. Method of Compliance: CEMS			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(i)			
Allowable Emissions Allowable Emissions	2_ of 2		
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:		
3. Allowable Emissions and Units: 75% reduction	4. Equivalent Allowable Emissions: lb/hour tons/year		
5. Method of Compliance: CEMS			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(i)			
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		

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5. Method of Compliance:

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6. Allowable Emissions Comment (Description of Operating Method):

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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: 58.63 lb/hour 256	4. Synthetically Limited? Stons/year Yes X No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 205 ppmdv@7% O2	7. Emissions Method Code:
Reference: existing permit limit	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	☐ 5 years ☐ 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Comment:	

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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: 2. Future Effective Date of Allowable **Emissions:** RULE 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 205 ppmdv @ 7% O2 lb/hour 256 tons/year 5. Method of Compliance: **CEMS** 6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(d) Allowable Emissions Allowable Emissions of 1. Basis for Allowable Emissions Code: 2. Future Effective Date of Allowable **Emissions:** 4. Equivalent Allowable Emissions: 3. Allowable Emissions and Units: 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):

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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 Efficie	ency of Control:	
3. Potential Emissions: 0.065 lb/hour 0.288	I *	netically Limited? Tes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 0.44 mg/dscm@7% O2		7. Emissions Method Code:	
Reference: existing permit limit			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:	
tons/year	From:	o:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoria	ng Period:	
tons/year	· ·	0 years	
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit			
11. Potential, Fugitive, and Actual Emissions Comment:			
	•		

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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	

A	Ilowable Emissions Allowable Emissions I_	01 1	_	
1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:	
	0.44 mg/dscm @ 7% O2		lb/hour 0.288 tons/year	
5.	Method of Compliance: Annual Stack Test	<u> </u>		
6.	Allowable Emissions Comment (Description 40 CFR 60.33b(a)(4)	of	Operating Method):	
Al	lowable 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.	6. Allowable Emissions Comment (Description of Operating Method):			
All	lowable 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 (perating Method):	

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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: Fl	2. Total Percent Efficiency of Control:		
3. Potential Emissions:	4. Synthetically Limited?		
1.0 lb/hour 4.43	3 tons/year Yes X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 6.74 mg/dscm @7% O2	7. Emissions Method Code:		
Reference: existing permit limit			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:		
tons/year	From: To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	5 years 10 years		
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit			
11. Potential, Fugitive, and Actual Emissions Comment:			

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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.

Allowab	le Emissions Allowable Emissions I_	of I	_	
	for Allowable Emissions Code:	2.	Future Effective Date of	f Allowable
ОТН	ER		Emissions:	
	vable Emissions and Units:	4.	Equivalent Allowable I	
6.74	mg/dscm @ 7% O2		lb/hour	4.43 tons/year
1	od of Compliance:		•	
Ann	ual Stack Test			
6. Allov	vable Emissions Comment (Description	of (Operating Method):	
PSD	-FL-121C			
			·	
		of_	_	
1. Basis	for Allowable Emissions Code:	2.	Future Effective Date o	f Allowable
			Emissions:	
3. Allov	vable Emissions and Units:	4.	Equivalent Allowable E	
			lb/hour	tons/year
5. Meth	od of Compliance:			
6. Allov	6. Allowable Emissions Comment (Description of Operating Method):			
Allowabi	e Emissions Allowable Emissions	of_	_	
1. Basis	for Allowable Emissions Code:	2.	Future Effective Date of	f Allowable
			Emissions:	
3. Allow	vable Emissions and Units:	4.	Equivalent Allowable E	missions:
			lb/hour	tons/year
5. Metho	od of Compliance:			
			•	
6. Allow	vable Emissions Comment (Description	of C	perating Method):	
	•			

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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: Hg	2. Total Percent Efficiency of Control:		
3. Potential Emissions: 0.02 lb/hour 0.087	4. Synthetically Limited? Yes X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 0.07 mg/dscm @7% O2	7. Emissions Method Code:		
Reference: existing permit limit			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:		
tons/year	From: To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	5 years 10 years		
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit			
11. Potential, Fugitive, and Actual Emissions Comment:			

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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			
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 0.070 mg/dscm @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 0.087 tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(3)				
Allowable Emissions 2_	_of 2			
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 85% reduction	4. Equivalent Allowable Emissions: lb/hour tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(3)				
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):			

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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: Be	2. Total Percent Efficiency of Control:		
3. Potential Emissions: 2.18E-04 lb/hour 9.6E-04	4. Synthetically Limited? 4 tons/year Yes X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 1.48 μg/dscm@7% O2	7. Emissions Method Code:		
Reference: existing permit condition			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:		
tons/year	From: To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	5 years 10 years		
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	t ·		
11. Potential, Fugitive, and Actual Emissions Comment:			

Allowable Emissions Allowable Emissions 1 of 1

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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.

1. Basis for Allowable Emissions Code: 2. Future Effective Date of Allowable **OTHER Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 1.48 μg/dscm @ 7% O2 9.6E-04 tons/year lb/hour 5. Method of Compliance: **Annual Stack Test** 6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-121C 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 2. Future Effective Date of Allowable 1. Basis for Allowable Emissions Code: **Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: lb/hour tons/year 5. Method of Compliance:

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6. Allowable Emissions Comment (Description of Operating Method):

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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: Cd	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6.00E-03 lb/hour 0.026	4. Synthetically Limited? Stons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.040 mg/dscm @7% O2 Reference: existing permit condition	7. Emissions Method Code:
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: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 1_	of !_			
Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
0.040 mg/dscm @ 7% O2	lb/hour 0.026 tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(a)(2)(i)				
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	of			
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):			

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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: HCl	2. Total Percent Efficiency of Control:		
3. Potential Emissions: 17.00 lb/hour 74.43	4. Synthetically Limited? Stons/year Yes X No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 29 ppmdv@7% O2	7. Emissions Method Code:		
Reference: existing permit limit			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:		
tons/year	From: To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	5 years 10 years		
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit			
11. Potential, Fugitive, and Actual Emissions Comment:			

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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 1_ of 2_

1 8	Thowavic Emissions 1_	01 2	-	
1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units:	4.	. Equivalent Allowable Emissions:	
	29 ppmdv @ 7% O2		lb/hour 74.43 tons/ye	ar
5.	Method of Compliance: Annual Stack Test	<u> </u>		
6.	Allowable Emissions Comment (Description 40 CFR 60.33b(b)(3)(ii)	of	Operating Method):	
<u>Al</u>	lowable Emissions Allowable Emissions 2_	of 2	2_	
1.	Basis for Allowable Emissions Code: RULE	2.	Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:	
	95% reduction		lb/hour tons/year	
5.	Method of Compliance: Annual Stack Test			
6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(b)(3)(ii)				
Al	lowable 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):	

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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: PCDD/PCDF	2. Total Percent Efficiency of Control:
3. Potential Emissions: 4.5E-06 lb/hour 1.96E-05	4. Synthetically Limited? Stons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):
6. Emission Factor: 30 ng/dscm@7% O2 Reference: existing permit condition	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	•
·	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 2. Future Effective Date of Allowable 1. Basis for Allowable Emissions Code: RULE **Emissions:** 3. Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 30 ng/dscm @ 7% O2 1.96E-05 tons/year lb/hour 5. Method of Compliance: **Annual Stack Test** 6. Allowable Emissions Comment (Description of Operating Method): 40 CFR 60.33b(c)(1)(ii) 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:** 4. Equivalent Allowable Emissions: 3. Allowable Emissions and Units: lb/hour tons/year 5. Method of Compliance: 6. Allowable Emissions Comment (Description of Operating Method):

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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 Efficie	ency of Control:
3. Potential Emissions: 17.4 lb/hour 76.26		netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	
6. Emission Factor: 100 ppmdv @7% O2		7. Emissions Method Code:
Reference: existing permit condition		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoria	ng Period:
tons/year	ŭ	0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

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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
Basis for Allowable Emissions Code: RULE	Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 100 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 76.26 tons/year
5. Method of Compliance: CEMS	
6. Allowable Emissions Comment (Descript 40 CFR 60.34b(a)	tion 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 (Descript	ion 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	ion of Operating Method):

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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

Pollutant Emitted: VOC	2. Total Perc	ent Efficie	ency of Control:
3. Potential Emissions: 3.83 lb/hour 16.8	3 tons/year		netically Limited? Tes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		•
6. Emission Factor: 0.01 gr/dscf @12% CO2 Reference: existing permit condition			7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:
tons/year	From:		Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:
tons/year		rs 🔲 1	0 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

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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 1_	of 2_
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.01 gr/dscf @ 12% CO2	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Annual Stack Test	
6. Allowable Emissions Comment (Description PSD-FL-104 and PSD-FL-121C	n of Operating Method):
Allowable Emissions 2_	of 2
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.2 lb/ton	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Initial Stack Test only	
6. Allowable Emissions Comment (Description PSD-FL-104 and PSD-FL-121C	n of Operating Method):
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):

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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

Pollutant Emitted: SAM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 24.6 lb/hour 107.7	4. Synthetically Limited? 7 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 0.072 gr/dscf @12% CO2 Reference: existing permit condition	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Refer to Table 1-1 of existing Title V permit	
11. Potential, Fugitive, and Actual Emissions Co	omment:

POLLUTANT DETAIL INFORMATION
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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 1_	of 2
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.072 gr/dscf @ 12% CO2	lb/hour tons/year
5. Method of Compliance: Initial Stack Test only	
6. Allowable Emissions Comment (Description PSD-FL-121C	of Operating Method):
Allowable Emissions 2_	of 2
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.2 lb/ton	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Initial Stack Test only	
6. Allowable Emissions Comment (Description PSD-FL-121C	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):

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G. VISIBLE EMISSIONS INFORMATION

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

	isible Emissions Limitation: Visible Emi	ssions Limitation 1_ of 1	_
1.	Visible Emissions Subtype: VE10	2. Basis for Allowable	Opacity:
		X Rule	Other
3.	1 5	Exceptional Conditions: wed:	% 6 min/hour
40	Method of Compliance: CFR60.33(b)(a)(1)(iii)		
5.	Visible Emissions Comment:		
₹/i			
<u>V 1</u>	sible Emissions Limitation: Visible Emis	sions Limitation of	-
_	Visible Emissions Limitation: Visible Emis Visible Emissions Subtype:	2. Basis for Allowable Rule	Opacity:
1.	Visible Emissions Subtype: Allowable Opacity:	2. Basis for Allowable Rule Exceptional Conditions:	
3.	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: % 1	2. Basis for Allowable Rule Exceptional Conditions:	Other %

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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 8
1. Parameter Code:	2. Pollutant(s):
O2	O2(inlet)
3. CMS Requirement:	X Rule
4. Monitor Information Manufacturer: M&C	
Model Number: PMA-22	Serial Number: 99-11-048
5. Installation Date:	6. Performance Specification Test Date: 7/28/2000
7. Continuous Monitor Comment:	
Continuous Monitoring System: Continuous	Monitor 2 of 8
1. Parameter Code:	2. Pollutant(s):
1. Parameter Code:	2. Pollutant(s):
1. Parameter Code: EM	2. Pollutant(s): SO2(inlet)
Parameter Code: EM CMS Requirement: Monitor Information	2. Pollutant(s): SO2(inlet)
Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2. Pollutant(s): SO2(inlet) X Rule Other
1. Parameter Code: EM 3. CMS Requirement: 4. Monitor Information Manufacturer: TECO Model Number: 43 CHL	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61486-331 6. Performance Specification Test Date:
1. Parameter Code: EM 3. CMS Requirement: 4. Monitor Information Manufacturer: TECO Model Number: 43 CHL 5. Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61486-331 6. Performance Specification Test Date:
1. Parameter Code: EM 3. CMS Requirement: 4. Monitor Information Manufacturer: TECO Model Number: 43 CHL 5. Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61486-331 6. Performance Specification Test Date:
1. Parameter Code: EM 3. CMS Requirement: 4. Monitor Information Manufacturer: TECO Model Number: 43 CHL 5. Installation Date:	2. Pollutant(s): SO2(inlet) X Rule Other Serial Number: 43CHL-61486-331 6. Performance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3_ of 8_

1.	Parameter Code: EM	2. Pollutant(s): CO
3.	CMS Requirement:	X Rule Other
4.	Monitor Information Manufacturer: TECO	
	Model Number: 48C	Serial Number: 48C-61473-331
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
		·
Co	ntinuous Monitoring System: Continuous	Monitor 4 of 8
1.	Parameter Code: CO2	2. Pollutant(s): CO2
3.	CMS Requirement:	X Rule Other
4.	Monitor Information Manufacturer: FUJI	
	Model Number: ZRH-1	Serial Number: A7P2711T
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
I		

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 5_ of 8_

1		
1.	Parameter Code:	2. Pollutant(s):
	EM	SO2
3.	CMS Requirement:	X Rule Other
4.	Monitor Information	
	Manufacturer: TECO	
	Model Number: 43 CHL	Serial Number: 43CHL-61440-331
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
7.	Continuous Monitor Comment:	
_		
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 6_ of 8_
	Parameter Code:	2. Pollutant(s):
1.	Parameter Code:	2. Pollutant(s):
1. 3.	Parameter Code: EM	2. Pollutant(s): NOx
1. 3.	Parameter Code: EM CMS Requirement:	2. Pollutant(s): NOx
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2. Pollutant(s): NOx X Rule Other
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332 6. Performance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332 6. Performance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332 6. Performance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332 6. Performance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332 6. Performance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 CHL Installation Date:	2. Pollutant(s): NOx X Rule Other Serial Number: 42CHL-61610-332 6. Performance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

<u>Continuous Monitoring System:</u> Continuous Monitor 7_ of 8_

一		a = 11 · · ·/ >
1.	Parameter Code:	2. Pollutant(s):
	O2	O2 (outlet)
	CMS Requirement:	X Rule Other
4.	Monitor Information	
	Manufacturer: M&C	
	Model Number: PMA-22	Serial Number: 99-11-049
5.	Installation Date:	6. Performance Specification Test Date: 7/28/2000
<u> </u>		1/28/2000
7.	Continuous Monitor Comment:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 8 of 8
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor 8 of 8 2. Pollutant(s):
1.	Parameter Code:	2. Pollutant(s):
1. 3.	Parameter Code: VE	2. Pollutant(s): Opacity
1. 3.	Parameter Code: VE CMS Requirement:	2. Pollutant(s): Opacity
1. 3.	Parameter Code: VE CMS Requirement: Monitor Information	2. Pollutant(s): Opacity
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems	2. Pollutant(s): Opacity X Rule Other
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41	2. Pollutant(s): Opacity X Rule Other Serial Number: 9811-8029 6. Performance Specification Test Date:
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: 9811-8029 6. Performance Specification Test Date:
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: 9811-8029 6. Performance Specification Test Date:
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: 9811-8029 6. Performance Specification Test Date:
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: 9811-8029 6. Performance Specification Test Date:
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Spectrum Systems Model Number: 41 Installation Date:	2. Pollutant(s): Opacity X Rule Other Serial Number: 9811-8029 6. Performance Specification Test Date:

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I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix D 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: Appendix E 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) X Attached, Document ID: Appendix F 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) X Attached, Document ID: Appendix G Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested: Previously Submitted, Date: August 2011, Appendix H 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:

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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 sa only)	mpling facilities	
Attached, Document ID: X Not Applicable		
Additional Requirements for Title V Air Operation Permit Applications		
1. Identification of Applicable Requirements:		
X Attached, Document ID: Appendix B		
2. Compliance Assurance Monitoring:		
Attached, Document ID: X Not Applicable		
3. Alternative Methods of Operation:		
Attached, Document ID: X Not Applicable		
4. Alternative Modes of Operation (Emissions Trading):	•	
Attached, Document ID: X Not Applicable		
Additional Requirements Comment		
·		

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A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

	egulated Emissions Unit / air operation permit. S only.)					
. 	x The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.					
_	 The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit. 					
Emissions Unit Desc	Emissions Unit Description and Status					
1. Type of Emission	s Unit Addressed in this	Section: (Check one)				
process or pro	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).					
of process or p	s Unit Information Section of Section units and action which went but may also produced to the section of the s	vities which has at least	e emissions unit, a group one definable emission			
	☐ 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: Ash Building and Handling System with Baghouse						
3. Emissions Unit Id	entification Number: 10	00				
4. Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit			
Status Code:	Construction Date:	Date:	Major Group SIC Code:			
Α		12/18/86	49			
8. Federal Program A	Applicability: (Check all	that apply)				
Acid Rain Uni	t					
☐ CAIR Unit						
9. Package Unit:						
Manufacturer:		Model Number:				
10. Generator Namep		1	1			
11. Emissions Unit Comment: Ash is conveyed via numerous enclosed conveyors to the Ash Handling Building, where Ash is loaded into covered trucks for transport to the Hillsborough County Southeast landfill.						

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Emissions Unit Control Equipment/Method: Control 1_ of	ot I	1
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1. Control Equipment/Method Description:
A baghouse is located on the ash handling building as an added precaution for fugitive
emissions. The baghouse maintains negative pressure in the ash handling building.
chinssions. The bagnouse manualis negative pressure in the ash handling building.
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control 2_ of 2_
1. Control Equipment/Method Description:
Wet Scrubber – Whirl/Wet Wet Dust Collector Size 70, Model H.
,
<u> </u>
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate: 100,800 wet tons			
2.				
3.	Maximum Heat Input Rate: million Btu/hr	ν.		
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:			
	•			

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

Emission Point Description and Type

1.	Identification of Point on Flow Diagram:	Plot Plan or	2. Emission Point	Type Code: 3
3.	Descriptions of Emission Visible emissions from the			
	ID Numbers or Descriptio N/A	ns of Emission Ur	nits with this Emission	n Point in Common:
5.	Discharge Type Code: R	6. Stack Height	: 5 feet	7. Exit Diameter:2 feet
8.	Exit Temperature: 77 °F	9. Actual Volum 12,000 acfm	netric Flow Rate:	10. Water Vapor: varies
11.	Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13.	13. Emission Point UTM Coordinates Zone: 17 East (km): 368.2 North (km): 3092.7		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) 27/57/14 Longitude (DD/MM/SS) 82/40/22	
15.	Emission Point Comment:			,

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1.	Segment Description (Process/Fuel Type): Ash handling from combustion of municipal solid waste					
2.		e (SCC):	3. SCC Units:			
	30510199					
4.	Maximum Hourly Rate: N/A	5. Maximum 100800	Annual Rate:	6.	Estimated Annual Activity Factor:	
7.	Maximum % Sulfur: N/A	8. Maximum 9 N/A	% Ash:	9.	Million Btu per SCC Unit:	
10.	. Segment Comment:					
<u>Se</u>	Segment Description and Rate: Segment of					
1.	1. Segment Description (Process/Fuel Type):					
2.	2. Source Classification Code (SCC): 3. SCC Units:					
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:	
7.	Maximum % Sulfur:	8. Maximum %	% Ash:	9.	Million Btu per SCC Unit:	
10.	Segment Comment:					

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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	017		WP
	-		
			_
			-
,			

POLLUTANT DETAIL INFORMATION Page [1] of [2]

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:	2. Total Percent Efficie	ency of Control:	
PM			
3. Potential Emissions:	4. Synth	netically Limited?	
1.63 lb/hour 7.14	tons/year	es X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 1.63 lbs/hr		7. Emissions Method Code:	
Reference: existing permit condition		0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:	
tons/year	From:	To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:	
tons/year	5 years 10 years		
10. Calculation of Emissions: Potential emissions estimates based on curre			
11. Potential, Fugitive, and Actual Emissions Comment:			
		•	

POLLUTANT DETAIL INFORMATION
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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 1_ of 1_				
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units: 1.63 lbs/hr	4. Equivalent Allowable Emissions: lb/hour tons/year			
5. Method of Compliance:5% Opacity limit accepted in lieu of stack to	Method of Compliance: 5% Opacity limit accepted in lieu of stack testing			
6. Allowable Emissions Comment (Description of Operating Method): Basis for allowable emissions: PSD-FL-121				
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):				
<u>Allowable Emissions</u> 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):				

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G. VISIBLE EMISSIONS INFORMATION

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

	sible Emissions Limitation: Visible Emissi	ons Limitation 1_ of 2	
1.	Visible Emissions Subtype:	2. Basis for Allowable Or	pacity:
	VE05	∏ Rule 🗍	x Other
2	Allowable Opacity:		
3.		contional Conditions	%
	·	ceptional Conditions:	-
	Maximum Period of Excess Opacity Allowe	2 0:	min/hour
4.	Method of Compliance: Annual Method 9		
_	W. 11 B		
5.	Visible Emissions Comment: 5% opacity fr	om the ash handling buildin	g baghouse
Visible Emissions Limitation: Visible Emissions Limitation 2_ of 2			
Vis	sible Emissions Limitation: Visible Emission	ons Limitation 2_ of 2	
	sible Emissions Limitation: Visible Emissions Subtype:	ons Limitation 2_ of 2 2. Basis for Allowable Op	pacity:
	-		acity:
1.	Visible Emissions Subtype: VE05	2. Basis for Allowable Op	•
1.	Visible Emissions Subtype: VE05 Allowable Opacity:	2. Basis for Allowable Op	Other
1.	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex	2. Basis for Allowable Op	Other %
3.	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allower	2. Basis for Allowable Op Rule ceptional Conditions:	Other
3.	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex	2. Basis for Allowable Op Rule ceptional Conditions:	Other %
3.	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allower	2. Basis for Allowable Op Rule ceptional Conditions:	Other %
3.	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowe Method of Compliance: Annual Method 22	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour
 3. 4. 5. 	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowed Method of Compliance: Annual Method 22 Visible Emissions Comment: 5% Opacity for	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour
 3. 4. 5. 	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowe Method of Compliance: Annual Method 22	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour
 3. 4. 5. 	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowed Method of Compliance: Annual Method 22 Visible Emissions Comment: 5% Opacity for	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour
 3. 4. 5. 	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowed Method of Compliance: Annual Method 22 Visible Emissions Comment: 5% Opacity for	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour
 3. 4. 5. 	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowed Method of Compliance: Annual Method 22 Visible Emissions Comment: 5% Opacity for	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour
 3. 4. 5. 	Visible Emissions Subtype: VE05 Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allowed Method of Compliance: Annual Method 22 Visible Emissions Comment: 5% Opacity for	2. Basis for Allowable Op X Rule ceptional Conditions:	Other % min/hour

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H. CONTINUOUS MONITOR INFORMATION

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

<u>C</u> (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:			
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor of		
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor of 2. Pollutant(s):		
1.				
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):		
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s): Rule		
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):		

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: Appendix L Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: X Previously Submitted, Date 11/18/2005
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: X Previously Submitted, Date 11/18/2005
	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)
	☐ Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: August 2011, See Appendix H
	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: X Not Applicable

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EMISSIONS UNIT INFORMATION Section [4] of [12]

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
Identification of Applicable Requirements: Attached, Document ID:

2. Compliance Assurance Monitoring:
Attached, Document ID: X Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: X Not Applicable
Additional Requirements Comment

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of [12] A. GENERAL EMISSIONS UNIT INFORMATION

<u>Ti</u>	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.)				
	emissions unit			on Section is a regulated	
	unregulated en	unit addressed in this Entire in this Entire in the Entire	missions Unit Information	on Section is an	
<u>En</u>	nissions Unit Desci	ription and Status			
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)		
	single process	s Unit Information Secti or production unit, or ac which has at least one de	tivity, which produces of	one or more air	
	of process or p	s Unit Information Secti- roduction units and activ vent) but may also prod	vities which has at least	e emissions unit, a group one definable emission	
		s Unit Information Section production units and a		e emissions unit, one or fugitive emissions only.	
	Description of Em WC Units 1, 2 and 3	issions Unit Addressed i	n this Section: Pebble I	Lime Storage Silo for	
3.	Emissions Unit Ide	entification Number: 10	1	_	
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit	
	Status Code:	Construction Date:	Date:	Major Group SIC Code:	
	Α	Date.	10/1/2000	49	
8.	Federal Program A	pplicability: (Check all	that apply)		
	Acid Rain Unit	i e			
	CAIR Unit				
9.	Package Unit:				
	Manufacturer: N/A		Model Number:	N/A	
	Generator Namepla	_			
	Emissions Unit Co VC (Units 1, 2 and 1	mment: Lime is used in 3).	the spray dryer absorbe	ers for each of three	
	- (1, -	1			

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Emissions Unit Control Equipment/Method: Control 1_ of 1_
Control Equipment/Method Description: Fabric Filter Baghouse
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:

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2. Control Device or Method Code:

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate: ~20 tons per silo filling	
2.	Maximum Production Rate: N/A	
3.	Maximum Heat Input Rate: N/A Btu/hr	
4.	Maximum Incineration Rate: pounds/hr N/A	
	tons/day N/A	
5.	Requested Maximum Operating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6.	Operating Capacity/Schedule Comment: Lime is received in the silo approximately once per week.	

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

Emission Point Description and Type

1.	Identification of Point on Flow Diagram:	Plot Plàn or	2. Emission Point	Гуре Code: 1
3.	Descriptions of Emission Vent discharges horizont	ally near top of ba	ghouse.	
4.	ID Numbers or Description	ns of Emission Ui	nits with this Emission	
5.	Discharge Type Code: H	6. Stack Height	: ~40 feet	7. Exit Diameter: 0.66 feet
8.	Exit Temperature:	9. Actual Volur ~5700 acfm	netric Flow Rate:	10. Water Vapor:
11.	Maximum Dry Standard F ~7500 dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13.	Emission Point UTM Coo	rdinates		Latitude/Longitude
	Zone: East (km):		Latitude (DD/MI	,
	North (km)		Longitude (DD/I	MM/SS)
15.	Emission Point Comment:			

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1.	Segment Description (Process/Fuel Type): Pebble lime unloading operation					
2.	Source Classification Code 30510296	le (SC	CC):	3. SCC Units:		
4.	Maximum Hourly Rate: 20	5.	Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8.	Maximum %	% Ash:	9.	Million Btu per SCC Unit:
10.	Segment Comment: Assumes that a single 20-	ton tr	ruck will off	load in ∼1 hr		
Seg	gment Description and Ra	ite:	Segment (of		· · · · · · · · · · · · · · · · · · ·
1.	1. Segment Description (Process/Fuel Type):					
2.	Source Classification Code	e (SC	C):	3. SCC Units:		
4.	Maximum Hourly Rate:	5.	Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8.	Maximum %	% Ash:	9.	Million Btu per SCC Unit:
10.	10. Segment Comment:					

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1.	Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
	PM	018		EL
	_			
				_

EMISSIONS UNIT INFORMATION Section [5] of [12]

POLLUTANT DETAIL INFORMATION Page [1] of [1]

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

Pollutant Emitted: PM	2. Total Percent Effici	ency of Control:
3. Potential Emissions: lb/hour		hetically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):	
6. Emission Factor:		7. Emissions Method Code:
Reference:		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	Го:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitor	ing Period:
tons/year		0 years
10. Calculation of Emissions:		·
,		
11. Potential, Fugitive, and Actual Emissions Co		_
11. I otelitai, I agitive, and I tetaal Elinissions ex	Jimilent.	

