# JEA NORTHSIDE GENERATING STATION

# Construction/Operating Permit Application

**Use of Coal Treated with a Binder** 

August 2003





### RECEIVED

August 25, 2003.

AUG 26 2003

BUREAU OF AIR REGULATION



Ms. Trina L. Vielhauer, Chief Bureau of Air Regulation Division of Air Resources Management Florida Department of Environmental Protection ELECTRIC 2600 Blair Stone Road Tallahassee, FL 32399-2400

RE: Northside Generating Station Units 1 and 2 Permit No. 0310045-011-AV and PSD-FL-265 0310045-012-AC/BSD-FL-265(B)

Dear Ms. Vielhauer:

Enclosed please find an original and four (4) copies of a request for permit modifications to the above referenced PSD and Title V permits to permit the use of solid fuel treated with a binder in the Northside Generating Station Units 1 and 2 circulating fluidized bed boilers.

Please see the introductory section of the attached application for a more detailed description of the requested modifications.

If you have any questions, please call me at (904) 665-6247.

Sincerely,

N. Bert Gianazza, P.E. **Environmental Services** 

Scott Sheplak, P.E., FDEP (w/o atta.) cc: Bruce Mitchell, P.E., FDEP (w/o atta.) Syed Arif, P.E., FDEP (w/o atta.)

Steve Pace, P.E., RESD (w/o atta.)

# JEA Northside Generating Station Fuel Binder Construction/Operation Permit Application

This permit application is for the use of coal treated with a binder and a blend of such treated coal with other permitted fuels (hereinafter referred to as treated solid fuel) at JEA's Northside Generating Station (NGS) located in Jacksonville, Florida. This application seeks to revise the facility's existing PSD permit to include this change and also to include this change in the facility's Title V renewal permit that is currently being processed by FDEP. As required by Florida Administrative Code regulations, JEA has prepared the permit application on the forms provided by the Florida Department of Environmental Protection (FDEP). Supplementary attachments are included to support the information contained in the application forms. Because much of the supplemental information typically included with a permit application was included in the recently submitted Title V renewal application and this information has not and will not change as a result of this construction/operation permit application, it is not included with this application. This is in accordance with the application instructions.

The facility is currently operating under Title V Operation Permit Number 0310045-008-AV and Construction Permit Nos. PSD-FL-265 (3010045-003-AC) and PSD-FL-265A. Construction Permit Nos. PSD-FL-265 and PSD-FL-265A were issued to cover the repowering of NGS Units No. 1 and 2 to Circulating Fluidized Bed (CFB) Boilers No. 1 and 2 and ancillary equipment. An application for modification of the facility's Title V permit was submitted to FDEP in August of 2002. An application for a Title V operation permit renewal was submitted to FDEP on June 19, 2003.

This permit application is for revision of Construction Permit Number PSD-FL-265 to explicitly allow for the use of treated solid fuel in NGS CFB Boiler No. 1 and CFB Boiler No. 2, Emissions Unit 027 and 026, respectively. JEA also requests that by this application, this change also be incorporated into the facility's Title V operation permit. JEA is seeking approval to use coal treated with two types of similar binders with the trade names COVOL 298 and COVOL 298-1. Both of these binders are used to produce what is considered coal-based synthetic fuel. COVOL 298 is a proprietary carboxylated styrene/butadiene polymer. COVOL 298-1 is a proprietary carboxylated styrene/butadiene/acrylate/acetate polymer. The raw binders consist of 40-62% of the proprietary polymer and 38-60% water. When applied to the coal, the binder causes smaller coal particles (which represent potential fugitive emissions) to bind to each other or to larger coal particles. The binder will be applied to the coal off-site prior to the coal being received at NGS. Therefore, no additional equipment or processes are needed to affect this change.

JEA believes that the use of treated solid fuel as described in this application may already be allowed under construction permit PSD-FL-265. Condition 24(b) and (c) of construction permit PSD-FL-265 states that the indicated material handling sources "...shall use wet suppression, water spray, partial enclosures, and/or conditioned materials to control particulate emissions as needed..." Appendix BD to construction permit PSD-FL-265 includes a discussion of the BACT determination for the PSD permit. Included on page BD-9 of Appendix BD is a discussion of the strategies used to control particulate matter emissions from materials handling and storage operations. In the discussion of wet suppression it is stated that "Direct application of water

and/or chemicals to bulk materials for purposes of increasing moisture content and/or stabilizing small particles is considered a "wet suppression" technique." Because the binder acts to stabilize small particles, it is considered a "wet suppression" technique and as such one could consider that its use is allowed under conditions 24(b) and (c).

A similar FDEP determination was made concerning use of coal treated with these same binders at St Johns River Power Park (SJRPP). As detailed in letters from the FDEP to SJRPP dated September 20, 2000 and October 1, 2001, the finding by FDEP was that this type of binder applied to coal is considered a dust suppressant and is allowed under the existing SJRPP/NGS operating permit (Facility-wide condition II.9 and Appendix TV-3, Condition 57). These letters are included in Attachment A for reference. Based on the aforementioned determination, the same logic could lead to the finding that the use of coal treated with these binders is allowed under