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POLLUTANT DETAIL INFORMATION
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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 1_ of 1_

1.	Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.015 gr/dscf	4. Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance: Annual Method 9 (5% Opacity limit accepted)	ed in lieu of stack testing)
	Allowable Emissions Comment (Description	
	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):
<u>Al</u>	owable 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):

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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___ 2. Basis for Allowable Opacity: 1. Visible Emissions Subtype: VE05 x Rule ☐ Other 3. Allowable Opacity: 5 % **Exceptional Conditions:** Normal Conditions: % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: Annual Method 9 5. Visible Emissions Comment: Visible Emissions Limitation: Visible Emissions Limitation___ of_ 2. Basis for Allowable Opacity: 1. Visible Emissions Subtype: ☐ Rule ☐ Other 3. Allowable Opacity: **Exceptional Conditions: Normal Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: 5. Visible Emissions Comment:

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H. CONTINUOUS MONITOR INFORMATION

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

<u>C</u>	ontinuous Monitoring System: Continuous	s Monitor of
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement:	☐ Rule ☐ Other
4.	Monitor Information Manufacturer: Model Number:	Serial Number:
_	Installation Date:	
Э.	installation Date:	6. Performance Specification Test Date:
/.	Continuous Monitor Comment:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor of
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor of 2. Pollutant(s):
1.		
1. 3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):
3. 4.	Parameter Code: CMS Requirement: Monitor Information	2. Pollutant(s):

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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 11/18/2005
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 11/18/2005
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: X Previously Submitted, Date 11/18/2005 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 11/18/2005 Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested: Previously Submitted, Date: August 2011, See Appendix H Test Date(s)/Pollutant(s) Tested:
	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: X Not Applicable

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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: \times 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: X Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: x Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: \times Not Applicable
Additional Requirements Comment

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A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	_	air operation permit. S	•		ng for an initial, revised g for an air construction
	x The emissions emissions unit.		mis	sions Unit Information	on Section is a regulated
		unit addressed in this E	mis	sions Unit Informati	on Section is an
<u>En</u>	nissions Unit Desci	ription and Status			
1.	Type of Emissions	Unit Addressed in this	Sec	tion: (Check one)	
		s Unit Information Sect			
	~ ·	or production unit, or a		• '	
	-	which has at least one of		•	e emissions unit, a group
					one definable emission
		vent) but may also prod			
	☐ This Emissions	S Unit Information Section	ion a	addresses, as a single	e emissions unit, one or
	<u> </u>	<u> </u>			fugitive emissions only.
		issions Unit Addressed	in th	nis Section: Carbon	Storage Silo for MWC
Un	its 1,2 and 3				
	T ' T ' X 1				
		entification Number: 10	,	T '4' 104- 4	7 5
4.	Emissions Unit Status Code:	5. Commence Construction	6.	Initial Startup Date:	7. Emissions Unit Major Group
	Status Couc.	Date:		Bute.	SIC Code:
	Α			10/1/2000	49
8.	Federal Program A	pplicability: (Check al	l tha	it apply)	
	Acid Rain Unit	Ĭ.			
	CAIR Unit			•	
9.	Package Unit:			36 1131 1	NT/A
10	Manufacturer: N/A			Model Number:	N/A
	Generator Namepla		1 4		Com h - Cal
	Emissions Unit Co VC (Units 1, 2 and 3	mment: Carbon is used 3).	110	control rig emissions	s nom each of three
	· - (- <i>)</i> -			

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<u>E</u>	missions Unit Control Equipment/Method: Control 1_ of 1_
1.	Control Equipment/Method Description:
	Fabric Filter Baghouse
2.	Control Device or Method Code:
Er	nissions Unit Control Equipment/Method: Control of
1.	Control Equipment/Method Description:
2.	Control Device or Method Code:
-	
<u>Er</u>	nissions Unit Control Equipment/Method: Control of
	Control Equipment/Method: Control of Of
1.	
2.	Control Equipment/Method Description:
1. 2. <u>En</u>	Control Equipment/Method Description: Control Device or Method Code:
1. 2. <u>En</u>	Control Equipment/Method Description: Control Device or Method Code: nissions Unit Control Equipment/Method: Control of
1. 2. <u>En</u>	Control Equipment/Method Description: Control Device or Method Code: nissions Unit Control Equipment/Method: Control of

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate: ~20 tons per silo filling	
2.	Maximum Production Rate: N/A	
3.	Maximum Heat Input Rate: N/A Btu/hr	
4.	Maximum Incineration Rate: pounds/hr N/A	
	tons/day N/A	
5.	Requested Maximum Operating Schedule:	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6.	Operating Capacity/Schedule Comment: Carbon is received in the silo approximately every other week.	

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C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on I Flow Diagram:	Plot Plan or	2. Emission Point	Гуре Code: 1
3.	Vent discharges horizonta	ally near top of bag	ghouse.	
	ID Numbers or Description			
5.	Discharge Type Code: H	6. Stack Height	: ~40 feet	7. Exit Diameter: 0.66 feet
8.	Exit Temperature:	9. Actual Volum ~5700 acfm	netric Flow Rate:	10. Water Vapor:
11.	Maximum Dry Standard F	low Rate:	12. Nonstack Emissi	on Point Height:
	~7500 dscfm		feet	
	Emission Point UTM Coor	rdinates	14. Emission Point I	Latitude/Longitude
	Emission Point UTM Coor Zone: East (km):		14. Emission Point L Latitude (DD/MI	M/SS)
13.	Emission Point UTM Coor Zone: East (km): North (km)	:	14. Emission Point I	M/SS)
13.	Emission Point UTM Coor Zone: East (km):	:	14. Emission Point L Latitude (DD/MI	M/SS)

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1.	Segment Description (Pro Carbon unloading operation			
2.	Source Classification Cod 30510296	e (SCC):	3. SCC Units	:
4.	Maximum Hourly Rate: 20	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:
10	Segment Comment: Assumes that a single 20-	ton truck will off	fload in ∼1 hr	
Se	gment Description and Ra	ite: Segment	of	
1.	Segment Description (Prod	cess/Fuel Type):		
2.	Source Classification Code	e (SCC):	3. SCC Units:	
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:
10.	Segment Comment:			

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018		EL
			-
	_		-
	_		
	_		
		-	
			•
			_

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POLLUTANT DETAIL INFORMATION
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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

Pollutant Emitted: PM	2. Total Perc 99	ent Efficie	ency of Control:
3. Potential Emissions: lb/hour	tons/year		netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	•	
6. Emission Factor: Reference:			7. Emissions Method Code:
	0.1 D1:	2441-	D-'-:- 1.
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline		
·	From:		Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected		~
tons/year		ırs 🔲 1	0 years
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

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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 1_ of 1_

Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.015 gr/dscf	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Annual Method 9 (5% Opacity limit accepted)	ed in lieu of stack testing)
6. Allowable Emissions Comment (Description permit condition	of Operating Method): Existing Title V
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:	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):

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G. VISIBLE EMISSIONS INFORMATION

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

$\underline{\mathbf{V}}_{\mathbf{i}}$	isible Emissions Limitation: Visible Emiss	ons Limita	tion 1_ of 1	-	
1.	Visible Emissions Subtype:	2. Basis	for Allowable	Opacity:	
	VE05	[x]	Rule	Other	
3.	Allowable Opacity:				
		-	Conditions:	%	
	Maximum Period of Excess Opacity Allow	ed:		min/hour	
4.	Method of Compliance: Annual Method 9				
5.	Visible Emissions Comment:	<u>_</u> _			
<u> </u>					
<u>Vi</u>	sible Emissions Limitation: Visible Emissi			-	
	sible Emissions Limitation: Visible Emissi Visible Emissions Subtype:	2. Basis	for Allowable	- Opacity:	
			for Allowable	Opacity:	
1,		2. Basis	for Allowable		
1,	Visible Emissions Subtype: Allowable Opacity:	2. Basis	for Allowable	Other	
1,	Visible Emissions Subtype: Allowable Opacity:	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Ex	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Ex Maximum Period of Excess Opacity Allower	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Maximum Period of Excess Opacity Allowed Method of Compliance:	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Ex Maximum Period of Excess Opacity Allower	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Maximum Period of Excess Opacity Allowed Method of Compliance:	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Maximum Period of Excess Opacity Allowed Method of Compliance:	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Maximum Period of Excess Opacity Allowed Method of Compliance:	2. Basis Rul	for Allowable le	Other	
3,	Visible Emissions Subtype: Allowable Opacity: Normal Conditions: Maximum Period of Excess Opacity Allowed Method of Compliance:	2. Basis Rul	for Allowable le	Other	

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H. CONTINUOUS MONITOR INFORMATION

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

	ontinuous Monitoring System: Continuous	 • •
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:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor of
_	Parameter Code: Continuous	Monitor of 2. Pollutant(s):
1.	Parameter Code:	2. Pollutant(s):
_	Parameter Code: CMS Requirement:	
1.	Parameter Code: CMS Requirement: Monitor Information	2. Pollutant(s):
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s): Rule Other Serial Number:
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:

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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 11/18/2005
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:
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: X Previously Submitted, Date 11/18/2005
	☐ 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 11/18/2005
	☐ Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested: Previously Submitted, Date: August 2011, See Appendix H 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: X Not Applicable

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EMISSIONS UNIT INFORMATION Section [6] of [12]

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			
Identification of Applicable Requirements: Attached, Document ID:			
Compliance Assurance Monitoring: Attached, Document ID: X Not Applicable			
3. Alternative Methods of Operation: Attached, Document ID: X Not Applicable			
4. Alternative Modes of Operation (Emissions Trading): Attached, Document ID: X Not Applicable			
Additional Requirements Comment			

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EMISSIONS UNIT INFORMATION Section [7] of [12]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)				
	 X The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit. 				
En	nissions Unit Descr	ription and Status			
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)		
	X This Emission	ns Unit Information Sect	tion addresses, as a sing	le emissions unit, a	
	U 1	or production unit, or ac			
	•	which has at least one d	•	` ' '	
	of process or p		vities which has at least	e emissions unit, a group one definable emission	
		s Unit Information Section production units and a	_	e emissions unit, one or fugitive emissions only.	
2.	Description of Em	issions Unit Addressed	in this Section: MWC U	Jnit 4	
3.	Emissions Unit Ide	entification Number: 10			
	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit	
	Status Code:	Construction	Date:	Major Group	
	A	Date:	00/05/2000	SIC Code:	
0	A Endough Browner A	mulicability (Charle all	09/05/2009	49	
0.	Acid Rain Unit	applicability: (Check all	i mat appry)		
	CAIR Unit	•			
9.	Package Unit:				
	_	B Riley, Inc. Model N	umber: Mass Burner W	/aterwall Boiler	
10.	Generator Namepl	ate Rating: 17 MW			
	Emissions Unit Conerator (TG-2).	mment: MWC Unit 4 is	s directly connected to a	single steam turbine-	

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<u>En</u>	Emissions Unit Control Equipment/Method: Control 1_ of 4_			
1.	Control Equipment/Method Description:			
	Activated Carbon Injection			

2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 2_ of 4_

- Control Equipment/Method Description:
 Selective Noncatalytic Reduction
- 2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 3_ of 4_

- 1. Control Equipment/Method Description: Spray Dryer Absorber
- 2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control 4_ of 4_

- 1. Control Equipment/Method Description: Fabric Filter Baghouse
- 2. Control Device or Method Code:

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	1. Maximum Process or Throughput Rate: 200,000 lbs of steam per hour			
2.	2. Maximum Production Rate: N/A			
3.	3. Maximum Heat Input Rate: ~288 million Btu/hr			
4.	Maximum Incineration Rate: pounds/hr 55,000 lbs/hr of reference waste			
	tons/day 660 tons/day of reference waste			
5.	Requested Maximum Operating Schedule:			
	24 hours/day 7 days/week			
	52 weeks/year 8760 hours/year			

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

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: Stack	Plot Plan or	2. Emission Point	Type Code: 1	
3.	Descriptions of Emission Flue No. 4	·			
	ID Numbers or Descriptio N/A				
5.	Discharge Type Code: V	6. Stack Height	: 220 feet	7. Exit Diameter: 5.5 feet	
8.	Exit Temperature: ~270 °F	9. Actual Volum 130,000 acfm	netric Flow Rate:	10. Water Vapor: ~20 %	
11.	11. Maximum Dry Standard Flow Rate: ~70,000 dscfm		12. Nonstack Emission Point Height: feet		
13.	Emission Point UTM Coo			atitude/Longitude	
	Zone: 17 East (km):	368.2	Latitude (DD/M)	, and the second	
15	North (km)		Longitude (DD/I	MM/SS) 82/21/12	
15.	15. Emission Point Comment: MWC Unit 4 flue is enclosed within a common stack annulus with three other flues.				
			non stack annulus wi	h three other flues.	
			non stack annulus wi	h three other flues.	
			non stack annulus wi	th three other flues.	
			non stack annulus wi	h three other flues.	
			non stack annulus wi	h three other flues.	
			non stack annulus wi	h three other flues.	
			non stack annulus wi	th three other flues.	

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1. Segment Description (Process/Fuel Type): Municipal Solid Waste				
2. Source Classification Code 50100105	e (SCC): 3. SCC Units	»: 		
4. Maximum Hourly Rate: 25 tons/hr	5. Maximum Annual Rate: 219,000 tons/yr	6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 10		
10. Segment Comment:				
Segment Description and Ra	ite: Segment of			
1. Segment Description (Prod	cess/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:	-			

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

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):				
2. Source Classification Coc	le (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 Ra	ate: 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:				

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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	016		EL
SO2	067		EL
NOx	107	026	EL
Pb	017		EL
Hg	207		EL_
Cd	016		EL
HCI	067		EL
PCDD/PCDF	016	*	EL
CO	025		EL

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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	2. Total Percent Efficie	ency of Control:
	5 tons/year	netically Limited? Tes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):	
6. Emission Factor: 0.012 gr/dscf @ 7% O2		7. Emissions Method Code:
Reference: existing permit condition		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	co:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:
tons/year	5 years 1	0 years
10. Calculation of Emissions: Potential emissions estimates based on curr		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

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F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

 $\label{lem:complete} \textbf{Complete Subsection F2} \ \ \textbf{if the pollutant identified in Subsection F1} \ \ \textbf{is or would be subject} \\ \textbf{to a numerical emissions limitation.}$

Allowable Emissions 1_ of 1_

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 12 mg/dscm @ 7% O2	4.	Equivalent Allowable Emissions: lb/hour 14.45 tons/year
5.	Method of Compliance: Annual Stack Test		
6.	Allowable Emissions Comment (Description PSD-FL-369B	of (Operating Method):
Αľ	lowable Emissions Allowable Emissions	of_	_
	Basis for Allowable Emissions Code:		Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of C	Operating Method):
All	lowable 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 C	perating Method):

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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 Perc	ent Efficie	ency of Control:
3. Potential Emissions: 19.2 lb/hour 84.10	tons/year	•	netically Limited? Tes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 26 ppmdv@7% O2 Reference: existing permit condition			7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:
tons/year	From:	Γ	o:
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:
tons/year	☐ 5 yea	rs 🔲 1	0 years
` ' '			
11. Potential, Fugitive, and Actual Emissions Co	11. Potential, Fugitive, and Actual Emissions Comment:		

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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_

Allowable Emissions Allowable Emissions I	_ 01 2			
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable			
OTHER	Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
26 ppmdv @ 7% O2	lb/hour 84.10 tons/year			
5. Method of Compliance: CEMS				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-369B				
Allowable Emissions 2	_ of 2			
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
80% reduction	lb/hour tons/year			
5. Method of Compliance: CEMS				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-369B				
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 (Descriptio	6. Allowable Emissions Comment (Description of Operating Method):			

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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

Pollutant Emitted: NOx	2. Total Percent Effic	iency of Control:	
3. Potential Emissions: 58.5 lb/hour 256	-	thetically Limited? Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	_	
6. Emission Factor: 110 ppmdv@7% O2		7. Emissions Method Code:	
Reference: existing permit condition			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-mont	h Period:	
tons/year	From:	To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitor	ring Period:	
tons/year	5 years	10 years	
` 1 '			
11. Potential, Fugitive, and Actual Emissions Co	omment:		

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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.

1. Basis for Allowable Emissions Code: 2. Future Effective Date of Allowable

Allowable Emissions 1 of 1

	OTHER	Emissions:	
3.	Allowable Emissions and Units: 110 ppmdv @ 7% O2	4. Equivalent Allowable Emissions: lb/hour 256 tons/y	ear
5.	Method of Compliance: CEMS		
6.	Allowable Emissions Comment (Description PSD-FL-369B	on of Operating Method):	
Al	lowable 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	
	Method of Compliance: Allowable Emissions Comment (Description	on of Operating Method):	
<u>Al</u>	lowable 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	n of Operating Method):	

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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

Pollutant Emitted: Pb	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions: N/A lb/hour N/A	7	netically Limited? Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 140 μg/dscm@7% O2		7. Emissions Method Code:	
Reference: existing permit condition			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:	
tons/year	From:	co:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoria	ng Period:	
tons/year	· ·	0 years	
10. Calculation of Emissions: Potential emissions estimates based on curre			
11. Potential, Fugitive, and Actual Emissions Comment:			

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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:	
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:	
	140 μg/dscm @ 7% O2		lb/hour N/A tons/year	
5.	Method of Compliance: Annual Stack Test			
6.	6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-369B			
<u>Al</u>	lowable 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):	
All	owable 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):	

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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: Hg	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions: 0.022 lb/hour 0.096		netically Limited? Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor: 28 μg/dscm @7% O2		7. Emissions Method Code:	
Reference: existing permit limit			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:	
tons/year	From:	Го:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:	
tons/year	•	0 years	
10. Calculation of Emissions: Potential emissions estimates based on curre	ent allowable.		
11. Potential, Fugitive, and Actual Emissions Comment:			

POLLUTANT DETAIL INFORMATION Page [10] of [18]

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 1_ of 2_

A	Ilowable Emissions Allowable Emissions	01 2	<u> </u>	
1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units: 0.028 mg/dscm @ 7% O2	4.	Equivalent Allowable Emissions: lb/hour 0.096 tons/year	
5.	Method of Compliance: Annual Stack Test			
6.	Allowable Emissions Comment (Description PSD-FL-369C	of C	Operating Method):	
Al	lowable Emissions Allowable Emissions 2_	of 2	_	
1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:	
3.	Allowable Emissions and Units: 85% reduction	4.	Equivalent Allowable Emissions: lb/hour tons/year	
5.	Method of Compliance: Annual Stack Test			
6.	6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-369C			
<u>Al</u>	lowable 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 C	perating Method):	

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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

Pollutant Emitted: Cd	2. Total Percent Efficie	ency of Control:
3. Potential Emissions: N/A lb/hour N/A	I *	netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	
6. Emission Factor: 10 μg/dscm @7% O2 Reference: existing permit condition		7. Emissions Method Code:
	01 70 11 01 1	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:
tons/year	5 years 1	0 years
10. Calculation of Emissions: Potential emissions estimates based on curre	ent allowable.	
11. Potential, Fugitive, and Actual Emissions Comment:		

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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 1_ of 1_				
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable			
OTHER	Emissions:			
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
10 μg/dscm @ 7% O2	lb/hour tons/year			
5. Method of Compliance: Annual Stack Test				
6. Allowable Emissions Comment (Description of Operating Method): PSD-FL-369B				
Allowable Emissions Allowable Emissions	of			
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	of			
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):			

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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

Pollutant Emitted: HCl	2. Total Percent Efficiency	y of Control:
3. Potential Emissions: 25.4 lb/hour 111.25	4. Synthetic Yes	cally Limited?
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):	
6. Emission Factor: 25 ppmdv@7% O2	7.	Emissions Method Code:
Reference: existing permit limit		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Per	riod:
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring I	Period:
tons/year	☐ 5 years ☐ 10 ye	ears
10. Calculation of Emissions: Potential emissions estimates based on curre		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

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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.

\mathbf{A}	lowable Emissions Allowable Emissions I_	OI 2	_
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable
	OTHER		Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:
	25 ppmdv @ 7% O2		lb/hour 111.25 tons/year
5.	Method of Compliance:		
	Annual Stack Test		
6.	Allowable Emissions Comment (Description	of (Operating Method):
	PSD-FL-369B		
Al	lowable Emissions Allowable Emissions 2_0	of 2	_
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable
	OTHER		Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:
	95% reduction		lb/hour tons/year
5.	Method of Compliance:		
	Annual Stack Test		
6.	Allowable Emissions Comment (Description	of (Operating Method):
	PSD-FL-369B		
	lowable Emissions Allowable Emissions		<u> </u>
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 C	Operating Method):
	•		

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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

Pollutant Emitted: PCDD/PCDF	2. Total Percent Efficiency of Control:
3. Potential Emissions: 3.61E-06 lb/hour 1.58E-05	4. Synthetically Limited? Stons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: 13 ng/dscm@7% O2	7. Emissions Method Code:
Reference: existing permit condition	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions: Potential emissions estimates based on curre	
11. Potential, Fugitive, and Actual Emissions Co	omment:

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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 1 of 1 _____

1.	OTHER	2.	Emissions:
3.	Allowable Emissions and Units: 13 ng/dscm @ 7% O2	4.	Equivalent Allowable Emissions: lb/hour 1.58E-05 tons/year
5.	Method of Compliance: Annual Stack Test		
6.	Allowable Emissions Comment (Description PSD-FL-369B	of (Operating Method):
Allo	owable 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 C	Operating Method):
Allo	wable Emissions Allowable Emissions	of_	_
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3. 4	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.]	Method of Compliance:		
6. 4	Allowable Emissions Comment (Description	of C	Operating Method):
			•

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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

Pollutant Emitted: CO	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 32.4 lb/hour 141.91	4. Synthetically Limited 1 tons/year Yes X No	?
5. Range of Estimated Fugitive Emissions (as to tons/year		
6. Emission Factor: 100 ppmdv @7% O2 (4-h Reference: existing permit condition	r block average) 7. Emissions Method Co	de:
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	☐ 5 years ☐ 10 years	
10. Calculation of Emissions: Potential emissions estimates based on curre		
11. Potential, Fugitive, and Actual Emissions Co	omment:	
•		

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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.

Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
Allowable Emissions and Units: 100 ppmdv @ 7% O2	4.	Equivalent Allowable Emissions: lb/hour 141.91 tons/year
Method of Compliance: CEMS		
Allowable Emissions Comment (Description PSD-FL-369B	of (Operating Method):
owable Emissions Allowable Emissions	of	_
Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
Method of Compliance:		
Allowable Emissions Comment (Description	of (Operating Method):
owable Emissions Allowable Emissions	of_	_
Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
Method of Compliance:		
Allowable Emissions Comment (Description	of C	Operating Method):
	Allowable Emissions and Units: 100 ppmdv @ 7% O2 Method of Compliance: CEMS Allowable Emissions Comment (Description PSD-FL-369B Owable Emissions Allowable Emissions Code: Allowable Emissions and Units: Method of Compliance: Allowable Emissions Comment (Description Description Descriptio	Allowable Emissions and Units: 100 ppmdv @ 7% O2 Method of Compliance: CEMS Allowable Emissions Comment (Description of OPSD-FL-369B Owable Emissions Allowable Emissions Code: Allowable Emissions and Units: 4. Method of Compliance: Allowable Emissions Comment (Description of Omble Emissions Code) Owable Emissions Comment (Description of Omble Emissions Code) Allowable Emissions Comment (Description of Omble Emissions Code) Allowable Emissions Allowable Emissions Code: Allowable Emissions Allowable Emissions Code: Allowable Emissions and Units: 4.

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G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit emissions limitation.	is or would be subject to a unit-specific visible
Visible Emissions Limitation: Visible Emissi	ons Limitation of
1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: X Rule
Maximum Period of Excess Opacity Allowe	acceptional Conditions: % ed: 6 min/hour
4. Method of Compliance: COMS	
5. Visible Emissions Comment:	
Visible Emissions Limitation: Visible Emission	ons Limitation of
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: Rule Other
3. Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allower	acceptional Conditions: % ed: min/hour
4. Method of Compliance:	
5. Visible Emissions Comment:	

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H. CONTINUOUS MONITOR INFORMATION

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

	ontinuous Monitoring System: Continuous	Widnitor I Or I I_
1.	Parameter Code: O2	2. Pollutant(s): O2(inlet)
3.	CMS Requirement:	Rule X Other
4.	Monitor Information Manufacturer: Servomex Model Number: 1440	Serial Number: 01440D1/4193
5.	Installation Date:	6. Performance Specification Test Date: 8/13/2009
, , . 	Continuous Monitor Comment:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 2 of 11_
	ntinuous Monitoring System: Continuous Parameter Code: EM	Monitor 2 of 11_ 2. Pollutant(s): SO2(inlet)
1.	Parameter Code:	2. Pollutant(s):
3.	Parameter Code: EM	2. Pollutant(s): SO2(inlet)
3.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: Western	2. Pollutant(s): SO2(inlet) Rule × Other

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3_ of 11_

_			<u>-</u>
1.	Parameter Code:	. Pollutant(s):	
	EM	CO-H	
3.	CMS Requirement:	Rule [x Other
4.	Monitor Information		
	Manufacturer: TECO		
	Model Number: 48 i	Serial Nu	mber: CM-08140014-H
5.	Installation Date:	. Performance 8/13/2009	Specification Test Date:
_		8/13/2009	<u> </u>
7.	Continuous Monitor Comment:		
	•		
Co	ntinuous Monitoring System: Continuous	onitor 4 of 11	· -
_	Parameter Code: Continuous	onitor 4 of 11 2. Pollutant	
_		_	
1.	Parameter Code:	2. Pollutant CO-L	
3.	Parameter Code: EM CMS Requirement:	2. Pollutant CO-L	(s):
3.	Parameter Code: EM	2. Pollutant CO-L	(s):
3.	Parameter Code: EM CMS Requirement: Monitor Information	2. Pollutant CO-L Rule	(s):
3.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2. Pollutant CO-L Rule Serial Nu 6. Performa	x Other mber: CM-08140014-L nce Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 48 i Installation Date:	2. Pollutant CO-L Rule	x Other mber: CM-08140014-L nce Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 48 i	2. Pollutant CO-L Rule Serial Nu 6. Performa	x Other mber: CM-08140014-L nce Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 48 i Installation Date:	2. Pollutant CO-L Rule Serial Nu 6. Performa	x Other mber: CM-08140014-L nce Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 48 i Installation Date:	2. Pollutant CO-L Rule Serial Nu 6. Performa	x Other mber: CM-08140014-L nce Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 48 i Installation Date:	2. Pollutant CO-L Rule Serial Nu 6. Performa	x Other mber: CM-08140014-L nce Specification Test Date:
 3. 4. 5. 	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 48 i Installation Date:	2. Pollutant CO-L Rule Serial Nu 6. Performa	x Other mber: CM-08140014-L nce Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 5_ of 11_

_				
1.	Parameter Code:	1	llutant(s):
	EM	S	O2	
3.	CMS Requirement:	R	ule	X Other
4.	Monitor Information			
	Manufacturer: Western			
	Model Number: 921 CE		Serial	Number: AE-921-S399
5.	Installation Date:		rformar 13/2009	ace Specification Test Date:
7	Canting and Maritan Comments	6/ 1	13/2007	
7.	Continuous Monitor Comment:			
_				
<u>Co</u>	ntinuous Monitoring System: Continuous	Monito	r 6 of	11_
_	Parameter Code:		Polluta	
_				
1.	Parameter Code:		Polluta NOx	
1.	Parameter Code: EM	2.	Polluta NOx	ant(s):
3.	Parameter Code: EM CMS Requirement:	2.	Polluta NOx	ant(s):
3.	Parameter Code: EM CMS Requirement: Monitor Information	2.	Polluta NOx ile	ant(s):
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 i-HL Installation Date:	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 i-HL	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 i-HL Installation Date:	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 i-HL Installation Date:	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 i-HL Installation Date:	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:
3. 4.	Parameter Code: EM CMS Requirement: Monitor Information Manufacturer: TECO Model Number: 42 i-HL Installation Date:	2.	Polluta NOx ale Serial	x Other Number: 0825631827 mance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 7_ of 11_

1.	Parameter Code: O2	2. Pollutant(s): O2 (outlet)
3.	CMS Requirement:	Rule X Other
4.	Monitor Information Manufacturer: Servomex Model Number: 1440	Serial Number: 01440D1/4194
5.	Installation Date:	6. Performance Specification Test Date: 8/13/2009
7.	Continuous Monitor Comment:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 8 of 11_
_	Parameter Code: VE	Monitor 8 of 11_ 2. Pollutant(s): Opacity
1.	Parameter Code:	2. Pollutant(s):
1.	Parameter Code: VE	2. Pollutant(s): Opacity
3. 4.	Parameter Code: VE CMS Requirement: Monitor Information Manufacturer: Sick Maihak	2. Pollutant(s): Opacity Rule X Other

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 9_ of 11_

1.		2. Pollutant(s):
	CO2	CO2
3.	CMS Requirement:	Rule X Other
4.	Monitor Information Manufacturer: CAI	
	Model Number: ZRE	Serial Number: A0E2900T
5.	Installation Date:	6. Performance Specification Test Date: 8/13/2009
7.	Continuous Monitor Comment:	
		<u> </u>
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor 10_ of 11_
1.	Parameter Code:	2. Pollutant(s):
	O2	O2 (wet)
3.	CMS Requirement:	☐ Rule X Other
4.	M '4 Y 6 - m ' - m	
	Monitor Information	
	Manufacturer: Rosemount	
		Serial Number: F-08001793
5.	Manufacturer: Rosemount	Serial Number: F-08001793 6. Performance Specification Test Date: 8/13/2009
	Manufacturer: Rosemount Model Number: XI-0101	6. Performance Specification Test Date:
	Manufacturer: Rosemount Model Number: XI-0101 Installation Date:	6. Performance Specification Test Date:
	Manufacturer: Rosemount Model Number: XI-0101 Installation Date:	6. Performance Specification Test Date:
	Manufacturer: Rosemount Model Number: XI-0101 Installation Date:	6. Performance Specification Test Date:
	Manufacturer: Rosemount Model Number: XI-0101 Installation Date:	6. Performance Specification Test Date:

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H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 11_ of 11_

1.	Parameter Code: FLOW	2. Pollutant(s): Flow
3.	CMS Requirement:	Rule X Other
4.	Monitor Information Manufacturer: Trace	
	Model Number: CEMSFLOW	Serial Number: TS-080220
5.	Installation Date:	6. Performance Specification Test Date: 8/13/2009
7.	Continuous Monitor Comment:	
~		
<u>C0</u>	ntinuous Monitoring System: Continuous	Monitor of
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor of 2. Pollutant(s):
1.		
1.	Parameter Code: CMS Requirement: Monitor Information	2. Pollutant(s):
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s): Rule Other
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s): Rule Other
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:
3. 4.	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:

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Section [7]

of [12] I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) x Attached, Document ID: Appendix D 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: Appendix E 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 Decement ID: Appendix F. Prayiously Submitted Date
	x Attached, Document ID: <u>Appendix F</u> 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) X Attached, Document ID: Appendix G Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records: Attached, Document ID:
	Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: August 2011, See attached Appendix H 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: X Not Applicable

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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
Identification of Applicable Requirements: Attached, Document ID:
2. Compliance Assurance Monitoring: Attached, Document ID: X Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: X Not Applicable
Additional Requirements Comment
-

Section [8]

of [12]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)				
	x The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.				
	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.				
<u>E</u> 1	missions Unit Desc	ription and Status			
1.	Type of Emissions	Unit Addressed in th	is Sec	ction: (Check one)	
	× This Emission	s Unit Information Se	ction	addresses, as a sing	gle emissions unit, a
	~ .	or production unit, or		• •	
	•	which has at least one		•	· ·
	of process or p		ctiviti	es which has at leas	le emissions unit, a group at one definable emission.
	more process of	or production units and	d activ	vities which produc	le emissions unit, one or e fugitive emissions only.
	Description of Em nit 4	issions Unit Addresse	d in t	nis Section: Pebble	ELime Storage Silo –
3.	Emissions Unit Ide	entification Number:	108		
4.	Emissions Unit Status Code:	5. Commence Construction Date:	6.	Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
	Α			7/9/2009	49
8.	Federal Program A	applicability: (Check	all tha	nt apply)	
	Acid Rain Uni	t			
	CAIR UnitPeb	ble Li			
9.	Package Unit:				
	Manufacturer: N/A			Model Number:	N/A
	. Generator Namepl				
11.	. Emissions Unit Co	mment: Lime is used	in the	e spray dryer absorl	bers for MWC Unit 4.

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Throughput Rate: ~20 tons per silo filling	
2.	Maximum Production Rate: N/A	
3.	Maximum Heat Input Rate: N/A Btu/hr	
4.	Maximum Incineration Rate: pounds/hr N/A	
	tons/day N/A	
5.	1 0	
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6.	Operating Capacity/Schedule Comment: Lime is usually received in the silo approximately once per week.	

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C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram:	Plot Plan or	2. Emission Point	Гуре Code: 1	
3.	Descriptions of Emission Vent discharges horizonta	ally near top of bag	ghouse.		
_	ID Numbers or Descriptio				
5.	Discharge Type Code: H	6. Stack Height	: ~57.5 feet	7. Exit Diameter: 0.416 feet	
8.	Exit Temperature: Ambient	9. Actual Volum ~5700 acfm	netric Flow Rate:	10. Water Vapor:	
11.	Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emission Point Height: feet		
13.	3. 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:		. U		

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1.	Segment Description (Process/Fuel Type): Pebble lime unloading operation				
2.	Source Classification Cod 30510296	e (SCC):	3. SCC Units:		
4.	Maximum Hourly Rate: 20	5. Maximum	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:
10.	Segment Comment: Assumes that a single 20-	ton truck will of	fload in ∼1 hr		
Ses	gment Description and Ra	te: Segment	of		
1.	1. Segment Description (Process/Fuel Type):				
	•				
2.	2. Source Classification Code (SCC): 3. SCC Units:				
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum % Ash:		9.	Million Btu per SCC Unit:
10.	10. Segment Comment:				

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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	018	_	EL
,			
		_	
		-	
		_	
		-	
	t .	-	

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POLLUTANT DETAIL INFORMATION
Page [1] of [1]

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	2. Total Percent Efficiency of Control: 99
3. Potential Emissions: lb/hour	4. Synthetically Limited? tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	
6. Emission Factor:	7. Emissions Method Code:
Reference:	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	☐ 5 years ☐ 10 years
10. Calculation of Emissions:	_
11. Potential, Fugitive, and Actual Emissions Co	omment:

POLLUTANT DETAIL INFORMATION Page [1] of [1]

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.

to a numerical emissions limitation.				
Allowable Emissions 1_	of l			
Basis for Allowable Emissions Code: OTHER 2. Future Effective Date of Allowable Emissions:				
3. Allowable Emissions and Units: 0.015 gr/dscf	4. Equivalent Allowable Emissions: lb/hour tons/year			
5. Method of Compliance: Annual Method 9				
6. Allowable Emissions Comment (Description PSD-FL-369	of Operating Method):			
Allowable Emissions Allowable Emissions	of			
1. Basis for Allowable Emissions Code:	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):			

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G. VISIBLE EMISSIONS INFORMATION

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

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation 1_ of 1_ 1. Visible Emissions Subtype: 2. Basis for Allowable Opacity: VE05 ☐ Rule X Other 3. Allowable Opacity: **Normal Conditions:** 5 % **Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: Annual Method 9 5. Visible Emissions Comment: Visible Emissions Limitation: Visible Emissions Limitation of 1. Visible Emissions Subtype: 2. Basis for Allowable Opacity: ☐ Rule ☐ Other 3. Allowable Opacity: **Normal Conditions: Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: 5. Visible Emissions Comment:

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H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor of		
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement:	☐ Rule ☐ Other
4.	Manufacturer:	
	Model Number:	Serial Number:
5.	Installation Date:	6. Performance Specification Test Date:
7.	Continuous Monitor Comment:	
<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor of
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor of 2. Pollutant(s):
1.		
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s): Rule
 3. 4. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s): Rule Other Serial Number:
 3. 4. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s): Rule

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I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix E Previously Submitted, Date
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix G Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records:
	Attached, Document ID:
	Test Date(s)/Pollutant(s) Tested:
	X Previously Submitted, Date: August 2011, See Appendix H
	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: X Not Applicable

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EMISSIONS UNIT INFORMATION Section [8] of [12]

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
	k Height Analysis (Rules 62-212.400(4)(d) and 62-
212.500(4)(f), F.A.C.):	
Attached, Document ID:	
3. Description of Stack Sampling F only)	Facilities: (Required for proposed new stack sampling facilities
Attached, Document ID:	X Not Applicable
Additional Requirements for Title	e V Air Operation Permit Applications
Identification of Applicable Attached, Document ID:	Requirements:
Compliance Assurance Mon Attached, Document ID:	
3. Alternative Methods of Oper Attached, Document ID:	
4. Alternative Modes of Operat	ion (Emissions Trading):
Attached, Document ID:	X Not Applicable
Additional Requirements Comme	<u>nt</u>

Section [9]

of [12]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

	Title V	air operation permit. S			ng for an initial, revised g for an air construction
	x The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.				
		unit addressed in this E	Emis	sions Unit Informati	ion Section is an
unregul	ated en	nissions unit.			
		iption and Status			
1. Type of En	nissions	Unit Addressed in this	Sec	ction: (Check one)	
single p	rocess	s Unit Information Sector production unit, or a which has at least one or	ctivi	ity, which produces	one or more air
of proce	ess or p		iviti	es which has at least	e emissions unit, a group one definable emission
					e emissions unit, one or fugitive emissions only.
	of Em	ssions Unit Addressed	in tl	his Section: Activat	ed Carbon Storage Silo
– Unit 4					
2 5	T. 1. T.1		10		
		entification Number: 1	_	T 11 1 0	
4. Emissions V		5. Commence Construction	6.	Initial Startup Date:	7. Emissions Unit Major Group
Status Cour	5.	Date:		7/10/2009	SIC Code:
Α		Bute.		7710/2009	49
8. Federal Pro	gram A	pplicability: (Check al	l tha	at apply)	
☐ Acid Ra	in Unit				
☐ CAIR U	Jnit				
9. Package Ur	nit:				
Manufactur	er: N/A	<u> </u>		Model Number:	N/A
		ate Rating: N/A			
11. Emissions U	Unit Co	mment: Carbon is used	i to	control Hg emission	s from MWC Unit 4.

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EMISSIONS UNIT INFORMATION Section [9] of [12]

Emissions Unit Control Equipment/Method: Control 1_ of 1_
Control Equipment/Method Description:
Baghouse
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:

2. Control Device or Method Code:

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

oughput Rate: ~20 tons p	er silo filling
te: N/A	
e: N/A Btu/hr	
ate: pounds/hr N/A	
tons/day N/A	
erating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year
	y every other week.
	te: N/A Btu/hr ate: pounds/hr N/A tons/day N/A erating Schedule: 24 hours/day

EMISSIONS UNIT INFORMATION Section [9] of [12]

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

Emission Point Description and Type

l	dentification of Point on low Diagram:	Plot Plan or	2. Emission Point	Гуре Code: 1	
\	Descriptions of Emission Vent is off the filter unit a	and discharges ver	rtically on top of silo.		
4. II	O Numbers or Descriptio	ns of Emission Ui	nits with this Emission		
5. D	ischarge Type Code: I	6. Stack Height	:: ~52.5 feet	7. Exit Diameter:0.416 feet	
	xit Temperature: mbient	9. Actual Volumetric Flow Rate: 10. Wate ~5700 acfm		10. Water Vapor:	
	11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet		
	13. Emission Point UTM Coordinates Zone: East (km): North (km):		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
15. Er	mission Point Comment:				

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EMISSIONS UNIT INFORMATION Section [9] of [12]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1. Segment Description (Process/Fuel Type):

Carbon unloading operati	on		
2. Source Classification Coo 30510296	de (SCC): 3.	SCC Units:	<u> </u>
4. Maximum Hourly Rate: 20	5. Maximum Annu	al Rate: 6.	Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % As	h: 9.	Million Btu per SCC Unit:
10. Segment Comment: Assumes that a single 20-	-ton truck will offload	in ∼1 hr	
1. Segment Description (Pro			_
2. Source Classification Cod	e (SCC): 3.	SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annu	al Rate: 6.	Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Asi	h: 9.	Million Btu per SCC Unit:
10. Segment Comment:	1	ı	·

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018		EL
		•	
_			
		-	_
_			
			_
			_
_			

EMISSIONS UNIT INFORMATION Section [9] of [12]

POLLUTANT DETAIL INFORMATION
Page [1] of [1]

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

Pollutant Emitted: PM	2. Total Perc 99	ent Efficie	ency of Control:
3. Potential Emissions: lb/hour	tons/year		netically Limited? Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: Reference:			7. Emissions Method Code:
	01 70 11	0.1	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline		
tons/year	From:	Т	To:
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:
tons/year	5 yea	irs 🔲 1	0 years
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Co	omment:		
, ,			

EMISSIONS UNIT INFORMATION Section [9] of [12]

POLLUTANT DETAIL INFORMATION
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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 1_	of 1_
Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.015 gr/dscf	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Annual Method 9	
6. Allowable Emissions Comment (Description PSD-FL-369	n 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	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):

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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___ 2. Basis for Allowable Opacity: 1. Visible Emissions Subtype: VE05 ☐ Rule X Other 3. Allowable Opacity: 5 % **Exceptional Conditions: Normal Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: Annual Method 9 5. Visible Emissions Comment: Visible Emissions Limitation: Visible Emissions Limitation of 2. Basis for Allowable Opacity: 1. Visible Emissions Subtype: ☐ Other ☐ Rule 3. Allowable Opacity: **Normal Conditions: Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: 5. Visible Emissions Comment:

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H. CONTINUOUS MONITOR INFORMATION

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

<u>C</u> (ontinuous 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:	
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor of
_	Parameter Code: Continuous	Monitor of 2. Pollutant(s):
_		
1.	Parameter Code:	2. Pollutant(s):
1. 3.	Parameter Code: CMS Requirement: Monitor Information	2. Pollutant(s):
1. 3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s): Rule

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Effective: 03/11/2010

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix C Previously Submitted, Date
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix E Previously Submitted, Date
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) X Attached, Document ID: Appendix G Previously Submitted, Date Not Applicable
<u>_</u>	
6.	Compliance Demonstration Reports/Records: Attached, Document ID:
	Test Date(s)/Pollutant(s) Tested:
	X Previously Submitted, Date: August 2011, See attached Appendix H
	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: X Not Applicable

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EMISSIONS UNIT INFORMATION Section [9] of [12]

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
Identification of Applicable Requirements: Attached, Document ID:
2. Compliance Assurance Monitoring: Attached, Document ID: X Not Applicable
3. Alternative Methods of Operation: Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: X Not Applicable
Additional Requirements Comment
·

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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.)				
	x The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.				
	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.				
Er	nissions Unit Desci	ription and Status			
1.	Type of Emissions	Unit Addressed in this	Sec	tion: (Check one)	-
		s Unit Information Secti			
	~ ·	or production unit, or ac which has at least one d		• •	
	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.				
		Unit Information Section of the Unit Information Units and a		•	e emissions unit, one or fugitive emissions only.
2.	2. Description of Emissions Unit Addressed in this Section: Diesel Driven Fire RICE pump			Driven Fire RICE pump	
3.	Emissions Unit Ide	entification Number: 11	3		
4.	Emissions Unit	5. Commence	6.	Initial Startup	7. Emissions Unit
	Status Code:	Construction		Date:	Major Group
	Α	Date: 1/1/1986			SIC Code: 49
8.	_	pplicability: (Check all	tha	t apply)	
	☐ Acid Rain Unit	• • •		FF-7)	
	CAIR Unit				
9.	Package Unit:			-	
	Manufacturer: N/A			Model Number:	N/A
		ate Rating: N/A MW			
		mment: Existing diesel y promulgated NESHAI			ed as a new emission

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EMISSIONS UNIT INFORMATION Section [10] of [12]

Emissions Unit Control Equipment/Method: Control of 1_
1. Control Equipment/Method Description: N/A
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
Emissions Chit Control of Equipmental Sections Control
Control Equipment/Method Description:
1. Control Equipment/Method Description:
Control Equipment/Method Description: Control Device or Method Code:
Control Equipment/Method Description: Control Device or Method Code: Emissions Unit Control Equipment/Method: Control of
Control Equipment/Method Description: Control Device or Method Code: Emissions Unit Control Equipment/Method: Control of

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B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	1. Maximum Process or Throughput Rate: N/A		
2.	2. Maximum Production Rate: N/A		
3.	Maximum Heat Input Rate: N/A Btu/hr		
4.	Maximum Incineration Rate: pounds/hr	N/A	
	tons/day	N/A	
5.	5. Requested Maximum Operating Schedule: N/A		
	hours/day		days/week
	weeks/year hours/year		hours/year

6. Operating Capacity/Schedule Comment:

The diesel driven fire pump is rated at 235 horse power. This pump falls under the RICE standards due to the engine horse power rating.

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

Emission Point Description and Type

1. Identification of Point on		2. Emission Point	Гуре Code: 1	
Flow Diagram: Diesel Driven Fire RICE pump				
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: N/A				
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A				
5. Discharge Type Code: N/A	6. Stack Height: N/A		7. Exit Diameter: N/A	
8. Exit Temperature: N/A	9. Actual Volumetric Flow Rate: N/A acfm		10. Water Vapor:	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet		
13. Emission Point UTM Coordinates Zone: East (km):		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS)		
North (km)):	Longitude (DD/I	MM/SS)	
15. Emission Point Comment:	;			

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EMISSIONS UNIT INFORMATION Section [10] of [12]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

	1. Segment Description (Process/Fuel Type): Diesel					
2. So N/	ource Classification Code A	e (SCC):	3. SCC Units	:		
	aximum Hourly Rate: /A	5. Maximum . N/A	Annual Rate:	6. Estimated Annual Activity Factor:		
7. M	aximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:		
10. Segment Comment: The diesel driven fire pump falls under RICE standards based on the engine horse power rating.						
Segme	ent Description and Ra	te: Segment	of			
	1. Segment Description (Process/Fuel Type):					
2. So	2. Source Classification Code (SCC): 3. SCC Units:					
4. Ma	aximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:		
7. Ma	aximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit:		
10. Se	gment Comment:					

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
N/A			
-			
_			

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POLLUTANT DETAIL INFORMATION Page [1] of [1]

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

4 D 11 The state of the payoffile of	2 F 1 P 1 F 2	6.6 1
1. Pollutant Emitted:	2. Total Percent Efficie	ency of Control:
N/A	N/A	
3. Potential Emissions:	4. Synth	netically Limited?
	tons/year Y	es X No
5. Range of Estimated Fugitive Emissions (as		
to tons/year	паррисаоте).	
6. Emission Factor: N/A		7. Emissions
		Method Code:
Reference:		N/A
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	Co:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoria	ng Period:
tons/year		0 years
10. Calculation of Emissions:		•
10. Calculation of Dimissions.		
	•	
	•	
11. Potential, Fugitive, and Actual Emissions Co	omment:	
11. 2 statisting 1 agree of unite 1 states Distributions Of	,	

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POLLUTANT DETAIL INFORMATION
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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 Emission	ns 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 (Descri	iption of Operating Method):
Allowable Emissions Allowable Emission	
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 (Descri	ption of Operating Method):
Allowable Emissions Allowable Emission	as 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 (Descri	ption of Operating Method):

EMISSIONS UNIT INFORMATION Section [10] of [12]

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit emissions limitation.	is or would be subject to a unit-specific visible
Visible Emissions Limitation: Visible Emissi	ons Limitation of
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: Rule Other
3. Allowable Opacity: Normal Conditions: % Ex	cceptional Conditions:
Maximum Period of Excess Opacity Allow	ed: min/hour
4. Method of Compliance: Annual Method 9	
5. Visible Emissions Comment:	
Visible Emissions Limitation: Visible Emissi	ons Limitation of
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: Rule Other
3. Allowable Opacity: Normal Conditions: Ex Maximum Period of Excess Opacity Allower	ceptional Conditions: % ed: min/hour
4. Method of Compliance:	
5. Visible Emissions Comment:	

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H. CONTINUOUS MONITOR INFORMATION

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

<u>Co</u>	ontinuous Monitoring System: Continuous	Monitor of		
1.	Parameter Code:	2. Pollutant(s):		
3.	CMS Requirement:	Rule Other		
4.				
	Manufacturer:			
	Model Number:	Serial Number:		
5.	Installation Date:	6. Performance Specification Test Date:		
7.	Continuous Monitor Comment:			
Continuous Monitoring System: Continuous Monitor of				
Co	ntinuous Monitoring System: Continuous	Monitor of		
	ntinuous Monitoring System: Continuous Parameter Code:	Monitor of 2. Pollutant(s):		
 3. 	Parameter Code: CMS Requirement:			
 3. 	Parameter Code:	2. Pollutant(s):		
 3. 	Parameter Code: CMS Requirement: Monitor Information	2. Pollutant(s):		
 3. 4. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s): Rule Other		
 3. 4. 5. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number:	2. Pollutant(s): Rule Other Serial Number:		
 3. 4. 5. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:		
 3. 4. 5. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:		
 3. 4. 5. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:		
 3. 4. 5. 	Parameter Code: CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	2. Pollutant(s): Rule Other Serial Number:		

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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
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
	Procedures for Startup and Shutdown: (Required for all operation permit applications, except
4.	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: Previously Submitted, Date
	X 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:

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EMISSIONS UNIT INFORMATION Section [10] of [12]

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: X 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
Identification of Applicable Requirements: Attached, Document ID:
2. Compliance Assurance Monitoring: Attached, Document ID: X Not Applicable
3. Alternative Methods of Operation: Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading): Attached, Document ID: X Not Applicable
Additional Requirements Comment
See Appendix M for Instant RICE software for Diesel Driven Fire Pump.

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A. GENERAL EMISSIONS UNIT INFORMATION

<u>Title V Air Operation Permit Emissions Unit Classification</u>

1. Regulated or Unregulated Emissions Unit or renewal Title V air operation permit. S permit or FESOP only.)		•
x The emissions unit addressed in this E emissions unit.	missions Unit Informati	ion Section is a regulated
The emissions unit addressed in this E unregulated emissions unit.	missions Unit Informat	ion Section is an
Emissions Unit Description and Status		_
1. Type of Emissions Unit Addressed in this	Section: (Check one)	
x This Emissions Unit Information Sect single process or production unit, or ac pollutants and which has at least one d	ctivity, which produces	one or more air
This Emissions Unit Information Section of process or production units and action point (stack or vent) but may also productions.	vities which has at least	
This Emissions Unit Information Section more process or production units and a	•	•
2. Description of Emissions Unit Addressed reciprocating internal combustion (RICE) Ger	nerator No. 1 at Falkenb	•
3. Emissions Unit Identification Number: 11	4	
4. Emissions Unit Status Code: 5. Commence Construction Date: 6/30/2002	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		49
8. Federal Program Applicability: (Check al	that apply)	
☐ Acid Rain Unit		
CAIR Unit		
9. Package Unit:	N. 1.137 1	>T/A
Manufacturer: Caterpillar	Model Number:	N/A
10. Generator Nameplate Rating: N/A MW	an av diagal finad masin	re esting internal
11. Emissions Unit Comment: Existing Emerge combustion engine (RICE) Generator No. 1 is recently promulgated NESHAP standards.		•

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Emissions Unit Control Equipment/Method: Control of 1_
1. Control Equipment/Method Description:
N/A
, and the second se
2. Control Device or Method Code:
2. Control Bevice of Method Code.
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:

EMISSIONS UNIT INFORMATION Section [11] of [12]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

	put Rate: N	/A	
2. Maximum Production Rate: N	J/A		·
3. Maximum Heat Input Rate: N	/A Btu/hr		
4. Maximum Incineration Rate:	pounds/hr	N/A	
1	tons/day	N/A	
5. Requested Maximum Operatin	g Schedule:	N/A	
	hours/day	/	days/week
	weeks/ye	ear	hours/year
6. Operating Capacity/Schedule (ustion engine (RICE) Generator

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C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on	Plot Plan or	2. Emission Point	Гуре Code: 1
Flow Diagram: Emergen	cy diesel-fired		
RICE Generator No. 1			
3. Descriptions of Emission N/A	Points Comprising	g this Emissions Unit	for VE Tracking:
4. ID Numbers or Description N/A	ons of Emission Un	nits with this Emission	n Point in Common:
5. Discharge Type Code: N/A	6. Stack Height	: N/A	7. Exit Diameter: N/A
8. Exit Temperature: N/A	9. Actual Volum N/A acfm	netric Flow Rate:	10. Water Vapor:
11. Maximum Dry Standard I dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13. Emission Point UTM Coo	rdinates	14. Emission Point I	Latitude/Longitude
Zone: East (km):		Latitude (DD/MI	M/SS)
North (km)) :	Longitude (DD/N	MM/SS)
15. Emission Point Comment			

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D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

Segment Description (Pro Diesel	cess/Fuel Type):		
·			
2. Source Classification Cod N/A	e (SCC):	3. SCC Units	
4. Maximum Hourly Rate: N/A	5. Maximum . N/A	Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: The Emergency diesel-fire engine horse power rating.	ed Generator No.	1 falls under RI	CE standards based on the
Segment Description and Ra	nte: Segment	of	
1. Segment Description (Pro	cess/Fuel Type):		
2. Source Classification Cod	e (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:			

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E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
N/A			
			٠

EMISSIONS UNIT INFORMATION Section [11] of [12] POLLUTANT DETAIL INFORMATION
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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:	2. Total Percent Efficie	ency of Control:
N/A	N/A	
3. Potential Emissions:		netically Limited?
N/A lb/hour N/A	tons/year Y	es X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):	
6. Emission Factor: N/A		7. Emissions Method Code:
Reference:		N/A
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From: 7	Го:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:
tons/year		0 years
10. Calculation of Emissions:		
11. Potential, Fugitive, and Actual Emissions Co	omment:	

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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.

\mathbf{A}	llowable 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
		lb/hour tons/year
	Method of Compliance:	
	Allowable Emissions Comment (Description	
<u>Al</u>	Iowable 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
	Method of Compliance: Allowable Emissions Comment (Description	of Operating Method):
Al	lowable 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):

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G. VISIBLE EMISSIONS INFORMATION

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

$\mathbf{V}_{\mathbf{i}}$	sible Emissions Limitation: Visible Emiss	ions Limitation of
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity:
		☐ Rule ☐ Other
3.	Allowable Opacity:	
	Normal Conditions: % Ex	sceptional Conditions: %
	Maximum Period of Excess Opacity Allow	ed: min/hour
	Method of Compliance: Annual Method 9	
5.	Visible Emissions Comment:	
Vi	sible Emissions Limitation: Visible Emissi	ons Limitation of
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity:
		Rule Other
3.	Allowable Opacity:	
		sceptional Conditions:
	Maximum Period of Excess Opacity Allow	ed: min/hour
4.	Method of Compliance:	
5.	Visible Emissions Comment:	

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H. CONTINUOUS MONITOR INFORMATION

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

<u></u>	ntinuous 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:	
		
<u>Co</u>	ntinuous Monitoring System: Continuous	Monitor of
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement:	2. Pollutant(s):
3.		
3.	CMS Requirement: Monitor Information	
3.	CMS Requirement: Monitor Information Manufacturer:	☐ Rule ☐ Other
3.4.5.	CMS Requirement: Monitor Information Manufacturer: Model Number:	Rule Other Serial Number:
3.4.5.	CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	Rule Other Serial Number:
3.4.5.	CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	Rule Other Serial Number:
3.4.5.	CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	Rule Other Serial Number:
3.4.5.	CMS Requirement: Monitor Information Manufacturer: Model Number: Installation Date:	Rule Other Serial Number:

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

_	<u>-</u>
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
2	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
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 Not Applicable
6	. Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested: Test Date(s)/Pollutant(s) Tested: Test Date(s)/Pollutant(s) Tested: 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
7	compliance plan must be submitted at the time of application.

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EMISSIONS UNIT INFORMATION Section [11] of [12]

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: X Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: X Not Applicable
Additional Requirements Comment
See Appendix M for Instant RICE software for the Emergency diesel-fired RICE Generator
No. 1.

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A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

111	it v An Operano	u rermit Emissions on	III CIASSIIICALIUII	
1.	_	gulated Emissions Unit air operation permit. Sonly.)		•
	emissions unit			on Section is a regulated
	unregulated en	unit addressed in this Entire in this Entire in the Entire	missions Onit miormati	on Section is an
	nissions Unit Descr			
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)	
		s Unit Information Secti		•
		or production unit, or ac which has at least one d		
				e emissions unit, a group
		roduction units and active vent) but may also prod		one definable emission
		s Unit Information Section production units and a		e emissions unit, one or fugitive emissions only.
2.	Description of Em	issions Unit Addressed i	in this Section: Emerge	ncy Diesel-fired
		combustion (RICE) Gen	erator Nos. 2, 3 and 4 a	t Falkenburg Advanced
W۷	VTP			
3.	Emissions Unit Ide	entification Number: 11	5	
	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit
	Status Code:	Construction	Date:	Major Group
	Α.	Date: 6/30/2009		SIC Code: 49
	A	1: -1:1:/ (C11 11	41 4 1 1	49
8.	_	pplicability: (Check all	tnat apply)	
	Acid Rain Unit			
	CAIR Unit			_
	Package Unit:	•	36 1 137 1 3	NT / A
	Manufacturer: Cur		Model Number:	N/A
		ate Rating: N/A MW		
		mment: Existing Emerg		
	_ ,	(CE) Generator Nos. 2, 3		ew emission unit 115
uuc	to recently bround	gated NESHAP standard	us.	

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EMISSIONS UNIT INFORMATION Section [12] of [12]

Emissions Unit Control Equipment/Method: Control of 1_
Control Equipment/Method Description: N/A
2. Control Device or Method Code:
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
2. Control Device or Method Code:
Emissions Unit Control Equipment (Methods Control
Emissions Unit Control Equipment/Method: Control of
1. Control Equipment/Method Description:
=
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1. Control Equipment/Method Description:
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1. Control Equipment/Method Description:
Control Equipment/Method Description: Control Device or Method Code:
Control Equipment/Method Description: Control Device or Method Code: Emissions Unit Control Equipment/Method: Control of
Control Equipment/Method Description: Control Device or Method Code: Emissions Unit Control Equipment/Method: Control of
Control Equipment/Method Description: Control Device or Method Code: Emissions Unit Control Equipment/Method: Control of

EMISSIONS UNIT INFORMATION Section [12] of [12]

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: N	J/A	
2. Maximum Production Rate: N/A		
3. Maximum Heat Input Rate: N/A Btu/hr		
4. Maximum Incineration Rate: pounds/hr	N/A	
tons/day	N/A	
5. Requested Maximum Operating Schedule		
hours/da	ıy	days/week
weeks/y	/ear	hours/year
6. Operating Capacity/Schedule Comment: The Emergency diesel-fired reciprocating Nos. 2, 3 and 4 are rated at 800 horse power. The engine horse power rating.		• , ,

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EMISSIONS UNIT INFORMATION Section [12] of [12]

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on		2. Emission Point	Гуре Code: 1
Flow Diagram: Emergence RICE Generator Nos. 2, 3 and			
3. Descriptions of Emission N/A		g this Emissions Unit	for VE Tracking:
4. ID Numbers or Description N/A	ns of Emission Un	nits with this Emission	n Point in Common:
5. Discharge Type Code: N/A	6. Stack Height	:: N/A	7. Exit Diameter: N/A
8. Exit Temperature: N/A	9. Actual Volum N/A acfm	netric Flow Rate:	10. Water Vapor:
11. Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13. Emission Point UTM Coo Zone: East (km):	rdinates	14. Emission Point I Latitude (DD/M	Latitude/Longitude M/SS)
North (km)	:	Longitude (DD/I	MM/SS)
15. Emission Point Comment:			

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EMISSIONS UNIT INFORMATION Section [12] of [12]

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1_ of 1_

1.	Segment Description (Prod Diesel	cess/Fuel Type):			
2.	Source Classification Code N/A	e (SCC):	3. SCC Units:		· · · · · · · · · · · · · · · · · · ·
4.	Maximum Hourly Rate: N/A	5. Maximum N/A	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:
	. Segment Comment: The Emergency diesel-fire e engine horse power rating.		s. 2, 3 and 4 falls	und	ler RICE standards based on
Se	gment Description and Ra	ite: Segment	of		
1.					
2.	Source Classification Code	€ (SCC):	3. SCC Units:		
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit:
10.	Segment Comment:		·		

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EMISSIONS UNIT INFORMATION

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of [12]

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	Secondary Control Device Code	4. Pollutant Regulatory Code
N/A			
			,

EMISSIONS UNIT INFORMATION Section [12] of [12]

POLLUTANT DETAIL INFORMATION Page [1] of [1]

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: N/A	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: N/A lb/hour N/A	4. Synthetically Limited? The tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	,
6. Emission Factor: N/A Reference:	7. Emissions Method Code: N/A
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions:	
<u>_</u>	
11. Potential, Fugitive, and Actual Emissions Co	omment:

EMISSIONS UNIT INFORMATION Section [12] of [12]

POLLUTANT DETAIL INFORMATION Page [1] of [1]

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:	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	n of Operating Method):
Allowable Emissions	of
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	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):

EMISSIONS UNIT INFORMATION Section [12] of [12]

G. VISIBLE EMISSIONS INFORMATION

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

Vi	sible Emissions Limitation: Visible Emissi	ions Limitation of
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity:
		☐ Rule ☐ Other
3.	Allowable Opacity:	
	Normal Conditions: % Ex	sceptional Conditions: %
	Maximum Period of Excess Opacity Allowe	ed: min/hour
4.	Method of Compliance: Annual Method 9	
5.	Visible Emissions Comment:	
¥ 7.º.	all Decision Thereses 77.11 Decision	
_	sible Emissions Limitation: Visible Emission	
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3.	Allowable Opacity:	
		ceptional Conditions: %
_	Maximum Period of Excess Opacity Allowe	ed: min/hour
4.	Method of Compliance:	
5.	Visible Emissions Comment:	•

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EMISSIONS UNIT INFORMATION Section [12] of [12]

H. CONTINUOUS MONITOR INFORMATION

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

	ontinuous Monitoring System: Continuous	<u> </u>
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:	
Co	ntinuous Monitoring System: Continuous	Monitor of
	Time of the state	Monitor or
1.	Parameter Code:	2. Pollutant(s):
 3. 	Parameter Code:	
	Parameter Code:	2. Pollutant(s):
3.	Parameter Code: CMS Requirement: Monitor Information	2. Pollutant(s):
3.	Parameter Code: CMS Requirement: Monitor Information Manufacturer:	2. Pollutant(s):

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		
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		
4.			
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 Not Applicable		
6.	Compliance Demonstration Reports/Records: Attached, Document ID: Test Date(s)/Pollutant(s) Tested: Test Date(s)/Pollutant(s) Tested: Test Date(s)/Pollutant(s) Tested: 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		

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EMISSIONS UNIT INFORMATION Section [12] of [12]

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: 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				
Identification of Applicable Requirements: Attached, Document ID:				
2. Compliance Assurance Monitoring: Attached, Document ID: X Not Applicable				
3. Alternative Methods of Operation: Attached, Document ID: X Not Applicable				
4. Alternative Modes of Operation (Emissions Trading): Attached, Document ID: X Not Applicable				
Additional Requirements Comment				
See Appendix M for Instant RICE software for the Emergency diesel-fired RICE Generator				
Nos. 2, 3 and 4.				

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Appendix A List of Insignificant Activities

APPENDIX A

LIST OF INSIGNIFICANT EMISSION UNITS AND/OR ACTIVITIES

- 1. Fire and safety equipment.
- 2. Paint usage of less than 6 gallons per day
- 3. Mineral spirits drums
- 4. Bulk drum of cooling water treatment
- 5. Flanges and valves
- 6. 55 gallon oil storage drums
- 7. 300 and 449 gallon fuel storage tanks
- 8. Laboratory vent
- Yard waste mulching operation adjacent (North) of Hillsborough County Resource Recovery Facility
- 10. Sulfuric acid tank
- 11. Chlorine cylinders
- 12. Aqueous Ammonia (19%) Storage Tank

Appendix B Identification of Applicable Requirements

APPENDIX B

LIST OF APPLICABLE REGULATIONS

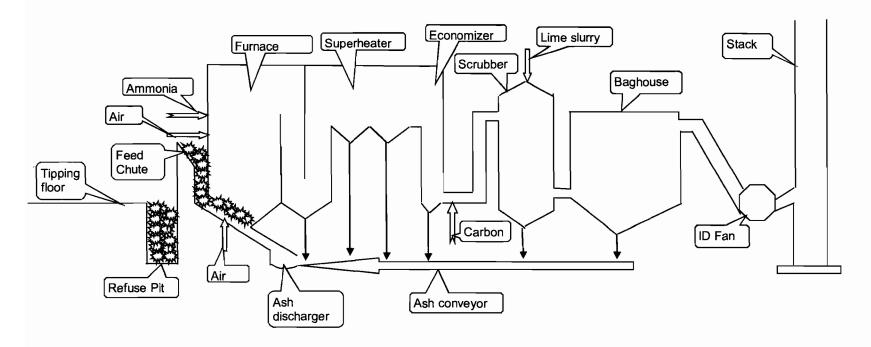
Facility Applicable Regulations

FAC 62-4	Permits (Core List)
FAC 62-103	Rules of Administrative Procedure (Core List)
FAC 62-204	Air Pollution Control – General Provisions
FAC 62-210	Stationary Sources – General Requirements
FAC 62-212	Stationary Sources – Preconstruction Review
FAC 62-213	Operating Permits for Major Sources of Air Pollution (Core List)
FAC 62-256	Open Burning and Frost Protection Fires
FAC 62-296	Stationary Sources – Emissions Standards
FAC 62-297	Stationary Sources – Emissions Monitoring
40 CFR 60	Standards of Performance for New Stationary Sources
40 CFR 61	National Emission Standards for Hazardous Air Pollutants
40 CFR 62	Approval and Promulgation of State Plans
40 CFR 70	State Operating Permit Programs
40 CFR 82	Protection of Stratospheric Ozone (Core List)

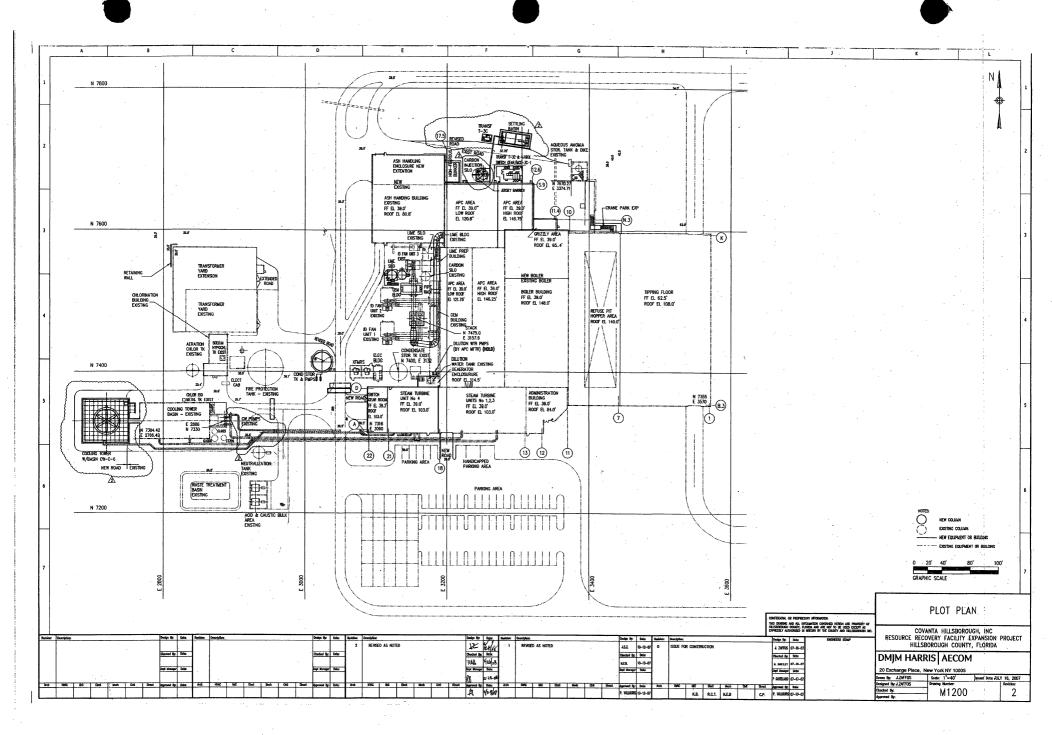
Appendix C Process Flow Diagram

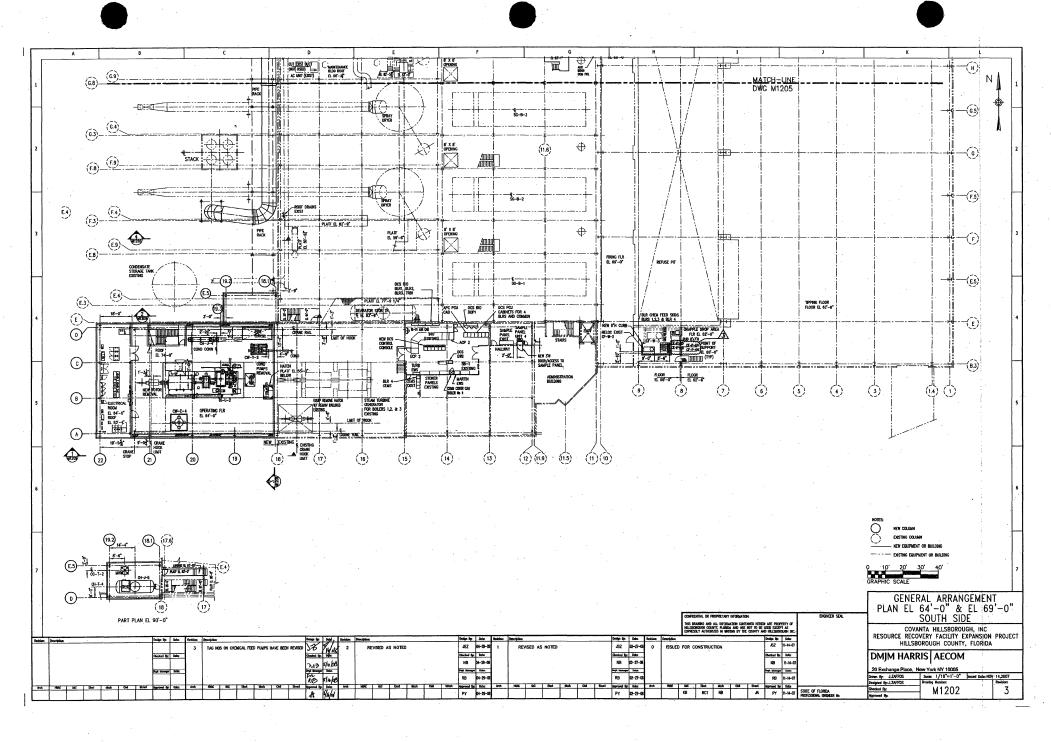
Hillsborough County Resource Recovery Facility

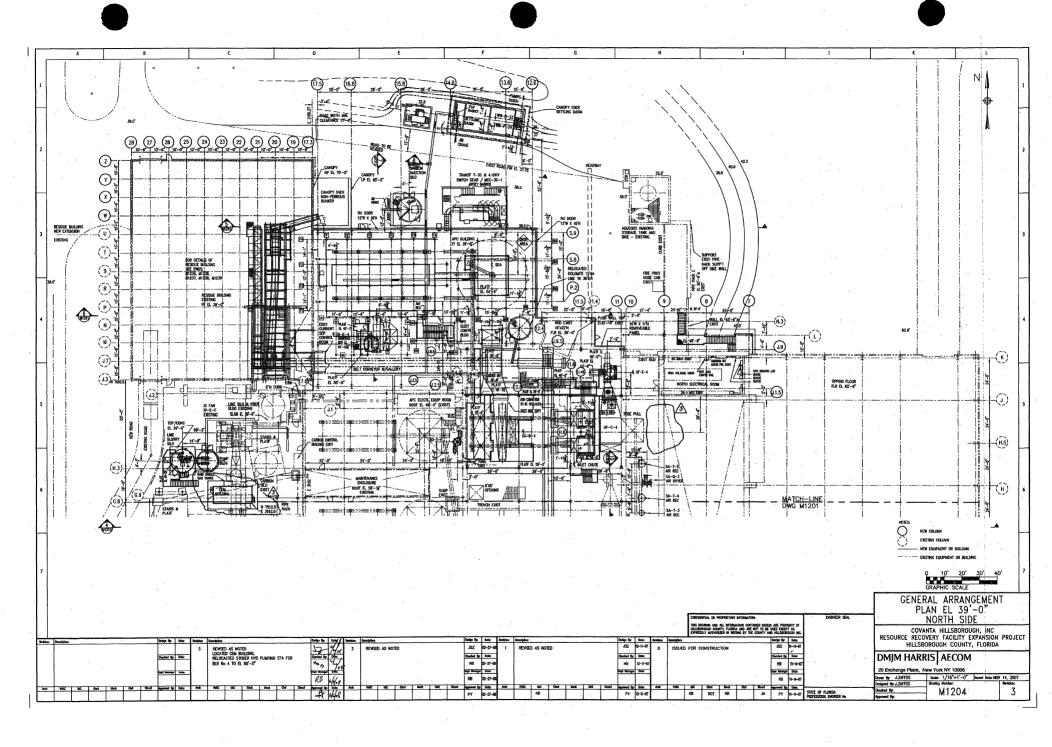
Appendix C: MWC Process Flow Diagram

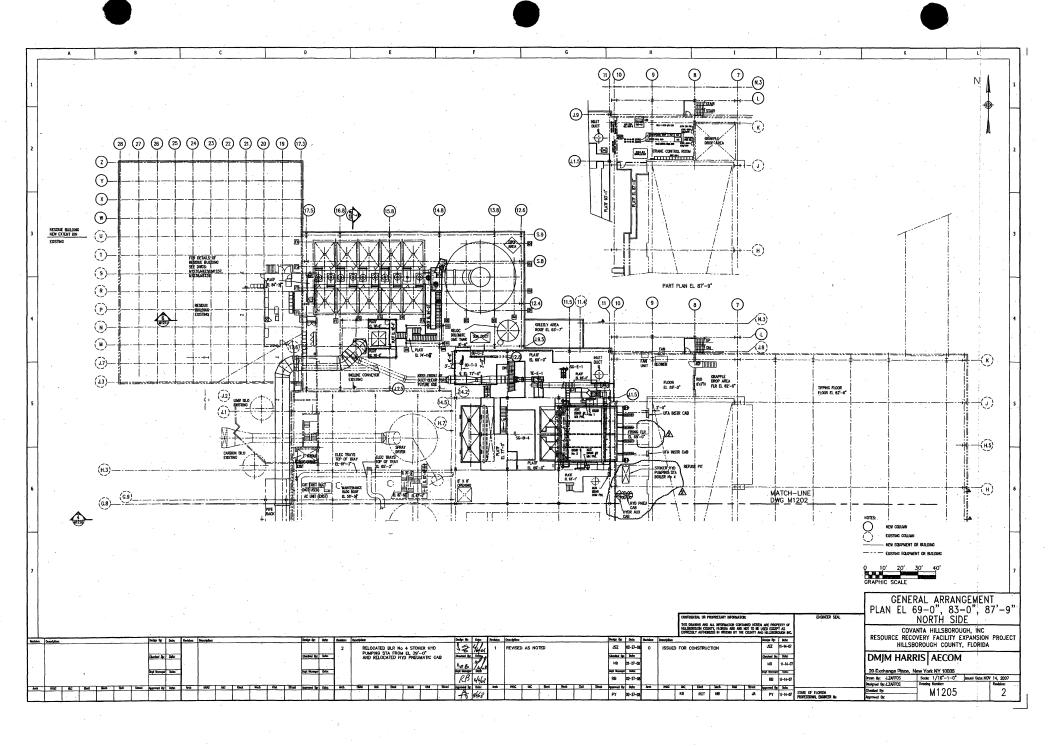


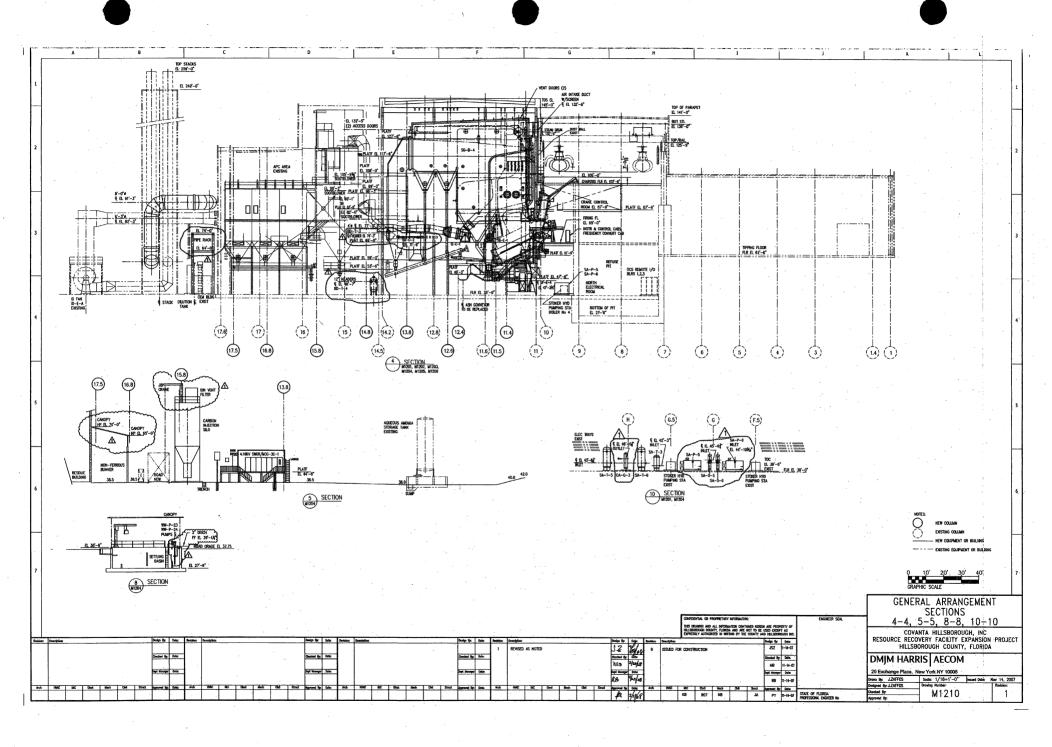
Note: For Unit 4 Low Nox combustion system is also used.

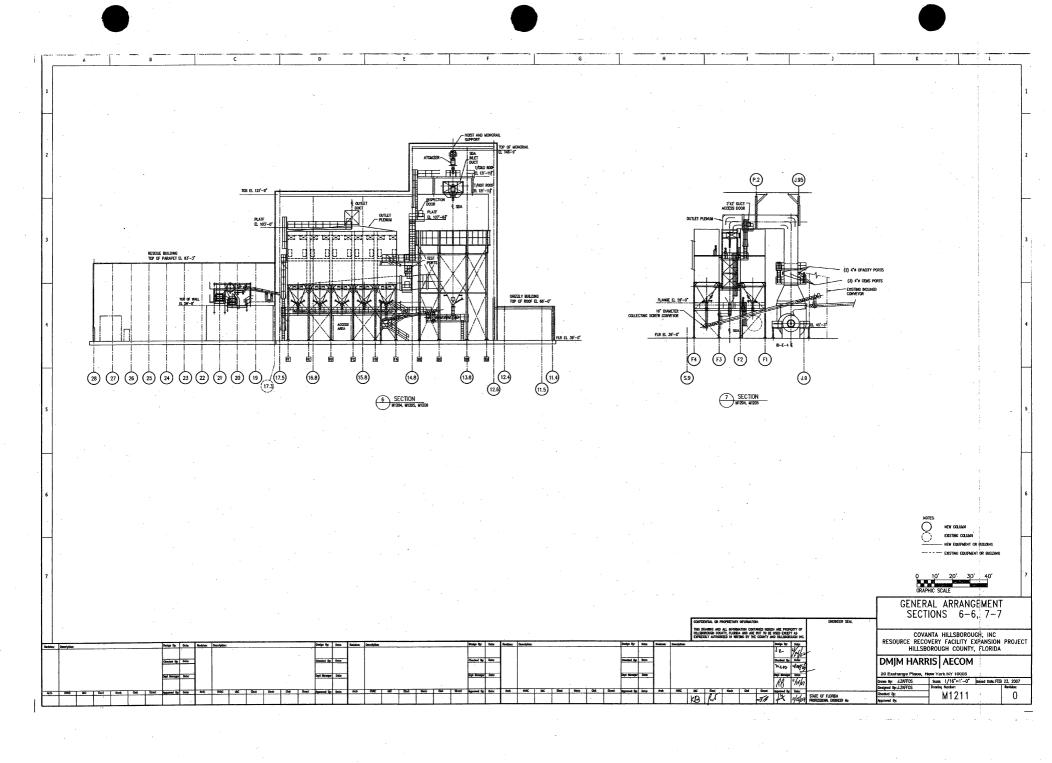












Appendix D Fuel Analysis or Specification

APPENDIX D

FUEL ANALYSIS OR SPECIFICATION

The reference waste ultimate analysis is as follows:

Component	Percent by Weight*
Carbon	28.5
Hydrogen	3.8
Oxygen	25.1
Nitrogen	0.5
Chlorine	0.4
Sulfur	0.1
Total Inert	20.9
Moisture	20.7
Total	100.0

^{*}Note: The values specified above are approximate and highly variable.

Appendix E Detailed Description of Control Equipment

APPENDIX E

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Existing Air Pollution Equipment for Municipal Waste Combustor - Units 1, 2, 3 and 4

The Air Pollution Control (APC) equipment at Units 1 through 3 consists of spray dryer absorber (SDA), a fabric filter (FF) baghouse, an activated carbon injection (ACI) system, and a selective non-catalytic reduction (SNCR) system. The combustion zone of each boiler has an auxiliary fuel (natural gas) burner to control combustion during periods of start-up, shutdown, and upset conditions. Continuous emission monitors (CEM) are installed in the outlet ducts of the economizer/boiler and FF. Additional CEM sample lines are installed in the stack.

The new APC equipment for Unit 4 is similar to the existing ones (such as spray dryer absorber (SDA), a fabric filter (FF) baghouse, an activated carbon injection (ACI) system) except a new enhanced selective non-catalytic reduction (SNCR) system is used as part of Covanta's low No_x control technology.

Like the existing units, the combustion zone of the boiler has an auxiliary fuel burner to control combustion. A continuous emission monitors (CEM) is installed in the outlet ducts of the economizer/boiler and FF.

The APC equipment for Unit 4 begins at the outlet flanges of the boiler economizer and extends through the scrubber vessel (spray dryer), baghouse, and I.D fans to the inlet flange of the stack. As mentioned above, the design of the APC equipment for the Unit 4 includes four major components:

1. Spray Dry Absorber (SDA): The SDA shall use lime reagent to remove SO₂, HCL, and HF from the flue gas. It employs a rotary atomizer for spraying lime slurry into the flue gas stream. The lime slurry mixes with the flue gas in the SDA vessel to remove acid gases. The waste formed in the acid gas removal process shall be dry and be capable of being readily collected in the bag house or precipitator.

A new 60 ton capacity supplemental lime silo (Emission Unit No. 108) is added for supplying lime for the expansion. The new silo is sized such that a total of 112 tons of storage (20 lb/ton x 1600 TPD x 7 days) is provided between the new supplemental silo and the existing lime silo. A new lime slurry pump is also provided. The fabric filter baghouse located on top of lime silo is designed, operated and maintained to control particulate matter emissions.

2. Activated Carbon Injection System (ACI): A carbon injection system is installed for mercury removal. The system pneumatically injects activated carbon directly into the flue gas ductwork of the new 4th combustion unit downstream of the economizer. The carbon particles attach to the mercury molecules and then are removed from the flue gas downstream in the fabric filter baghouse. The new injection system includes a new 1,500

cubic foot carbon storage silo (Emission Unit No. 110), blower, eductor, surge bin, gravimetric feeder, piping, wiring, process controls and other accessories needed for a complete and operational system. All activated carbon injection train equipment is located in the skirted area of the new carbon storage silo. The fabric filter baghouse located on top of activated carbon silo is designed, operated and maintained to control particulate matter emissions.

- 3. Fabric Filter Baghouse (FF): A pulse jet type baghouse with an air to cloth ratio of 3 to 1 at MCR flow is provided. The fabric filter baghouse removes particulate from the combustion process, calcium compounds resulting from acid gas removal in the SDA, and carbon particles with adsorbed mercury molecules from the carbon injection system. The new scrubber and baghouse system (Unit 4) is located north of the existing inclined residue conveyor between the grizzly and residue building. The existing settling basin is demolished and a new settling basin is constructed north of the new scrubber/ baghouse area.
- 4. Selective Non-Catalytic Reduction System (SNCR) with Covanta Low-Nox (LNTM) Technology: This is a process where an aqueous ammonia injection system is used to remove NO_x emissions from the flue gas. The system consists of an auxiliary fan assembly, air apportioning and mixing system and necessary duct work. The system can also help in slightly reducing fuel NO_x by a means of staging the combustion process.

The Covanta Low-Nox (LNTM) technology combined with a SNCR system for Unit 4 further reduces Nox emissions. Combining SNCR with the Covanta LNTM process also yields a number of synergistic effects which enhances the performance of the SNCR system. These enhancements minimize the number of SNCR nozzles required, reduce the amount of carrier gas needed with the ammonia or urea, and reduce the amount of unreacted ammonia that exits the boiler, which is commonly called "ammonia slip." The SNCR control system is also integrated with the LNTM combustion controls to maximize the NO_x reduction and minimize the ammonia slip.

With the Covanta LNTM process, a portion of the secondary air stream is diverted to a new series of nozzles, installed in the Municipal Waste Combustor furnace waterwalls at a higher elevation in the furnace. Typically, the total air flow requirement of the process is not changed. However, in some cases an additional or larger fan is required to maintain adequate air to control NO_x . The distribution of air between the primary, secondary and tertiary streams is then controlled to yield the optimal gas composition and temperature to minimize NO_x and control combustion. The control takes into account the heating value of the waste and the fouling condition of the furnace.

In addition to the installation of a tertiary air system, modifications to combustion controls, and if desired, modifications to the SNCR system, the Covanta LN™ process also requires upgraded protection to the furnace waterwalls due to increased gas temperatures in the furnace. Upgraded refractory materials are installed in the lower furnace, and Inconel® overlay of the waterwalls have been completed throughout the entire first pass, as well as the upper second pass of the boiler.

Appendix F Procedures for Startup and shutdown

APPENDIX F

MWC UNIT STARTUP AND SHUTDOWN PROCEDURES

1.1 MWC Unit startup Procedures

1.1.1 COMBUSTION UNIT STARTUP Units 1, 2 and 3 - 400 TPD

Note: Unit 4 is a stand alone 600 TPD Boiler that is fired directly to the by-bass condenser. The parameters for firing the unit is the same as Boilers 1, 2 and 3.

INTRODUCTION

This procedure covers the startup of one unit consisting of the boiler and its auxiliaries as well as all associated air pollution control equipment. The procedure assumes that one or both of the other units are already in normal operation and all plant systems that are common to each unit are also operating in a normal manner.

VERIFY THAT ALL SAFETY CLEARANCES HAVE BEEN PROPERLY RELEASED BEFORE PREPARING THE UNIT FOR SERVICE.

- 1. Walk down boiler, check for conditions that would abort lite-off.
- 2. Ensure all hoppers are clear and all doors are shut.
- 3. Ensure boiler drum & super-heater vents are open and ERV is aligned, tested, and in auto.
- 4. Ensure boiler safety valves are assembled and gags are off.
- 5. Ensure stoker riddlings are clear and view ports are in place.
- 6. Ensure stoker doors, riddling doors, plenum doors and feed-table doors are shut.
- 7. Ensure ash discharger doors are shut and place water seal on both ash dischargers.
- 8. Ensure ash discharger vibrators are on.
- 9. Ensure unit fly-ash system is in service, with conveyors going in the right direction.
- 10. Ensure all hopper air-hammer are in auto and all hopper heaters are in manual.
- 11. Ensure stoker feed chute water jackets are filled up with normal fill valves aligned.
- 12. Ensure stoker hydraulic system is aligned, start a hydraulic pump and check for leaks.
- 13. Ensure all hydraulic component local hand stations are in auto and no hydraulic leaks.
- 14. Ensure all stoker feeder-rams are all the way forward at about 0" inches.

Note: To prevent hydraulic oil overheating: run both stoker and ash discharges & clinker-roll with one martin hydraulic pump at this time, with stoker automatic greaser running.

- 15. Ensure ammonia carrier air upper header is aligned and lower level cool-air is aligned.
- 16. Ensure Boiler Non-return, Steam-stop and Chemical-feed valves are aligned.
- 17. Ensure boiler Stem-Header-Stop and bypass valves are shut.
- 18. Ensure boiler 4" warm-up-line is open and the 4" Throttle valve is 2 turns open
- 19. Ensure furnace camera air valves are aligned properly and blowing air.
- 20. Ensure header blow-down valves are shut and the common-drain is open.
- 21. Ensure boiler feed-water system valves are aligned as required at this time (no leak-by).
- 22. Ensure unit ruptured-tube-key is in the normal operating position.
- 23. Bring boiler steam-drum water level to firing level: -2".
- 24. Ensure sacrificial baghouse modules 1 & 2 are aligned for service with pulse-air system and each pulse air header aligned. Don't place in cleaning mode at this time.
- 25. Ensure unit spray machine is hooked up properly, start oil pumps & start the machine.
- 26. Ensure stoker is in furnace temp mode.
- 27. Ensure stoker UFA step and OFA front & rear dampers are set as needed for purge.

Note: Watch baghouse D.P. (max: 5 inches W.C. D.P.) and add modules as needed for purge.

28. Ensure stoker feed-chute damper is shut and start I.D. fan, if not already running.

Note: Start boiler fans in the order of: I.D. fan, Seal-air fan, U.F.A. fan and then O.F.A. fan.

Note: Trip-test: Unit fans by blowing down boiler drum "water column" then restart fans.

29. Place the Air Pre-Heater in service after UFA fan starts & before purge.

Note: Normal duct pressure for the UFA & OFA fans are: 16" & 18" in W.C. respectively.

30. Adjust UFA fan & OFA fan dampers to bring total air flow to 30 kscfm in any desired combination while adjusting I.D. fan damper to maintain proper draft: -0.3 inches W.C.

Note: All fans & fan dampers must be in auto and stoker riddlings cycle system must be turned on prior to purge and no auxiliary burners or riddlings system alarms in to complete a purge.

Note: Call Seminole Electric before boiler is tied on to main steam header. (Export MW's.)

- 31. Start ventilation sequence (purge), which should take 10 minutes to complete.
- 32. After purge is complete, back stoker UFA step down to minimum, back OFA damper all the way down while maintaining proper draft: -0.3 inches W.C. with I.D. fan damper.
- 33. Insure natural gas is available to boiler auxiliary burners and lite auxiliary gas burners.
- 34. Record the time when auxiliary gas burners are placed in service.
- 35. With the OFA damper closed, give the OFA fan a stop command at this time.
- 36. With stoker UFA step at minimum, adjust gas burners for CO control and warm-up curve.

Note: Adjust stoker UFA step to control UFA flow and adjust gas burners to stay on curve.

- 37. Ensure boiler drum CBD valves are open and boiler mixed chemical feed is in service.
- 38. At 25 psi, on the steam drum, shut boiler drum vent, cross-over vents and evap. Vent.

Note: Ensure steam flow through the 6" warm-up line to bypass condenser before shutting the final-pass super-heater vent.

39. At 75 psi on the steam drum, shut boiler super-heater vents and toe drain valves.

Note: When required align boiler feed-water system & feed & bleed to maintain drum level.

40. AT 100 psi on the steam drum, blow down all water wall and chill wall headers.

Note: Manually control feed-water flow to maintain drum level as needed.

Note: Adjust 4" throttle valve along with gas burner load to control steam drum saturation pressure/temperature rise rate at 100f Degrees/hr. Keep steam at 30-40 k for a 4 hour curve.

Note: About 3 hrs into a 4 hr curve, UFA flow & gas burner load should be enough to have the unit baghouse outlet temperature at 230*F ready for a 1 hour heat soak on modules A-F

- 41. After baghouse outlet temperature reaches 230*F, start heat soak on modules A-F
- 42. Place lime slurry and dilution water systems in service, recircling back to their tanks.
- 43. Align reactor feed tank and control SDA outlet temperature as needed and required.

Note: Increase UFA flow and gas burner load to increase superheater outlet temperature and pressure as needed while controlling & maintaining the start-up curve.

Note: Stoker UFA flow should be in the normal full load operating range (28-30 kscfm) & gas burners should be 90-100% load in service toward the end of the 4 hr curve

Note: It is good practice to have a man ready at the boiler blow-downs when tying on header.

Note: Match up the main steam header pressure with the other boiler before tying on.

- 44. Once proper boiler header pressure & temperature are reached, smoothly open the steam header stop valve, shut the 4" warm-up valve slowly and shut the 6" guardian valve.
- 45. Record the time when the boiler is tied onto the main steam header.
- 46. Walk down boiler, check for conditions that would abort feeding MSW.

Note: Align and place unit APC equipment in service: carbon, ammonia and lime at lead 5 minutes before the feed-chute is opened.

- 47. Start carbon train and place it at the set point (lbs/hr) level.
- 48. Align lime slurry flow to the atomizers at the required rate.
- 49. Align the ammonia reg. station and place unit NO_X control system (SNCR) in service.
- 50. Record the time the unit APC systems are all in service.
- 51. Ensure unit superheater attemperator system is aligned. Not needed for very clean boiler.
- 52. Place remaining baghouse modules in service, with pulse-air aligned to all modules.

- 53. Place unit baghouse in off-line cleaning mode.
- 54. Ensure two stoker martin hydraulic pumps are in service at the time.
- 55. Reduce UFA flow while gas burner load is at 95-105% to heat up furnace roof temp.

Note: Stoker UFA step may travel when switching to "steam-flow" control mode.

- 56. Set stoker UFA flow set-point (SP) to:20 kscfm and then take stoker to "steam-flow"
- 57. Ensure stoker UFA flow distribution is set for zone #1 (long/No. 3 position)
- 58. Pre-load feed-chute hopper with good dry MSW when furnace roof temp is high enough.
- 59. Set up the unit CEM computer input indication for: feed-chute opened.
- 60. When at the proper furnace roof temperature (about 1200*f) place the I.D. fan damper in manual and open the stoker feed-chute damper. Charge the hopper with good dry refuse.
- 61. Record the time the unit feed-chute damper is opened.
- 62. Once proper furnace seal is achieved, place the I.D. fan damper back in auto.

Note: It is good practice to have a man ready at the boiler blow-downs when going on MSW.

Note: For a "hard" lite-off, as indicated by wet O₂ dropping fast and quickly rising drum level, reduce gas burner load, reduce feed water flow and blow down the drum as needed.

- 63. Stroke MSW on to the grates, after it lites off good, start the OFA fan and adjust it's damper for 18 inches W.C. of duct pressure and then place in auto. Watch draft and CO's.
- 64. Reset and unlock the stoker to start feeders and grates.
- 65. With the stoker Optimizer controller off, adjust feeder stroke length and speed manually.
- 66. Place stoker O.F.A. front and rear dampers in auto. (Watch draft and CO's)
- 67. With combustion stable, set the unit CEM computer in-put indication for: flames on.
- 68. Record time when unit flames are on.

Note: Increase UFA flow set-point as needed for good combustion and to raise load.

- 69. Reduce gas burner load as stoker steam flow load is raised. Watch wet O2 and CO's.
- 70. Turn optimizer controller on, when stoker run time is about 50%.
- 71. Place feed-water control valve in auto when, 3-element feed signal is in, steam flow is stable at or above 100k and steam drum water level is normal and stable.
- 72. When gas burners are no longer needed, secure gas burners and propane vaporizers.
- 73. Record the time when the unit auxiliary burners are secured.
- 74. Place baghouse hopper heaters in auto.
- 75. Re-check all boiler vents, drains and blow-down valves for being tightly double valve shut.
- 76. Ensure unit soot-blow system is properly aligned.
- 77. Place dolo lime feed system in operation.

1.2 MWC Unit Shutdown Procedures

1.2.1 COMBUSTION UNIT SHUTDOWN

INTRODUCTION

This procedure covers the shutdown of one unit consisting of the boiler and its auxiliaries as well as all associated air pollution control equipment. The procedure assumes that one or both of the other units will remain in normal operation and all plant systems that are common to all units will continue operating in a normal manner.

- 1. Ensure best available fuel feed three hours before shutdown.
- 2. Blow soot approx. two hours before shutdown
- 3. Increase grate and clinker roll speed to thin beds (2 hrs before shutdown)
- 4. Test Auxiliary Burners for proper operation, then secure.
- 5. Stop refuse feed approx. 2 hour before closing the feed chute damper.
- 6. Clean off the hopper front of refuse and cut any streamers (secure hopper)
- 7. Close feed chute when refuse level is low enough. Record Time:
- 8. Select the feed chute "Closed" command on CEM computer.
- 9. Open low- load to augment Med. Press. Header,
- 10. Start Auxiliary Burners approx. 15 minutes after closing feed chute.
- 11. As the refuse burns out and steam flow decreases ramp up the burners to control CO.
- 12. Select the optimizer to "Off" and begin increasing feeder speed and stroke length.
- 13. Slowly lower OFA header pressure to 5"wc (enough to keep feeders and grates on)
- 14. Feeders/grates set to "non-interlock" and steam flow < 100Klbs.hr, lower OFA as needed to control CO. Reduce OFA to as close to zero scfm as possible.
- 15. Set automatic furnace draft control set point to -.1"wc to help control CO.
- 16. Adjust (down) UFA dampers as needed (as high as possible 10-15k scfm) to achieve a good burn out and maintain an elevated roof temp. in order to keep raw and corrected CO below 100ppm.
- 17. O₂>16%, steam flow due to refuse < 30Klbs.hr & burners at 100%, S/S visually verifies fires out. Unit is not considered off line until the criteria of Step #17 are met.
- 18. Shift Supervisor and C.R.O. verify fires are essentially burned out. On the CEM alarming computer "Visible flames on grates" selected to "No Flames" Verify flag and Record time.
- 19. Secure Aux. Burners.
- 20. Increase furnace draft set point and increase UFA/OFA flow to force cool unit.

- 21. Ensure clinker roll, grates and feeders are in "non-interlock" at 100%.
- 22. Once unit load drops below 30Klbs/hr open S/H final outlet vent, isolate the header stop, and crack open the 4" valve to the bypass condenser. Verify flow and isolate vent.
- 23. The UFA rate and position of 4" valve should be consistent with the Riley cool down curve of 150F/hr of saturation temperature, or approximately 3.5 hours to depressurize.
- 24. Blowdown all boiler water wall headers at 100 # and reseat.
- 25. Secure Carbon, lime slurry (after fresh water flush), and ammonia to the unit.
- 26. Secure the atomizer once the SDA inlet temp. < 150F.
- 27. Isolate propane root valve to unit.
- 28. Isolate UFA coil system.
- 29. Place riddlings system in short run time. Also run several manual cycles.
- 30. Once baghouse outlet temp reaches 230F start isolating compartments A F.
- 31. Maintain unit cool-down with Maximum UFA, not to exceed 10" dP across B/H.
- 32. Ensure pulse air is isolated to the unit baghouse.
- 33. Once all grates are run off of ash, secure OFA. Continue to run UFA fan for cool down.
- 34. Crack open feed chute to assist cool down.
- 35. Open the superheater vents at 75# drum pressure.
- 36. Open all drum and cross-over vents at 25# drum pressure.
- 37. Once there is no pressure the boiler can be drained.

Appendix G Operation and Maintenance Plan

APPENDIX G

OPERATION AND MAINTENANCE PLAN

Scheduled Maintenance

Each Municipal Waste Combustor (MWC) is generally shutdown semiannually for outage during which major equipment is inspected. At this time, manufacturer's recommended maintenance is performed. The outage generally involves but it is not limited to the following:

- 1. Inspection and repair of the boiler components;
- 2. Inspection and calibration of instruments;
- 3. Inspection and repair of the auxiliary burners;
- 4. Inspection and repair of the gas handling equipments;
- 5. Inspection and repair of the SNCR;
- 6. Inspection and repair of the Carbon Injection System;
- 7. Inspection and repair of the low NOx System;
- 8. Inspection and repair of the Spray Dry Absorbers;
- 9. Inspection and repair of the fabric filter bag house;
- 10. Inspection and repair of the CEMS/COMS;
- 11. Inspection and repair of the water treatment systems;
- 12. Inspection and repair of the Ash Handling System;
- 13. Inspection and repair of the baghouse located on top of each lime and carbon silo.

Unscheduled Maintenance

Occasionally, operation of the MWC is interrupted due to equipment breakdown. Depending on the severity and impact, repair may be conducted while the boiler is online or offline. In general, equipment breakdown that results in non-compliance with permitted emission limits will require that the MWC be shutdown, unless repairs can be made immediately.

Preventive Maintenance

In order to prevent equipment breakdown, preventive maintenance is performed in general frequency as per manufacturer's recommendation. Typically, this includes inspection, lubrication, replacement and minor repairs.

Logs

All inspections and maintenance activities are recorded in a written log.

1.1 Procedures for Handling and Feeding MSW

1.1.1 REFUSE PIT MANAGEMENT

During heavy delivery hours, trucks discharge more refuse to the pit than can be fed to the stokers. The crane operator must arrange, or "stack," pit refuse to allow for efficient discharge of incoming loads. This requires keeping space open along the pit's front wall where the trucks discharge, while stacking excess refuse in other parts of the pit.

DESCRIPTION

The refuse pit is divided into eight bays along its length. This helps organize refuse delivery by designating specific areas for discharging loads. The bays are not physically separated; assume that they run through the width of the pit to the rear wall. In addition, visualize that the pit is divided into three equal rows across its length. These rows, front, center, and back, are each slightly wider than a fully opened crane grapple. (Fig. 1.1.1-1)

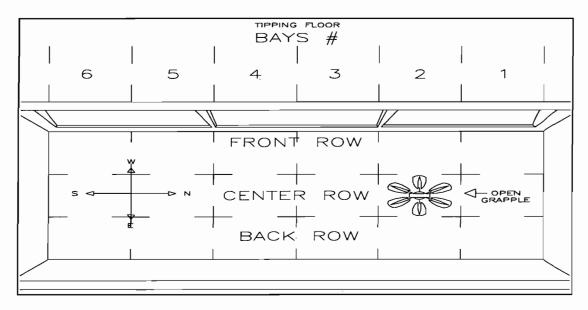


Figure 1.1.1-1: Refuse Pit (overhead view)

OPERATION

Proper pit management provides maximum refuse storage while keeping the front row sufficiently clear for arriving trucks to unload. The first goal is to keep the front wall dug well below tipping floor level so refuse vehicles can discharge directly to the pit. If overall refuse level is below the tipping floor height, keep the refuse in the pit level.

When refuse delivery rates exceeds stoker feed rates, stack refuse in the center and back pit rows. Pit space is used effectively by building a "barrier wall" along the center row. Form this wall by moving refuse from the front row to the top of the center row. Take a grapple from the front row and set it atop the center row. It should overhang slightly toward the front row so that the center row does not slope toward the back while building the wall of refuse. Open the grapple while slowly lowering it onto this wall. This packs the refuse to form a stable stack. Some refuse may tumble back to the front row.

By removing refuse from the front row and stacking it along the center row, the crane operator will form a refuse pit profile similar to that shown in Fig. 1.1.1-2. As the center wall rises, shift an occasional grab from the front row to the back row, behind the barrier wall. This quickly opens an area for arriving trucks to dump.

The center and back row heights will vary depending upon the amount of refuse delivered. The back row should always be four to six feet below the center row.

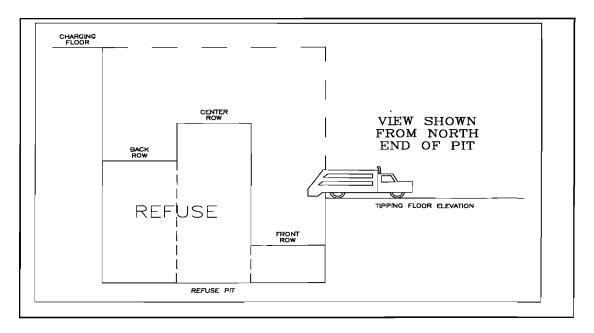


Figure 1.1.1-2: Properly Stacked Pit during Heavy Delivery Hours

It is important to form this center row barrier wall. If refuse is merely moved from the front row to the back of the pit, a slope forms from the rear of the pit down to the front. Soon the refuse can no longer be stacked. It merely tumbles down the slope back to the truck unloading area along the front wall. (Fig. 1.1.1-3.)

During extremely heavy delivery hours, it may be necessary to stack out entire bays. If required, stacking should begin at either end of the pit.

Form a barrier wall along the centermost bay (bay #1 and #8). The wall should be built as described above for the center row wall. This leaves lower areas in bay #2 for quick refuse displacement.

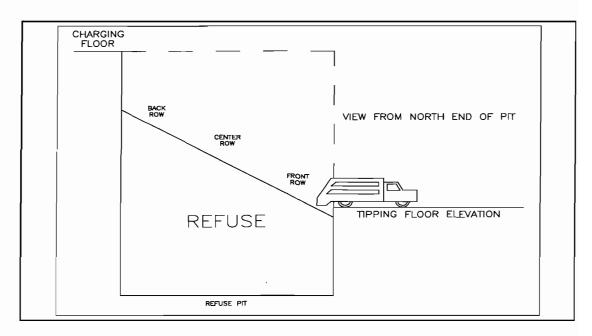


Figure 1.1.1-3: Improperly Stacked Refuse Pit

If refuse deliveries still exceed pit space, continue stacking from the either end of the pit toward the center. The barrier walls should always be formed as described above in the centermost bays for efficient use of pit space.

During non-delivery hours on weekdays, manage the pit as necessary to best prepare it for deliveries the next day. This includes digging out the front row and laying a firm foundation for the center barrier wall.

On weekends, always try to empty at least one half of the pit on either end. Alternate the ends emptied every other weekend. Refuse that remains undisturbed too long begins to form compost. The composting waste generates excessive heat and odor, and results in lower BTU value refuse.

Close communications between the crane operator and Tipping Floor Equipment Operator helps provide the most effective pit management. These two people must always keep each other well informed as to intentions, unusual conditions, pit management strategy as discussed above, etc. Cooperation is essential for efficient operation of the tipping floor, pit, and stoker charging. If a conflict arises, the crane operator's instructions should be followed.

1.1.2 PREPARING FUEL WITH THE REFUSE CRANES

The tasks discussed herein are for preparation of refuse prior to loading the refuse to the MWC feedchutes in order to provide smooth stoker combustion. These tasks also help to prevent stoker system plugs and dangerous operating conditions.

DESCRIPTION

Tasks for preparing refuse include watching for, and rejecting from the fuel stream, non-processable or hazardous waste. Non-processable Waste includes:

- Bulky material or items that cannot be broken up and may cause stoker system plugs;
- Excessive amounts of non-combustible material;
- Hazardous waste;
- Untreated medical waste;
- Any item or waste material that may damage or adversely affect operation of the facility; and
- Any item or waste material that may pose a threat to health or safety.

Despite initial screening, non-processable waste sometimes enters the pit. When uncovered, seize these items in the grapple. Lower to the lay down areas at either end of the pit on the tipping floor. The crane operator cannot see the grapple during this procedure. Operate the crane according to hand signals (Fig. 1.1.1-4) given by the tipping floor equipment operator. Use these hand signals any time when coordinating crane movement with a worker remote from the crane cab.

If the crane operator or tipping floor equipment operator is busy, store these items in a selected area of the pit, if available, until it is convenient to remove them. Once rejected from the pit, the tipping floor attendant transfers this material to the reject bin by the tipping floor's south wall with the front-end loader. If suspected hazardous waste is identified, the procedure outlined for handling suspected hazardous waste is followed.

Thoroughly mix pit refuse. Well-blended fuel helps minimize variation in the higher heating value (HHV) of the fuel, thereby, helping to ensure smooth combustion. Mixing is best accomplished by spreading freshly delivered fuel across the pit. Raise a loaded grapple above the pit refuse level. Bridge the crane along the length of the pit while slowly opening the grapple. Break up bulky refuse before loading to the feed chute. Before taking a loaded grapple to the feedchute, raise it a few feet above the refuse in the pit and open the grapple. "Fluffing" the refuse in this manner also helps to mix the refuse as mentioned above.

Never feed refuse to the charging hopper if water is running from the grapple. Spread such a load back through the pit so it mixes with drier refuse.

Usually, when digging near the bottom of the pit, the refuse has not been disturbed for at

least several days. The refuse here is dense and moist because it has been beneath tons of refuse. Mix it with fresher refuse before loading to the feedchute.

Once an acceptable bucket of refuse is found, load it into the desired feedchute.

1.1.3 LOADING STOKER FUEL AND MISCELLANEOUS TASKS

INTRODUCTION

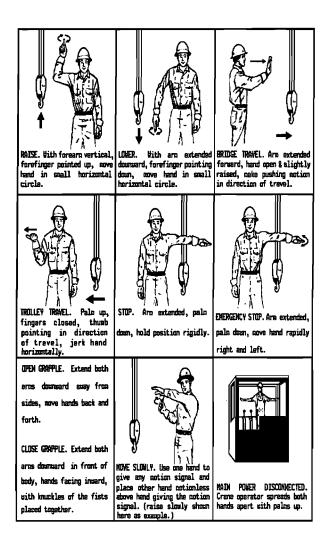


Figure 1.1.1-4: Standard Crane Operation Hand Signals

Use the refuse cranes to load fuel to the stoker feed chutes and clear feed chute plugs if necessary.

FEEDCHUTE LOADING

After properly preparing a grapple of fuel as discussed above, load the refuse to the feed chute as shown in the figure on the following page.

Refill the feed chute regularly, as soon as hopper capacity allows. A consistent feed chute level, in combination with the following guidelines, supplies a steady head of refuse to the feed rams below. This steady head of refuse is necessary for proper computer-controlled stoker operation.

Spread fuel across the width of the feed chute to keep it level from side to side. "Feather" the grapple open while slowly bridging from one side of the feed chute to the other; or feed alternate grapple loads to opposite sides of the feed chute.

During normal operation, never allow the fuel level to fall below the feed chute throat. This condition could lead to loss of stoker seal from atmosphere as well as affecting the computer-controlled fuel stoking.

Discharge fuel over the top of the feed chute's inclined face. This allows the refuse to break apart as it tumbles down the inclined face to help avoid hopper plugs at the feed chute throat.

CLEARING FEEDCHUTE PLUGS

Most feedchute plugs are avoided by properly preparing fuel as described above. However, if a plug occurs the following actions should be taken:

- 1. Immediately notify the shift engineer of the plug's nature, location and extent. The shift engineer must ensure negative draft so flames and burning materials do not blow to atmosphere if the boiler seal is lost.
- 2. Attack the plug using the gaff poles. These are long poles with pointed probes and hooks on the end to ram into, or hook and pull at, the plug. Probe for weak spots in the plug. If you can destroy the weakest area, the remainder of the "bridge" will collapse.
- 3. If the plug cannot be cleared within the first few minutes, request additional help and directions from the shift engineer.
- 4. Continue attacking the plug.

DANGER! Never lean over the feedchute edge while clearing a plug. It is also absolutely forbidden to climb atop the feedchute edge without fall protection while the stoker is operating.

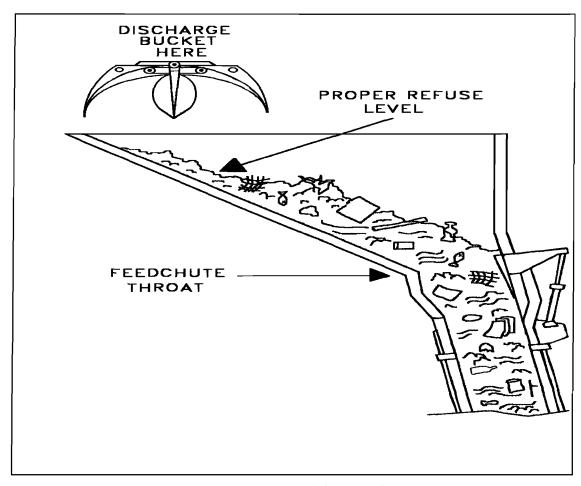


Figure 1.1.1-5. Proper Feed chute Loading

REFUSE CRANE LOG ENTRIES

Keep complete and accurate crane log entries in the control room log book. Information logged should include:

- 1. Extent and findings of any crane inspections, by operations or maintenance personnel -- maintenance log and control room log.
- 2. Any crane repairs, such as cable or brake shoe replacement—maintenance log.
- 3. Any crane damages or wear which may affect crane operation—control room log.
- 4. Any unusual or unsafe refuse delivery truck operation—control room log.
- 5. Any attempted delivery of unacceptable loads control room log.
- 6. Any unusual operating conditions control room log.

In addition to making log entries, immediately report any of the information discussed above to the Shift Supervisor as necessary.

CLEANING

The Auxiliary Engineer is responsible for maintaining charging floor and crane controls area cleanliness. Wear a dust mask and goggles, in addition to normal safety equipment, while working in the charging floor's high dust environment.

1.2 Refuse Crane Safety and Operator Response to Refuse Fires

SAFETY

In addition to safety items discussed throughout this training manual, follow all safety practices outlined in the Crane Manufacturers and Service vendor manual. In addition to normal safety equipment, a dust mask and goggles must be worn while working in the high dust areas of the charging or tipping floors.

REFUSE FIRE RESPONSE

The following are training guidelines. Do not substitute them for plant operating procedures.

Refuse trucks occasionally arrive at the plant carrying hot loads. A hot load is smoldering refuse. If the crane operator sees a hot load, he must immediately inform the Tipping Floor Equipment Operator or truck driver over the public address system, or by using the crane warning hom.

After completing fire response preparations (man hoses, don protective gear, etc.), direct the truck to dump the load in the Hot Load Lay Down Area. Call 911 and inform fire department of the hot load. After the fire in the load is extinguished, the Tipping Floor Equipment Operator carries the refuse with the front end loader to the pit. Feed this refuse to the stokers immediately. Maintain a close watch until the refuse descends below the feedchute throat.

Refuse pit fires include smoldering, smoking refuse as well as refuse with live flame. Upon seeing a refuse pit fire, the crane operator first notifies the control room. The fire's location, extent, and severity must be included in this initial report. The control room calls 911. Move the overhead refuse cranes as necessary to clear the hazard area.

If the refuse is smoldering, do not disturb it until fire response preparations are completed in case it ignites into live flame. The refuse atop the smoldering fire helps prevent ignition by keeping oxygen from reaching the smoldering refuse. Fire response preparations include manning fire hoses and cannons, donning protective gear and breathing apparatus, as necessary, and assuring the shift engineer calls the fire department, if necessary.

Once fire response preparations are completed, lower the grapple into the affected area while disturbing the refuse as little as possible. Feed the grapple directly to whichever feedchute has the lowest refuse level at the time. Continue feeding from the affected pit area until all smoldering refuse is removed. Maintain a watch over the loaded feedchute(s) until the affected refuse descends below the feedchute throat.

Upon seeing live flame in the refuse pit, the crane operator first notifies the control room, providing the information outlined above. The shift engineer immediately calls the fire department. Move the cranes clear of the hazard area.

Put on protective gear and breathing apparatus, as required. Control the fire using the water cannons, hoses, or overhead sprinkler system until the fire department arrives. Once the fire department arrives on the scene, follow their instructions.

After extinguishing the fire, feed the affected refuse directly to the stoker feedchutes as described above.

Feedchute fires include smoldering, smoking refuse as well as refuse with live flame in the feedchute. A feedchute fire can occur upon a loss of boiler seal if fire travels back up from the grates. Feedchute fires can also occur from loading hot refuse.

The crane operator first notifies the control room, providing the same information as discussed above. Move the cranes clear of the hazard area. Complete fire response preparations. If conditions allow, wait for the shift supervisor to determine whether to use water on a feedchute fire. If required, use water sparingly and only as a fine mist.

WARNING! DO NOT POUR WATER DOWN INTO THE FEEDCHUTE THIS CAUSES EXTENSIVE WARPING OF HOT STOKER COMPONENTS.

The Shift supervisor may also decide to smother smoldering refuse by loading another grapple atop it in the feedchute.

If a feedchute fire's severity threatens to ignite the refuse pit call 911 and use whatever means necessary to extinguish quickly.

If a feedchute plug causes the fire by providing a path for fire from the grates, (using extreme caution!!) clear the plug to re-establish stoker seal.

Always watch the feedchute for re-ignition until all affected refuse descends well below the feedchute throat.

Once normal operating conditions after any fire have been re-established, always survey equipment used. Order fire extinguishers, oxygen bottles, etc. as needed. Dry and hang fire hoses and return all other fire fighting gear to readiness condition.

1.3 MWC Unit Malfunction Procedures

1.3.1 PLANT BLACKOUT

This procedure covers the action to be taken in the event of a total loss of A/C power in the Facility.

- 1. Verify that all shift operators are safe and accounted for by assembling in the Control Room or reporting via radio.
- 2. Assign Auxiliary Operators to inspect the plant to verify the safety of other personnel who may be in the Facility and inspect for damage, fire or other potential hazards.
- 3. Notify the Load Dispatcher (Seminole Electric) and Chief Engineer of the blackout condition and any known causes.

- 4. Verify the satisfactory trip/shutdown of the plant equipment including:
 - Turbine/generator Emergency Lube Pump is in operation and T/G unit is in coast down.
 - Boiler drum level and pressure control.
 - Boiler feed pump and turbine shutdown.
 - Load center feeder breakers open.
 - Main transformer circuit breakers open.
 - Generator breaker open.
 - Equipment circuit breaker open or starters dropped out as appropriate.
 - ID fan inlet dampers open.
- 5. Inspect transformer, line and generator protective relays for trip-target indication. Log all findings, but do not reset any trip-targets until directed to do so by the Chief Engineer or Facility Manager.
- 6. Upon completion of the above steps, when outside power is available and if the Main Transformer and associated switchgear is in satisfactory condition for service, and after notifying the Load Dispatcher (Seminole Electric), energize the transformer.
- 7. Verify satisfactory operation of the Main Transformer and commence energizing the Auxiliary Power Transformers and associated load centers and MCCs. In each case, verify satisfactory conditions before proceeding to the next section.
- 8. Inspect and verify satisfactory operation of the battery charger.
- 9. After inspecting and determining the readiness of each for operation, place the following equipment and systems in service:
 - Turbine-generator A/C lube oil pump and turning gear.
 - Cooling tower and circulating water pumps and associated equipment.

NOTE: BEFORE STARTING CIRC. WATER PUMPS, CLOSE THE RISERS TO THE TOWER TRAYS AND OPEN THE COLD WEATHER VALVE TO THE BASIN. THIS WILL PREVENT DAMAGING THE FILL BY DUMPING THE OVERHEATED CIRC WATER TO THE BASIN. AFTER THE PUMPS ARE STARTED AND THE CIRC WATER COOLS, OPEN VALVES BACK TO TRAYS AND CLOSE COLD WEATHER VALVE.

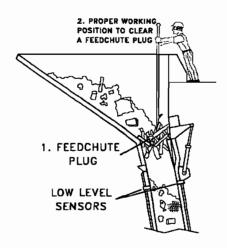
- Closed Cooling water system.
- Air compressors and control air system.
- Condensate water transfer pumps.
- Motor driven Boiler Feed Pump.
- Ash transfer conveyor system.
- Unit ash conveyors, flap valves, and metal recovery
- Baghouse system
- 10. Evaluate the readiness of the units for restart and verify the following conditions exist in each unit:

- Reactor outlet temperature is at least 275° F.
- Reactor hopper temperature is at least 275° F.
- 11. If the above conditions are satisfactory, contact the Facility Chief Engineer or Facility Manager for authorization to proceed with hot restart of the units. Refer to Operating Procedure Combustion Unit Hot Restart.

1.3.2 MARTIN STOKER SYSTEM: FEEDCHUTE PLUGS

INTRODUCTION

Refuse plugging at the feedchute throat is a common problem associated with operating the Martin Stoker System. The feedchute's design, with its inclined face giving way to the narrower feedchute, creates a bottleneck. This limits the size of material admitted to the stoker. When refuse becomes lodged in this throat, the fuel level underneath continues to fall as the feedrams push fuel onto the grates. The fuel level above the plug along the inclined face remains stationary. It is blocked from entrance to the throat by this "bridge" of refuse (Fig. 4.3.2-1, Item 1.)



The problems associated with feedchute plugs include:

- 1. Loss of proper fuel feed control to the grates. The feedrams adjust automatically to deliver a calculated amount of fuel to the grates with each forward stroke. These adjustments are made with certain assumptions, one of which is the constant weight of refuse "head" provided by a full feedchute. If this refuse head pressure suddenly decreases (as during a feedchute plug), the feedrams deliver less refuse to the grates with each forward stroke. The automatic fuel controls cannot accommodate for this great a change in refuse head. Combustion is severely impaired. Steamflow and CO events may be the result.
- 2. In extreme cases, the seal from atmosphere is lost at the stoker front. This results in loss of boiler draft control. Also, raw air is pulled through the boiler, causing loss of a reliable oxygen signal and probable emissions events.

3. An extremely dangerous situation results when a path opens for the combustion fire to escape to atmosphere through the feedchute.

CAUSES

Feedchute plugs form in several ways. A common cause is a bulky item, such as a refrigerator, water heater, etc. accidentally loaded to the feedchute. Material such as sheaves or bales of cardboard can also cause plugs. They tend to compress upon themselves as they descend into the feedchute throat. Plugs also occur if too much of a certain material, such as long boards, piping, or wooden pallets, is loaded at one time. These types of material cause a "logjam" affect as they descend into the feedchute throat.

PREVENTION

The best way to avoid feedchute plugs is for a crane operator to be alert and carefully observe the fuel as he mixes it in the pit. Separate and reject any bulky items that will not burn or cannot be broken up. Break up and scatter items such as cardboard bales or quantities of wooden pallets, boards, and piping.

Discharge the bucket at the top of the inclined face. This allows the refuse to break up and separate as it falls down the incline.

RECOGNITION

Despite the best efforts of the crane operator, feedchute plugs will occur. Early recognition and reaction decreases the time and effort necessary to clear these plugs.

During normal operation, the refuse level steadily falls as the feedrams push the fuel onto the grates below. This makes it necessary to charge the feedchute with a fresh bucket of refuse every five to ten minutes to keep the level constant on the inclined face. If this refuse level remains stationary, it indicates a feedchute plug. Closer observation will show a bulky item lodged in the throat or the formation of a refuse bridge. A gap will open below as the feedrams continue to feed fuel. In extreme cases the feedchute low level alarm will sound. An alert operator should recognize a feedchute plug before the level falls this low.

Any time a plug is verified, or even suspected, do not load any additional fuel. On rare occasions the additional weight of another bucket of refuse collapses the plug. But the usual result is that the plug becomes more firmly lodged. This increases the time and effort needed to clear the plug.

CORRECTION

When a plug occurs, attack it without delay. Correct the problem using the following procedure:

 Immediately inform the Control Room Operator of the plug's nature, location, and extent. The Control Room Operator must assure negative draft so flames and burning material do not blow to atmosphere if the boiler seal is lost. 2. Attack the plug without delay using the gaff poles provided. These are long poles with pointed probes and hooks on the end to ram into, or hook and pull at, the plug. Probe for the weak spot in the plug. If you can destroy the weakest area, the remainder of the "bridge" will collapse. (Fig. 4.3.2-1, Item 2.)

DANGER! NEVER LEAN OVER THE FEEDCHUTE EDGE WHILE CLEARING A PLUG. IT IS ALSO ABSOLUTELY FORBIDDEN TO CLIMB ATOP THE FEEDCHUTE EDGE WHILE THE STOKER IS OPERATING.

These actions may seem necessary to gain leverage against the plug, but the risk of falling into the feedchute is too great.

- 3. If the plug cannot be cleared within the first few minutes, notify the Operations Foreman and request additional help.
- 4. If the plug is caused by a bulky item, it may be necessary to lower grappling hooks by cables to seize the item. Attach the cables to the overhead crane and remove the item.

DANGER! IT IS ABSOLUTELY FORBIDDEN TO CLIMB INTO THE FEEDCHUTE FOR ANY REASON WHILE THE STOKER IS OPERATING.

If the plug cannot be cleared using one of, or combination of, the procedures discussed above, shut down the unit so personnel can enter the feedchute from above to clear the plug.

1.3.3 MARTIN STOKER SYSTEM: BROKEN GRATE BARS

INTRODUCTION

A problem that occasionally occurs while operating the Martin Stoker System is that of broken grate bars. This is when one or more of the individual grate bar castings break due to heat, stress, or concussion.

The problems associated with broken grate bars include:

- 1. Oversize material falls through the gap left by the broken grate bar. This causes riddlings discharge system plugs.
- 2. The gap left by the broken grate bar allows other grate bars on the same step to slide out of position along their common T-bar. This increases space between the grate bars of that step which increases jamming and the chance of damage to additional grate bars.
- 3. It upsets combustion as locally excessive air flows through the broken grate bar's gap.
- 4. Burning material from the fuel bed falls through the gap. This may damage the components in this area such as the grate drive beam support and guide rollers.

5. In extreme cases, the air zone beneath the broken grate bar fills with material that has fallen through the gap. This can lift entire sections of the grate system, breaking numerous grate bars and causing extensive damage to the T-bars and air zone components.

CAUSES

Concussion, heat stress, and mechanical stress cause broken grate bars.

- 1. Heavy material falling from above causes concussion damage. This includes items such as engine blocks, etc. entering the grate system from the feeders. However, the main source of concussion breaks is from clinker formation on the firebox walls. These clinkers, weighing hundreds of pounds, can crash down onto the grates causing extensive damage to many grate bars at a time.
- 2. Improper fuel bed height or underfire airflow cause grate bar heat stress. If the bed is too thick or underfire airflow is insufficient, too much heat remains at the grate surface. Too thin a bed reduces the cushion that protects the grate bars from concussion damage discussed above.
- 3. Bolts, ball bearings, and other small, solid material can lodge between grate bars despite the grate's self-cleaning action. Over time, this can bind the grate bars and cause breakage due to mechanical stress.

PREVENTION

Proper operation of the stoker system reduces broken grate bars. Proper furnace temperature and combustion airflow reduces firebox wall clinker formation. This reduces the chance of heavy clinkers crashing down to cause concussion damage.

The crane operator can also reduce concussion damage by rejecting heavy, incombustible material from the fuel stream.

In addition, proper fuel bed height assures a cushion against this concussion damage. It also maintains grate surface temperatures within range to avoid heat stress.

Reduce mechanical stress due to grate bar jamming by proper maintenance during stoker outages. Proper grate casting tension reduces the chance of small solid material becoming lodged between individual grate bars.

RECOGNITION

Despite the efforts of the plant staff, grate bar damage will occasionally occur. A broken grate bar's domino effect on surrounding grate bars is reduced or eliminated by early=Do vj-his by rodding out the air zone hopper through the riddlings discharge duct and flapgate. Do this procedure only with the immediate Operation Foreman's direct permission and/or supervision. Work with an U-shaped bar (bent re-bar works well) and only from above the discharge duct access door (Fig. 4.3.3-1). Observe the following guidelines to prevent serious injury while performing this procedure:

- 1. Rope off the area beneath the affected zone(s). This assures that falling debris will not injure anyone below. Post warning signs along this barrier. Inform everyone on the plant site to stand clear of the area.
- Isolate compressed air to the riddlings discharge flapgates in the hydraulic distribution cabinet. This valve should be clearance tagged closed. Put the feedrams and grates in non-interlock operation during this procedure.
- 3. Manually, initiate a riddlings discharge cycle. This bleeds any remaining air from the system so the affected riddlings flapgate(s) can be opened manually.
- 4. The system is now ready for safe clearing of the affected air zone hopper. Tie the affected riddlings flapgate open. Open the access door on the bottom of the riddlings discharge duct directly underneath.

DANGER! THERE IS NOW A PATH FOR HOT COMBUSTION AIR, DEBRIS, AND POSSIBLY MOLTEN LIQUID TO BLOW TO ATMOSPHERE UNDER PRESSURE.

Minimum personnel protection includes leather gloves and heat resistant clothing. Never put the hands, feet, or any body parts beneath the riddlings discharge duct (Fig. 1.3.3-1).

- 5. Clear the plug with the U-shaped bar. If possible, recover any broken grate bars that may emerge to help determine the extent of damage. Once the plug is clear, return the system to normal operation.
- 6. If a riddlings discharge duct plug is suspected, manually run several riddlings discharge cycles in a row. If necessary, temporarily increase underfire air pressure to a maximum of 20" during these cycles. Repeat the procedure as necessary until the unit is secured. Remember that the procedure above is only a temporary measure until the unit is secured to repair the broken grate bar(s).
- 7. Clean up basement area where material from riddlings fell during the clearing procedure.

1.3.4 MARTIN STOKER SYSTEM: RIDDLINGS DISCHARGE SYSTEM PLUGS

INTRODUCTION

A riddlings discharge system plug is any blockage of the system that can occur in various places. This includes the main discharge duct, individual air zone hoppers and flapgates, or the feedram drive area hopper and duct. (Fig. 1.3.4-1.)

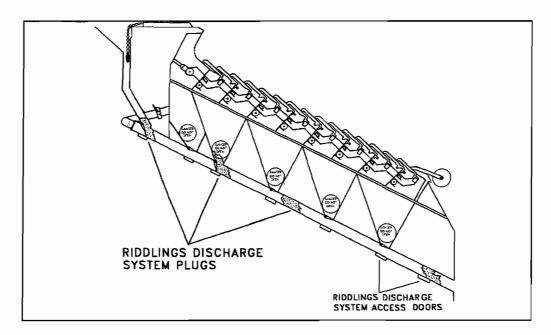


Figure 1.3.4-1: Martin Stoker Riddlings Discharge System Plugs

CAUSES

Plugging which occurs at the underfire air zone flapgates or in the discharge duct can be caused by grate bar wear. This increases the area between individual grate bars leading to excessive riddlings accumulation between cycles. Plugs in these areas also form when material that melts on the grates (aluminum, plastic, etc.), flows down through the air zones and hardens in the riddlings hoppers.

Broken grate bars can also leave gaps through which oversized material falls to plug these areas.

Feedram drive hoppers can also plug. Heavy feedram scraper wear allows excessive riddlings into this area. Plugs also form if the weighted chains riding with the feedrams have become entangled or disconnected.

Riddlings, discharge plugs also occurs if water enters the system (such as spraying water into the feedchute).

PREVENTION

Reduce riddlings discharge system plugs by:

1. Never spray water into the feedchute unless an extreme emergency exists, such as live flame in the feedchute hopper which threatens to ignite the refuse pit. Even then use the water sparingly and only in a fine mist spray.

WARNING! WATER SPRAYED INTO THE FEEDCHUTE CAN CAUSE EXTENSIVE WARPING OF HOT METAL PARTS BELOW IN ADDITION TO CAUSING RIDDLINGS DISCHARGE SYSTEM PLUGS.

- 2. Proper maintenance during stoker outages. Replace grate bars as necessary and assure that grate step tension is correct. Replace feedram scrapers.
- 3. If there is excessive riddlings accumulation in any of these areas, it may be advisable to switch to the more frequent twenty-minute riddlings discharge cycle.

RECOGNITION

The most obvious sign of riddlings discharge system plugs is if the flapgates do not fully close after a cycle. This situation actuates an alarm in the control room but the operator should also make visual checks once a shift and anytime they are in the area. Check that all flapgate cylinder rods are fully retracted between cycles. Also at least once a shift observe a riddlings discharge cycle. Any sign of flapgate binding may be evidence of a developing plug. In extreme cases, the grate drives or feedram may be unable to complete a full stroke due to riddlings accumulation.

CORRECTION

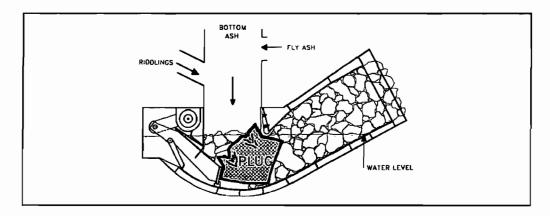
Clear these plugs using the same procedures discussed in section 1.3.3 for keeping air zones clear while securing a unit for broken grate bar repair. Follow the same preparations, cautions, and procedure after returning the system to service.

1.3.5 MARTIN STOKER SYSTEM: ASH DISCHARGER PLUGS

INTRODUCTION

Ash discharger plugs are a problem that occasionally occurs while operating the Martin Stoker System. These plugs form when a bulky item, or items, lodge in the ash discharger pit so the ram cannot make its full stroke (Fig. 1.3.5-1).

Figure 1.3.5-1: Martin Stoker System Ash Discharger Plug



CAUSES

In theory, anything that passes through the feedchute throat is small enough to clear the ash discharger. In practice, bulky items that clear through the feedchute sometimes become turned or distorted so they lodge in the ash discharger. Occasionally more than one bulky item combines to form a plug.

PREVENTION

The best way to avoid an ash discharger plug is for the crane operator to separate bulky items from the fuel stream.

RECOGNITION

The first indication of an ash discharger plug is almost always when the ash discharger kicks out of interlock due to incomplete stroke.

CORRECTION

The operator should try several things to clear the plug before shutting down the unit. They include:

Place the ash discharger ram in local control from the manual override box.
 Stroke the ram forward as far as it will travel until the plug stops it. Then back the ram off a few inches and drive it forward into the plug again. Continue this

procedure as long as the plug moves forward. Once the ram achieves complete forward travel the bulky item should clear from the discharger. Return the ash discharger to automatic control and watch the discharge mouth until the item clears onto the plant's ash conveying equipment.

- 2. If the plug does not move as you perform these short manual strokes, or if it starts to move and then lodges again, alternate ten to twenty of these short strokes with one full retraction of the ram. This often allows smaller material lodged with the bulky item to collapse, providing enough clearance for the plug to pass.
- 3. If these actions do not clear the plug, attack it from above with rigid poles through the view ports in the ash discharger transition chute doors.

DANGER! THERE IS THE POSSIBILITY OF HOT ASH, RIDDLINGS, OR SCALDING WATER FROM THE ASH DISCHARGER BLOWING OR SPLASHING THROUGH THESE PORTS.

Any time the operator is trying to clear a plug through these ports he should always stand to one side. Minimum personnel protection includes leather gloves and a full-face respirator. Try to break the plug apart or turn it with the pole. Repeat steps #1 and #2 above.

4. If these actions do not clear the plug, drain the ash discharger water to the ash settling sump. Draining the water often collapses the plug. Repeat steps #1 through #3 above as necessary to clear the plug.

WARNING! DRAINING THE ASH DISCHARGER WATER MAY CAUSE LOSS OF THE STOKER SEAL.

The debris and ash build-up behind the plug is normally sufficient to temporarily maintain the seal. But stay in close communication with the Control Room Operator and be prepared to refill the discharger if indications show that the seal is failing. These indications include:

- a.) Abnormal increase in emissions.
- b.) Dramatic increase of the excess oxygen content.
- c.) Loss of boiler draft control and/or Induced Draft Fan overloading.
- 5. If none of these actions clear the plug, secure the unit following the plant's normal shut-down procedure.
- 6. Once secured, isolate the grates, clinker roll, FD Fan, OFA Fan, and fly ash screw conveyers with clearance tags.
- 7. Open the door in the rear wall of the stoker at the clinker roll level. Clear any material that remains atop the clinker roll that could fall onto men working below.

DANGER! THERE IS THE POSSIBILITY THAT ANY REMAINING FUEL ON THE GRATES IS HOT ENOUGH TO EXPLODE AEROSOL CANS, ETC.

Minimum personnel protection includes leather gloves and a full-face respirator. Stand to one side of the door while performing this operation.

8. Open the ash discharger transition chute doors. Assure that no material remains atop the clinker roll that could fall onto men working below.

DANGER! ASH AND DEBRIS MAY HAVE ACCUMULATED TO A POINT ABOVE THESE DOORS. STAND ABOVE AND TO ONE SIDE OF THESE DOORS WHEN OPENING.

Attack the plug as necessary. It may be necessary to shovel debris from around the plug before it can be removed, cut, or turned so it will clear the system.

9. If the plug cannot be cleared from above, it is necessary to open the lower doors in the ash discharger itself.

DANGER! WATER MAY BE TRAPPED BEHIND THE RAM. ASSURE RAM IS FULLY EXTENDED TO ALLOW DRAINAGE BEFORE OPENING DOORS.

EXTREME DANGER! EVEN IF THE WATER HAS BEEN DRAINED, SCALDING HOT POOLS WILL REMAIN TRAPPED IN THE DEBRIS OF THE DISCHARGER. LARGE QUANTITIES OF THIS WATER WILL SPILL FROM THE DISCHARGER WHEN THE LOWER DOORS ARE OPENED. ALWAYS STAND ABOVE AND TO ONE SIDE OF THE DOORS WHEN OPENING.

Clear the plug by whatever means necessary and return the system to service.

1.3.6 TUBE LEAKS

INTRODUCTION

While various situations could arise from a tube failure, this procedure will focus on the two most likely. The first would be a small leak where the drum level can be maintained via a higher than normal feed water flow rate. The second would be a large leak (e.g. a rupture) where the drum level cannot be maintained at any sustainable feed water flow rate.

Maintaining adequate steam drum water level is important to the safe and efficient operation of any power boiler. Any loss of boiler tube integrity will require immediate action by the operators. A large leak requires action to prevent possible personnel injury and certain equipment damage. A slow leak may need quick action before the small leak turns into a large leak. The differences in actions are in some cases quite large and the reasons will be made clear in this procedure.

RECOGNITION:

The following indicate water bearing boiler tube ruptures. Steam carrying tube ruptures give similar indications although probably not as severe. These indications include:

- 1. Nearly instantaneous loss of drum water level, boiler pressure, and/or temperature.
- 2. Forced draft fan and over fire air fan trip due to loss of drum water level or Hi-Hi furnace

pressure.

- 3. Feed water flow increases to maximum as the controller tries to maintain drum level. This can lead to feed water pump overloading or loss of deaerator level.
- 4. The Martin Stoker System kicks out of interlock due to loss of under fire air pressure and drum water level.
- 5. Steam and smoke blows from the boiler casing, ash discharger, and feed chute.
- 6. Flue gas temperatures downstream of the rupture rapidly decrease as steam and water enter the flue gas stream.

ACTIONS FOR A SMALL LEAK

If a significant leak is discovered and the drum level can be maintained, immediately stop feeding refuse to the boiler. If the hopper is full and the crane can safely remove some of this refuse, do so. Take steps to reduce the load on the boiler and burn out the refuse while maintaining environmental compliance. If at any time during this shutdown, it becomes impossible to maintain the drum level, follow the steps, as applicable, in the section for a large leak.

Note that it is possible that boiler can be kept in service with a small leak such as a packing gland, external valve body to bonnet leak, small pinhole or crack at a weld. The situation should be evaluated to determine if there is a significant leak.

In any event, the Facility Manager, Chief Engineer and Maintenance Supervisor should be notified of the situation.

INITIAL ACTIONS FOR A LARGE LEAK (loss of drum level)

- 1. Announce the situation and follow the fire and general emergency procedure. Verify that all personnel are accounted for and evacuate the boiler building. Note that it is very possible that the boiler building will quickly fill with smoke. Requiring personnel to leave this area immediately, before this occurs, is very important.
- 2. The crane operator should be instructed to stop feeding the unit and to monitor the hopper for any signs of fire burn back. If the hopper is full and the crane can safely remove some of this refuse, do so. The control room operator and crane operator should communicate to coordinate the closing of the feed chute damper. Even if the feed chute is full, by pushing the feed chute close button, the refuse will be squeezed tightly, potentially making a better seal. Do not leave crane parked over effected unit's feed hopper as burn back could damage the festoon cables.
- 3. Verify FD and OFA fans have tripped. If they have not, manually trip them via the hard wired switches on the boiler control panel. Ensure that the ID fan is running. Check the furnace draft and ID fan amperage. If possible set the draft to 0" WC and monitor the fan amperage. If the amperage runs too high (>65 amps), transfer the controller into manual and adjust damper to maintain amps just below the 60 amp point. Periodically recheck the draft and amperage so as to maximize gas removal rates and to prevent excessive draft. Stay right at zero if possible. By staying right at zero, you will minimize any combustion due to tramp air in leakage.
- 4. Place the feed water control valve in manual and allow approx. 30 to 50 klbs/hr of feed water flow until furnace temp decreases below 700 deg f. or plant conditions (DA level) warrant otherwise. Feed water isolation valves can then be shut.

- 5. Set the pre-heater temperature control valve to zero percent in manual.
- **6.** Set the air combustion controller to zero percent in manual.
- 7. Align the effected unit to the start-up header by opening the start-up line isolation valve and shutting the main steam line stop valve.
- **8.** Secure and isolate the units NO_X Control system.
- 9. Instead of using raw CO as the next criteria for shutdown. use O₂. If the O₂ is above 18% for 5 minutes and the feed chute is closed then log the boiler off line on trace. (Regardless of the visual conditions of the grate). The thought process is if the O₂ is above 18% then combustion is no longer significant enough to consider the boiler on line. If combustion was significant then we would never get to 18% O₂.
- 10. Ensure operation of the unit carbon and dolomitic lime systems until unit logged off line on Trace.
- 11. Establish a visual feed chute fire watch at the charging floor.
- 12. Verify water flow to the feed chute and transition chute jackets.
- 13. Have an Auxiliary Engineer; ensure that the ash discharger water level is still normal. An air seal is important.
- 14. Place low water bypass switch into bypass position. Ensure stoker OFA dampers are at zero percent.
- 15. Engage the stoker interlock by-pass key on the Martin stoker panel. Start the grates only to run off the remaining refuse in the boiler. This should be done as rapidly as possible.
- 16. When grates clear, start the feeders and empty feed chute as rapidly as possible without exceeding a furnace roof temperature of 700 deg f. Close the feed chute damper when level allows, log in shift engineers log book.
- 17. When feed chute empty, open stoker front wall OFA damper 100 %.
- **18.** Secure and isolate the unit's mixed chemical pump.
- 19. Open super heater vent and drain and drum vent at approx. 50psi.
- 20. Secure startup header when drum pressure <50psi.
- 21. Continuously monitor ash discharger. As unburned refuse starts entering the discharger, water level may need to be lowered so that floating debris doesn't cause a bridge.
- 22. When the fires are burnt out and the furnace temperatures are maintained below 700 degrees, the feed water flow should be secured and valved out.
- 23. Place a boiler shutdown check off sheet into service and ensure that all shutdown task (as applicable) are completed. Never blow down the headers on a unit with a tube leak.
- 24. Once the refuse is burnt out, continue to force cool the boiler furnace and gas path to prepare the unit for entry for upcoming repairs. When cool enough, establish a gas path hold off and a confined space entry permit.
- 25. Operate the Martin Stoker System as described above after any loss of drum water level, or loss of feed water, that cannot be reestablished. Remember the goal during these emergencies is to clear the stoker system of remaining fuel while maintaining low flue gas temperatures.

1.4 RESPONSE TO LOSS OF CARBON INJECTION

1.4.1 Introduction

This procedure covers the actions to be taken in response to a loss of carbon flow to the atomizers and / or malfunctions associated with the system.

The Title 5 Operating Permit for Mercury requires the Carbon injection be rate based upon the most recent annual stack testing which demonstrate compliance with Mercury and DF Permits limits. Based on an EPA Guidance there is also an eight hour block average in pounds per hour (per unit), which will change slightly each year based on the injection rate during annual stack testing. To show compliance, the carbon system will be operated continuously, monitoring the #/hr. If there is a loss of carbon flow to a unit for 2 hours, unit shutdown must be initiated, as per unit shutdown procedure (Ops-1). If carbon flow is restored, continuous feeding may resume. The current carbon feed rate for Covanta Hillsborough is 1.0 lb/ton of refuse or base upon the rate established during the most recent stack testing.

1.4.2 Causes and Corrective Responses to a loss of carbon injection

1.4.2.1 Loss of carbon flow

Causes: Carbon system pluggage, power failure to system panel

Correction: For a total loss of flow of carbon, first verify the carbon system is operational per Ops-42 (start up) (rotary valve, feeder, day bin, and silo/feed hopper level satisfactory). If there is a loss of power, reset associated switches from inside the carbon control room and/or APC MCC room. Contact the Shift Supervisor immediately.

1.4.2.2 Loss of carbon flow to an individual boiler

Causes: Blower failure, feeder failure or plugged line between the carbon feeder and injection port

Correction: When there is a loss of carbon to a particular unit use the system start up procedure Ops-42. Check the blower operation, check the level in the hopper, check the alarms on the control panel LED display. If there is blockage in the supply hose it must be cleared. If the blockage is upstream of the silo the blockage must be cleared. The pluggage will be indicated by a High Pressure Alarm in the control room.

1.4.2.3 Loss of carbon feed indication

Causes: Feeder malfunction

Correction: Verify power to the system, cycle the power switch to reset the system. If the flow reading is low or at zero check the level in the hopper to determine a low feed situation. If flow is reestablished, verify proper operation by manually bucket testing the flow. If the flow indication is inconsistent with the manual test, operate the system manually and contact the Shift Supervisor immediately.

1.4.2.4 Low #/hr on previous carbon cycle

Causes: Low carbon feeder speed set point, carbon feeder plug

Correction: When there is a low carbon #/hr reading, increase the feeder speed set point to increase the amount of carbon metered to the boiler. Monitor closely and log all pertinent information in the Shift Engineer's log. If the pluggage continues, verify the carbon tank negative vent fan and associated piping clear are working properly.

1.5 RESPONSE TO AN INCREASED SULFUR DIOXIDE CONDITION

1.5.1 Introduction

This procedure covers the actions to be taken in response to a high SO2 condition. Operations should normally maintain a stack SO2 level between 0 and 15 ppm, with short spike to 50 ppm. The set point for the SO2 control should be 5 ppm and a mass flow set point of 310 lb/hr CAO.

1.5.2 Causes and Corrective Responses to Elevated SO2 Emissions

1.5.2.1 High Sulfur based fuel

Causes: Improper mixing of fuel such as roofing materials, sheet rock, rubber, construction debris.

Correction: Improve mixing of the refuse, direct the crane operator to dig in a different area of the pit, monitor the economizer inlet SO2. Temporarily lower the S.D.A. outlet temperature setpoint and / or increase the minimum lime slurry flow setpoint. This will increase the lime flow through the atomizer.

1.5.2.2 Low SDA inlet temperature

Causes: Low D.A. pressure, improper soot blowing, cold unit after start up.

Correction: Having a low SDA inlet temperature (below 400 deg.) reduces the amount of flow to the atomizer. Increasing the D.A. pressure will increase the feedwater temperature entering the economizer in turn increasing the outlet flue gas temperature. Improper soot blowing can reduce the outlet temperature by decreasing the flue gas temperature which reduces the amount of lime slurry flow through the atomizer. When the unit is brought online after an outage, the economizer temperature may stay low for along period of time after start up. For all three causes, temporarily lower the S.D.A outlet temperature an / or increase the minimum lime slurry set point to reduce ant stack SO2 spikes that might occurs.

1.5.2.3 Low lime slurry flow to Coriolis Meter

Causes: Low lime slurry flow will first be noticed by a low CAO #/hr flow while the lime slurry control valve is opening. Low lime slurry flow will occur when there is pluggage in the lime slurry transfer system.

Correction: When there is low lime slurry flow the initial response will be to flush the suction of the slurry pump, then flush the discharge piping to the coriolis meter with the control valve at 100% open. If a normal maximum flow is restored (approx. 5-7 gpm), verify the current CAO #/hr is correct and increase the set point as needed. Verify lime slurry recirculation back pressure valve is working properly. If flow cannot be restored, unit shutdown will be initiated while troubleshooting cause of plugging.

1.5.2.4 Low atomizer flow.

Causes: Plugged atomizer strainer, feed hose, distribution plate.

Correction: Flush lime slurry loop, flush lime slurry pump loop then the atomizer and the associated hoses, check the lime slurry strainer for pluggage. Change atomizer, if atomizer remains plugged monitor unit emissions, shutdown if required.

1.5.2.5.1 Low specific gravity in lime slurry tank.

Causes: The cause of low specific gravity of the lime sampled are due to poor quality slaking and/or water infiltration to the slurry system caused by excessive flushing, improper flush water valve line up etc.

Correction: To maintain proper lime slurry solids, verify and/or retest the lime slurry density. When the slaker is in service, verify operation, proper water flow, feeder speed and outlet temperature. Slaking temperature can be increased slightly by decreasing water flow one or two gpm, (Monitor outlet temperature closely). Verify the off-line slaker water is secure with all hoses off. verify the sealwater to the slurry pump are valved in properly and verify slurry pump flush water valves are secure. Verify lime slurry tank agitator is in service.

1.5.2.6 Verify economizer and stack SO2 analyzers are functioning satisfactory. Print data summary for affected unit, check for abnormal trends

1.6 RESPONSE TO OPACITY (Particulate Emission) EXCURSION

1.6.1 INTRODUCTION

This procedure covers the actions to be taken in response to an opacity (particulate emission) excursion. During normal operations stack opacity level should be between 0.1 and 1.0 percent, with spikes of short duration as high as 5.0 percent. Opacity is used as an indicator to ensure

continuous compliance with particulate emission limitations. The alarm limit for opacity is 5.0 percent.

The maximum allowable opacity level is 10 percent based on a six-minute average.

The stack opacity must be closely monitored. If opacity emissions exceed the normal operational range, the Shift Supervisor must be notified immediately. Boiler load must be reduced and if necessary taken off line to prevent the unit from exceeding the opacity limit of 10 percent (six minute average).

- 1.6.2 In the event that the opacity alarm condition is reached:
 - 1. Immediately notify the shift supervisor and begin taking steps to identify and correct the situation.

Note: Most gradual increases in Opacity will be observed if the cause is a small leak of one or two filter bags or a gradual fouling of the optics on the Opacity Monitor. Like wise a small momentary spike in opacity of 5%, immediately after an offline cleaning of a compartment is generally an indication of a leaking bag in that compartment. A quick increase could be an indication that a bypass damper is leaking by or a cage/bag is unseated. A large increase in Opacity could indicate a malfunction in the monitoring device. A visual inspection of the stack will clarify this possibility. All of these conditions require immediate action.

Verify which compartments have leaking bags by performing the following:

Close the last opened outlet damper if offline cleaning is used. Watch for a reduction in the opacity level. Reopen the outlet damper and if the opacity level increases the affected compartment has been located.

If the opacity does not increase perform the same procedure on the other compartments until the affected compartment has been located.

If online cleaning is being used isolate the compartment outlet dampers one at a time until the opacity level decreases.

Note: It is possible that two or more compartments have leaking bags causing high opacity. If opacity does not return to pre-alarm level when a compartment containing leaking bags is located and isolated a second check is necessary.

Once the leaking compartment has been located inject the leak detection powder and change out the affected bag(s).

All flyash must be cleaned before placing the compartment online.

Enter all pertinent information in the Control Room log.

Verify that the following parameters are within normal operating range and are not/will not be indirectly causing high opacity:

- 1. Furnace draft is stable.
- 2. Baghouse inlet temperature is below 550F.
- 3. Baghouse dP is less than 10@wc.
- 4. All flyash hoppers in the APC area are clear.
- 5. No boiler casing leaks or flyash screw cover leakage.

If no leaks can be identified verify the Opacity reading on the monitor is correct as indicated by:

Having an EPA Method 9 certified smoke reader determine the actual level.

Review the daily calibration report.

Review the previous 24-hour period and look for any indication as to whether the monitor has been tracking Opacity Emissions in a steady or very erratic manner.

If the CEM is suspected or found to be faulty, immediately contact an I/E Tech so that repairs can be made.

1.7 RESPONSE TO A HIGH BAGHOUSE INLET TEMPERATURE

1.7.1 Introduction

This procedure covers the actions to be taken in response to a high baghouse inlet temperature condition.

The Emissions Permit limit varies annually per unit for baghouse inlet temperature (BHI) is typically 325 deg. for a 4-hour block average. If the BHI temperature emissions limit may be exceeded, stop feeding the effected unit and notify the Shift Supervisor, unit shutdown must be initiated. Continue the shut down as per the shut down procedure (Ops-1). If normal flow is restored to the atomizer, continuous feeding may resume after all the environmental permit limits have been satisfied.

1.7.2 Causes and Corrective Responses to high Baghouse inlet temperatures

1.7.2.1 Air pollution control malfunction

Causes: Insufficient flow or loss of flow due to line pluggage and/or atomizer trip,

Correction:

When there is insufficient dilution water flow to control the baghouse inlet temperature (BHI) due to pluggage, flush the atomizer, verify temperature control valve is clear and cycling properly, clean the on-line strainer and verify the outlet is clear. If flow does not increase to approx. 20 gpm, then flow cannot be reestablished, prepare the effected unit for an on-line atomizer change out. If the atomizer trips and flow is lost to the unit, investigate the cause of the trip, (high amps, loss of cooling water, loss of oil pressure, etc.). If the malfunction can be remedied, restart the atomizer, or change the atomizer. If the atomizer system becomes inoperable, use the atomizer bypass nozzle for flow to the SDA until the

repairs are completed.

1.7.2.2 High S.D.A. inlet temperature

Causes: Loss of a boiler seal, high D.A. pressure or improper sootblowing

Correction: When there is a loss of seal on the boiler, (feedchute or discharger seal) Increased

atomizer flow will be needed to maintain bag house inlet temperature due to high back end temperatures. Unplug feedchute hopper or add water to the discharger as required to regain the boiler seal. Reducing the D.A. pressure will decrease the feedwater temperature entering the economizer in turn reducing the outlet flue gas

temperature. If the economizer exit gas temperature is high, additional

sootblowing may be necessary.

1.7.2.3 Good operating practices

When there is a scheduled atomizer change out, schedule it at the beginning of the 4-hour block period. When possible, reduce the bag house inlet temperature (set point) prior to change out to assist in reducing the temperature for the averaging period. Verify economizer exit gas temperature prior to atomizer change out. BHI temperature can also temporarily be reduced by flushing the atomizer with dilution water, as it is at a much lower temperature than the lime slurry tank.

1.8 RESPONSE TO AN INCREASED CARBON MONOXIDE (CO) CONDITION

1.8.1 Introduction

This procedure covers the actions to be taken in response to a high 4-Hour Average COsc condition.

The Emissions Permit limit for CO is 100 ppm corrected to 7% O₂ based on a 4-hour block average. If the CO (stack corrected) outlet emission limits may be exceeded, start the auxiliary burner and notify the Shift Supervisor. Anytime the CO concentration is above the permitted level immediate action must be taken. If the CO levels drop and are controllable, continuous feeding may resume after all the environmental permit limits have been satisfied.

1.8.2 Causes and Corrective Responses to Elevated CO Emissions

1.8.2.1 Low BTU/ wet MSW refuse

Causes: Feedchute loading of wet MSW with a low UFA temperature

Correction: The indications of wet MSW loading will be seen in an increased Stoker run time,

increased excess air (wet O2), boiler steam flow steadily dropping, reduced roof temperature, increased bed thickness and flames that are dull, ragged with dark veins.

To control the high CO, start the auxiliary burner, this will assist in reducing the high CO, increasing the furnace temperature, and aid in drying and combustion of the wet fuel. Increase the UFA temperature by placing the air preheater coil in service. Select Position 3 UFA distribution. Secure the optimizing controller, decrease the feeder stroke length, and slow down the grate speed. Match the steam flow set point with the actual steam flow to allow more residence time and reduce the amount of unburned fuel leaving the stoker. Adjust the air combustion controller as required to maintain O2 and primary combustion. With the burner in service, increase the firing rate to control CO, furnace roof temperature and maintain a steady steam flow. When the unit is beginning to recover (steady wet O2 signal), slowly increase the steam flow set point and increase the mixing of refuse in the pit and load only a homogeneous mixture of refuse in the feedchute hopper.

1.8.2.2 Excessive air infiltration

Causes: Discharger seal loss, feedchute seal loss, feedchute plug,

Correction: When there is an excessive air leakage it will be noticed by an steady increase in the economizer outlet temperature (500-540 deg.) and elevated O (50-100 ppm). The superheated steam temperature will also steadily increase, this will be apparent by an increase in the attemperator valve positions. If determined the seal loss is the discharger, verify flow from the level control valve (LCV) and add additional hoses to assist in filling the discharger. Verify the LCV is operating properly and the probe is positioned properly. If the seal loss is at the feed chute, Inform the crane operator to maintain a consistent level and uniformly across the entire feed chute. If a plug in the feedchute is the cause of the air in-leakage, refer to section 1.3.2 to remove the plug.

1.8.2.3 Boiler start up and operation of a clean boiler

Causes: Higher than normal CO (averaging above 30 ppm) will be seen while starting up and operating a clean boiler due to lower furnace temperatures.

Correction: When starting up and operating a clean boiler, maintain the wet O2 levels lower than normal (7.5-8), operate the OFA dampers in manual at a reduced flow rate, but never allowing flames over the refractory line. Verify the boiler is sealed (doors, discharger etc.). Operate the auxiliary burner as necessary to maintain combustion zone temperature. For more information about the start up of a unit refer to Ops-2, Boiler Start up.

1.8.2.4 Verify the stack CO analyzer is functioning satisfactory. Print data summary for affected unit, check for abnormal trends.

1.9 RESPONSE TO AN INCREASED NITROGEN OXIDE (NOx) CONDITION

1.9.1 Introduction

This procedure covers the actions to be taken in response to a high stack NOx condition.

The Emissions Permit limit for NOx is 205 ppm corrected to 7% O₂ based on a 24-hour arithmetic average on units 1-3 and 150ppm corrected to 7% O2 on unit 4. Anytime the NOx level is above the permit limit corrective action must be taken to reduce them to normal levels. If the unit NOx level cannot be decreased the load must be reduced or the unit taken off line so as to not exceed the permitted 24 hour average.

1.9.2 Causes and Corrective Responses to Elevated NOx Stack Emissions

1.9.2.1 High nitrogen based fuel

Causes: Improper mixing of fuel such as yard wastes, textiles, rubber and vegetable wastes.

Correction: Improve mixing of the refuse, direct the crane operator to dig in a different area of

the pit. Bypass unacceptable waste if discovered.

1.9.2.2 High NOx without a loss of Ammonia

Causes: Improper NOx/Ammonia reaction in the furnace, low pressure on Ammonia header

and/or excessive air in furnace.

Correction: A steady, elevated NOx (over 200 ppm) situation with Ammonia flow; verify

there is a normal Ammonia tank pressure (5-7 psig). The Ammonia header pressure should be about 12-15 psig at the injection point, confirm flow through the rotometers for each injection point. If the furnace temperature is low, place the lower injection header in service. Decreasing the amount of primary air in the furnace may also aid in the reduction of NOx produced. Confirm the daily calibration for the respective stack NOx analyzer. These changes will take time to see the results, if the NOx limits do not drop, reducing load temporarily will

also reduce NOx as the refuse throughput will be decreased.

1.9.2.3 High NOx with a loss of Ammonia

Causes: Ammonia system failure, loss of NOx analyzer

Correction: When there is a loss of Ammonia injection attempt to correct the problem. If the

situation cannot be corrected then start unit shutdown per Ops Procedure 1. When there is a loss of Ammonia to all units, verify proper tank level, pump operation and proper valve alignment. If there is a loss to one unit, investigate the header line up and ensure the proper operation of the isolation solenoids. If there is a failure of the NOx analyzer, the data will be flagged bad, depending on the analyzer output, the Ammonia flow may become erratic or flow may reduce to minimum. Contact the Shift Supervisor immediately if the problem cannot be

corrected within 20 minutes.

1.9.2.4 High furnace temperature causing elevated NOx

Causes: High furnace temperature causing thermal NOx

Correction: Increase the amount of combustion air to the unit, this will reduce the furnace

temperature and improve the reaction between the Ammonia and the NOx in the flue gas. Verify the upper injection header in service, nozzle height in the furnace may assist the reaction as it is affected by temperature. Soot blowing the unit will also lead to slightly lower furnace temperature as more heat will be removed in the back gas path. Temporally reducing load will also lower furnace temperature.

Appendix H
Compliance Demonstration
Reports/Records

APPENDIX H

COMPLIANCE DEMONSTRATION REPORTS/RECORDS

Emissions Testing Report (10790- Text and Appendices A through D) performed for Covanta Energy Group at the Hillsborough County Solid Waste Energy Recovery Facility, Tampa, FL for Units 1, 2, 3 and 4 Spray Dryer Absorber (SDA) Inlets and Fabric Filter Outlets by Testar, Inc. was submitted to Florida Department of Environmental Protection (FDEP) in August 2011. The testing program was conducted in July 2011 to quantify specific emissions from Units 1, 2, 3 and 4 for compliance purposes.

Appendix I Compliance Report and Plan

APPENDIX I

COMPLIANCE REPORT AND PLAN

All emission units at the facility (as listed in the application) are currently in compliance with all applicable requirements. Thus no compliance plan or compliance schedule is required.

Appendix J Precautions to Prevent Emissions of Unconfined Particulate Matter

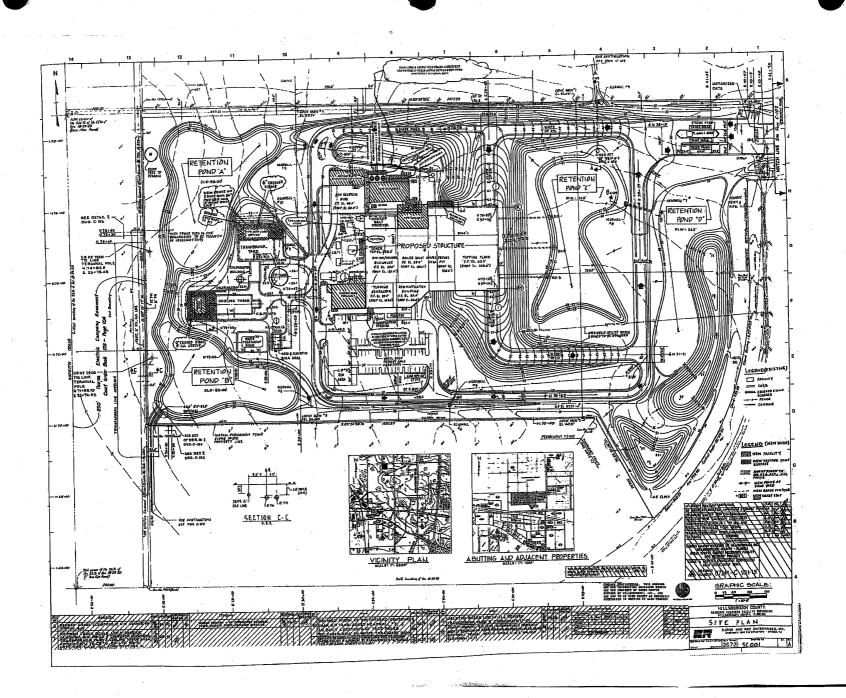
APPENDIX J

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

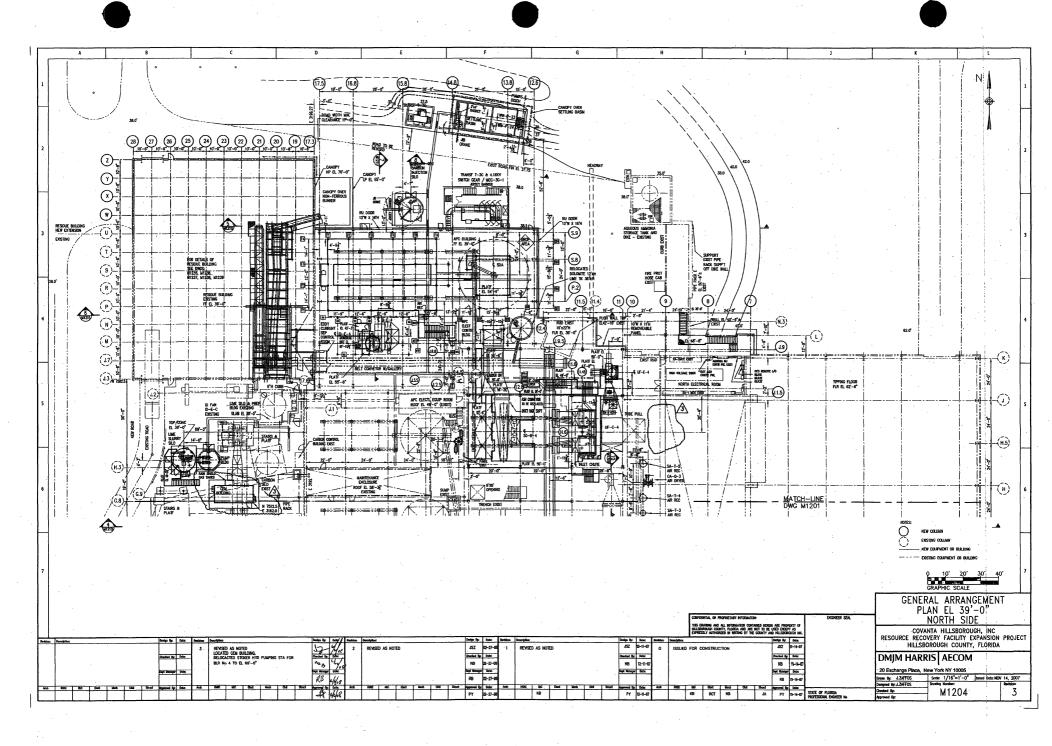
Reasonable precautions include the following:

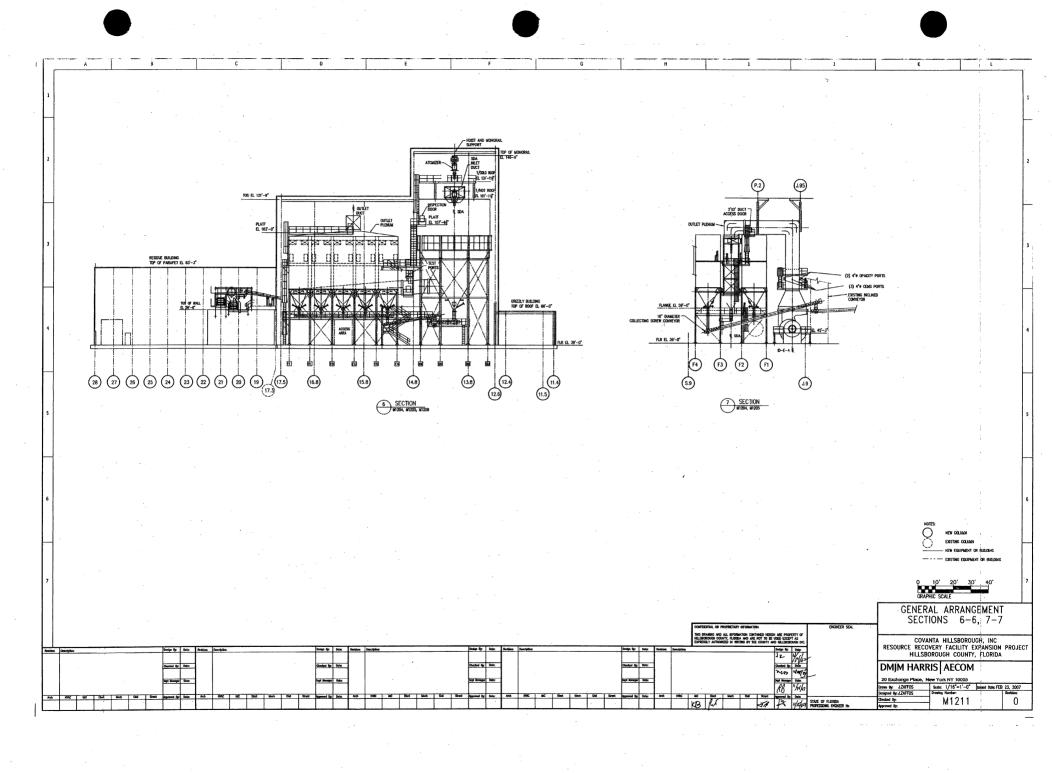
- a) Site roads, parking areas and maintenance driveways are paved with asphalt or concrete.
- b) A vacuum street sweeper is used to remove particulate matter from roads and other paved areas on as-needed basis.
- c) The unpaved areas of the facility are maintained with a vegetative cover (grass, ground cover, and plants) or mulch (wood chips and rock).
- d) Speed limit signs are posted.
- e) The Municipal Solid Waste (MSW) receiving and delivery area is fully enclosed within the tipping building which is maintained under negative pressure during normal operations via the forced draft fans which provide combustion air to the boilers. The resulting flow of ambient air into the tipping building and across the refuse pit captures particulate which is combusted in the boiler under normal operating conditions.
- f) The combined bottom and flyash is quenched in a water bath prior to discharge onto the ash conveying system under normal operation conditions. The combined ash conveying system is fully enclosed from the Boiler Building to the Ash Building.
- g) Ash and metal recovery processes, including storage and truck load out, are fully enclosed within the Ash Building. Metal trucks are covered with tarps prior to shipping. The combined ash which is hauled to Southeast County Landfill has a high moisture content of ~25% which eliminates escape of particulate.
- h) Watering of roads and haul routes for dust control is provided during any demolition, grading, construction and land clearing on as needed basis.

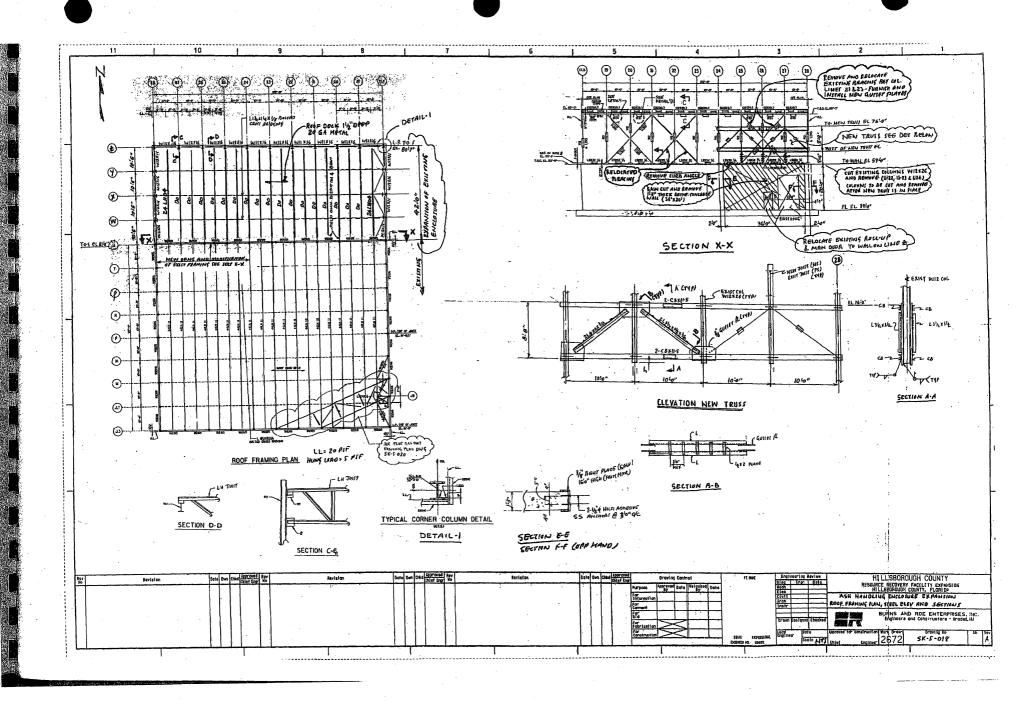
Appendix K Facility Site Plan



Appendix L Ash Building Expansion Plans







Appendix M Instant RICE for Diesel Driven Fire Pump and Emergency Generators at Falkenburg AWWTP

Diesel Driven Fire Pump



1715 North Westshore Boulevard, Suite 875 Tampa, Florida 33607 tel: +1 813 281-2900 fax: +1 813 288-8787 September 20, 2011

Scott M. Sheplak, PE
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Mail Station #5505
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject:

Hillsborough County Resource Recovery Facility

Application for Title V Permit Renewal (ESAP Application # 2310-1)

Dear Mr. Sheplak:

This letter is written to confirm that the ESAP Application #22310-1, submitted to FDEP on June 8, 2010, was not only intended to include the new Unit No. 4 municipal waste combustor in the Resource Recovery Facility's Title V Permit, but also to renew the facility wide Title V Permit.

Since making that Application we have determined there are several other issues that we respectfully request to be considered in the Application;

- The diesel powered engine that powers the fire pump should be added as an Emission Unit under the RICE standards. The Instant RICE software populated with data for this engine is attached.
- 2. We request that fluoride and beryllium be removed from the list of pollutants regulated. The Resource Recovery Facility does not combust beryllium containing wastes or fluoride containing wastes. Additionally Annual Compliance Tests since the start of Facility commercial operations in 1987 have shown either non-detectable levels of these 2 pollutants or trace amounts several orders of magnitude below the emission limitations.
- 3. The dolomitic lime storage silo, Emissions Unit No. 106, should be removed. This silo was totally enclosed within the new APC Building as a result of the Expansion project that added municipal waste combustor Unit No. 4.

We look forward to the Department's response.

Sincerely,

William R. Crellin Jr., P.E. Senior Project Manager

Camp Dresser & McKee Inc.

cc: Dan Strobridge (CDM)

Wm. R. Crellin, Fr. PE

Jason Gorrie (Covanta Energy)

Tyler Huffman (Covanta Energy)

Glenn Hoag (Covanta Energy) Nate Johnson (Hillsborough County) ->

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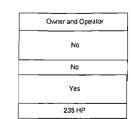
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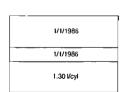
- Always answer the questions in order.
- Only orange colored cells should have an answer/choice in them. All others should be left blank.
- Follow the arrows until you have a big green arrow. When you get a big green arrow you are finished!
- The detailed results of the RICE will be on tabs ZZZZ or IIII or JUJU of this worksheet.
- Contact Andrew Bass (and ew.bass@dep.state.fl.us) with any Errors/Suggestions about the Program.

Input

- Are you the Manufacturer or the Owner and Operator of the Fire Pump?
- Is the Fire Pump a temporary replacement unit and located at a stationary source for less than 1 year and has been properly certified as meeting the standards that would be applicable to such engine under the appropriate non-road engine provisions?
- Is your Fire Pump being tested at a stationary RICE test cell/stand?
- Does your facility have the potential to amit 10 or more tons/year of any single hazardous air pollutant or 25 or more lons/year of any combination of hazardous air pollutants?(Area or Major Source)
- What is the 8rake HP (Hint: 1 HP = 0.7456 KW) of the stationary Fire Pump?
- * A fire pump is considered to be reconstructed if It meets any of the following conditions;

 (1) The fixed capital cost of the new (after July 11, 2005) components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act.
- When did you commence construction (date the Fira Pump is ordered by the owner or operator) or reconstruction on your stationary Fire Pump (ex. June 12, 2006 ≈ 06/12/06)(All manufacturers use manufacture date)?
- What is the date of manufacture of the Fire Pump?
- What is the Fire Pumps displacement (Vcyl/XHint:1 cc = 0.001 | & V# = # cylinders)(it engine is not a new compression ignition engine use 1 Vc, otherwise obtain information from applicant or manufacturer)





EEmission Limitations	Operating Limitations	Fuel Requirements	Performance Test	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Paporting Requirements	General Provisions (40 OF R part 63)
63.6602 Table 2c	No Requirements	No Requirements	No Requirements	63.6625(e), (1), (h), (i)	No Requirements	63.6605 63.6640	No Requirements	63.6655 (except 63.6655(c))	Footnote 1 of Table 2c	Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(c), (f)(4), and (f)(6), and 63.3(b)(e), (g) and (h).





Emergency Generator No. 1 at Falkenburg AWWTP

Instant RICE Software Disclaimer

Instant RICE was created to help potential permit applicants with rule applicability in permit applications. The content provided in this software tool is intended solely as assistance for potential permit applicants to aid in assessing requirements under the reciprocating internal combustion engines (RICE) National Emissions Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63 Subpart ZZZZ and New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII and JJJJ. Any variation between the rules and the information provided in this tool is unintentional, and, in the case of such variations, the requirements of the rules govern.

Use of this software is voluntary. The implementation software and its contents are not a rule and do not constitute a decision by Florida Department of Environmental Protection (FDEP) and may not be relied upon to create a substantive or procedural right or benefit enforceable by law, or inequity, by any person. While this tool is designed to help potential permit applicants comply with these rules, compliance with all federal, state and local laws and regulations remains the sole responsibility of each facility owner or operator subject to those laws and regulations. Use of this tool does not constitute an assessment by FDEP of the applicability of the rules to any particular facility. In any particular case, FDEP will make its assessment by applying the laws and regulations to the specific facts of the case.

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Instructions:

- Always answer the questions in order
- Only orange colored cells should have an answer/choice in them. All others should be left blank
- Follow the arrows until you have a big green arrow. When you get a big green arrow you are finished!
- The detailed results of the RICE will be on tabs ZZZZ or IIII or JJJJ of this worksheet
- Contact Andrew Bass (andrew.bass@dep.state.fl us) with any Errors/Suggestions about the Program

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- Are you the Manufacturer or the Owner and Operator of the engine?
- Is the engine a unit located at a stationary source for less than 1 year and has been properly certified as meeting the standards that would be applicable to such engine under the appropriate non-road engine provisions of 40 CFR 1068?
- Is your engine being tested at a stationary RICE test cell/stand?
- Does your facility have the potential to emit 10 or more tons/year of any single hazardous air pollutant or 25 or more tons/year of any combination of hazardous air pollutants? (Area or Major Source)
- What type of fuel does the engine use? (Use the primary fuel used by the engine)
- What is the Brake HP (Hint: 1 HP = 0.7456 KW) of the stationary engine?
- Is the engine a new, existing, or reconstructed engine?
- Does the engine meet any of the following conditions;
- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new - sources; and
- (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act.
- When did you commence construction (date the engine is ordered by the owner or operator) or reconstruction on your stationary engine (ex. June 12, 2006 = 06/12/06)(All manufacturers use manufacture date)?
- What is the date of manufacture of the engine?
- What is the engine displacement (I/cyl)(Hint:1 cc = 0.001 i & V#= #
- cylinders)(If engine is not a new compression ignition engine use 1 l/c, otherwise obtain information from applicant or manufacturer)
- Does the engine use an oxidation catalyst?
- Does the engine have a CEMS (continuous emission monitoring system)?
- Does the engine have NSCR (non-selective catalytic reduction)?
- Does the engine use a CPMS (continuous parameter monitoring system)?
- What are the total hours of operation per year for engine?
- How many of the total hours were during an emergency situation?
- How many of the total hours were used for maintance and testing?
- How many of the total hours were a part of the demand response program?
- Was the engine used for peak shaving, to generate income for a facility to - supply power to an electrical grid, or supply power as a part of a finacial arrangement with arriother entity?

Your engine are classified as a/an

1

- Please select from the following engine categories

	Owner and Operator
	No
	No
	Yes
ī	Diesel
	1000 HP
	Existing
	No
	6/30/2002
	6/30/2000
	4.30 l/cyl
	No
	No
	No
1	No
	100 hrs
	52 hrs
	48 hrs
	0 hrs
	No

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Emergency Engine

Compliance Date	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Test	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63 8640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6840(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 83.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines are subject to the requirement in 40 CFR 83.6640(f). No other requirement is apply.

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Compliance Date	Emulimitations	Operating Limitations	Fuel Requirements	Performance Test	General Provision (40 CFR p 63)	Initial Compliance	Notification Requirements		
These engines are subject to the	These engines ere subject to the requirements in 40 CFR 63.6840(f). No other requirements apply.	These engines are	These engines are		These engines are subject to the	s These engines are subject to the requirements in 40 CFR 63.6640(f). N			
requirements in 40 CFR 83.9640(f), No Ciber requirements apply.	are subject to the requirements in 40 CFR 83.6640(f). No other requirements Note: \$3.6625(h) During requirements	subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.		These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements epply	requirements in 40 CFR 63.6840(f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 53.6640(f). other requirements apply	These engines are subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.		
	Recordkeeping Requirements Reporting Requirements		Contli	naous Compliance	Monitoring, Installation, Collection, Operation and Maintenance Requirements				
These angion 63.4	These angines are subject to the requirements in 40 CFR 53.6640(f). No other requirements apply.		These engines ar	e subject to the requirements in 40 CFR 63.6640(f). No other requirements apply.	These engines CFR 63.664	s are subject to the requirements in 40 (f). No other requirements apply.	These engines are subject to the requirements in 40 CFR 63,6840(f). No other requirements apply		

Emergency Generator Nos. 2, 3 and 4 at Falkenburg AWWTP

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- Contact Andrew Bass (andrew.bass@dep.state.fl.us) with any Errors/Suggestions about the Program

Input

- Are you the Manufacturer or the Owner and Operator of the engine?

Is the engine a unit located at a stationary source for less than 1 year and has been properly certified as meeting the standards that would be applicable to such engine under the appropriate non-road engine provisions of 40 CFR 1068?

- Is your engine being tested at a stationary RICE test cell/stand?

Does your facility have the potential to emit 10 or more tons/year of any - single hazardous air pollutant or 25 or more tons/year of any combination of hazardous air pollutants?(Area or Major Source)

What type of fuel does the engine use? (Use the primary fuel used by the engine)

- What is the Brake HP (Hint: 1 HP = 0 7456 KW) of the stationary engine?

- Is the engine a new, existing, or reconstructed engine?

- Does the engine have a manufacturers certification?

When did you commence construction (date the engine is ordered by the owner or operator) or reconstruction on your stationary engine (ex. June 12, 2006 = 06/12/06)(All manufacturers use manufacture date)?

- What is the date of manufacture of the engine?

What is the engine displacement (Vcyl)(Hint:1 oc = 0.001 | & V#= #

 cylinders)(If engine is not a new compression ignition engine use 1 l/c, otherwise obtain information from applicant or manufacturer)

- Does the engine use an oxidation catalyst?

- Does the engine have a CEMS (continuous emission monitoring system)?

- Does the engine have NSCR (non-selective catalytic reduction)?

- Does the engine use a CPMS (continuous parameter monitoring system)?

- What are the total hours of operation per year for engine?

- How many of the total hours were during an emergency situation?

- How many of the total nours were used for maintance and testing?

- How many of the total hours were a part of the demand response program?

Was the engine used for peak shaving, to generate income for a facility to supply power to an electrical grid, or supply power as a part of a finacial arrangement with another entity?

Your engine are classified as a/an Emergency Enqine

- Please select from the following engine categories

4

Owner and Operator
No
No
Yes
Diesel
800 HP
New
No
6/30/2009
12/12/2007
3.80 l/cyl
No
No
No
No
100 hrs
52 hrs
48 hrs
0 hrs
No

Compliance Date	Emission Limitations	Operating Limitations	Fuel Requirements	Performance Test	Monitoring, Installation, Collection, Operation and Maintenance Requirements	Initial Compliance	Continuous Compliance	Notification Requirements	Recordkeeping Requirements	Reporting Requirements	General Provisions (40 CFR part 63)
Upon Startup	No Requirements	No Requirements	No Requirements	No Requirements	No Requirements	No Requirements	63.6805 63.6640	63.6645(f)	No Requirements	No Requirements	No (except as specified in 63.6645(f))

CI

			Emission lim	THE REAL PROPERTY.	HANNEL .					
Subpart IIII	NMHC+Nox [g/KW-hr (g/HP hr)]	HC [g/KW-hr (g/HP-hr)]	NOx [g/KW-hr (g/HP- hr)]	CO [g/KW-hr (g/HP- hr)]	PM [g/KW-hr (g/HP- hr)]	Emission limitations or	Fuel Requirements	Compliance	Testing	Notification, Reporting, and Recordkeeping
•	60.4205 (b)	60.4205 (b)	60.4205 (b)	60.4205 (b)	60.4205 (b)	60.4205 (b)	60.4207 (b)	60.4211	60.4212	60.4214



Compliance Date	Emulimitations	Operating Limitations	Fuel Requirements	Performance Test	General Provision (40 CFR p 63)	Initial Compliance	Notification Requirements
Upon Startup	No Requirements No Requirements		No (except as specified in 63.6645(f))	No Requirements	63.6645(f) (f) if you are required to submit en Initial Notification but are otherwise not effected by the requirements of this subpart, an accordance with §63.6590(b), your netification should include the information in §63.9(b)(2)(i) through (v), and a statengent that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).		
	Recordkeeping Requirements Reporting Requirements		Reporting Requirements	Contin	neous Compliance	Monitoring, Installation, Collection, Operation and Maintenance Requirements	
No Requirements			No Reguirements	(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, as ananner consistent with safety and good air pollution control pactices for mismixing emissions. The general duty to minimize emissions does not require you to make any further afforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator whitch may include, but is not limited to, misniforing results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.		No Requirements	

	Emission limitiations								
NMHC+Nox [g/KW-hr (g/HP-hr)]	HC [g/KW-hr (g/HP-hr)]	NOx [g/KW-hr (g/HP-hr)]	CO [g/KW-hr (g/HP-hr)]	PM [g/KW-hr (g/HP-hr)]	Emission limitations or				
					Comply with the emission standards for new non-road CI engines in §60.4202 (manufacturer emission limits listed above), for all pollutants, for the same model year and maximum engine power.				

Fuel Requirements	Compliance	Testing	Notification, Reporting, and Recordkeeping
Beginning October 1, 2010, engines with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel: • Sulfur Content (for NR diesel fuel) = 15 ppm = 0.0015% weight • Sulfur Content (for LM diesel fuel) = 500 ppm = 0.05% weight • Cetane index or aromatic content: Cetane index = 40 (minimum); OR Aromatic content = 35% volume (maximum)	Purchase an engine certified to the manufacturer emission standards (listed above), as applicable, for the same model year and maximum engine power. For all Generators: (1) Must operate and maintain the engine and control device according to the manufacturer's written instructions or procedures developed by the owner/operator that are approved by the engine manufacturer. (2) Meet the requirements for 40 CFR Parts 89, 94, and/or 1068, as they apply to you. (3) Must install a non-resettable hour meter prior to startup of the engine. (4) If you are an owner/operator of an engine equipped with a diesel particulate filer, the filter must be installed with a backpressure monitor that notifies the owner/operator when the high backpressure limit of the engines is approaching. (5) May be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to 100 hours per year.	(2) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR Part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 1039.102(g)(1), except as specified in 1039.104(d). (3) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR	engine displacement • Emission control equipment • Fuel used • All notifications and documentation submitted to comply with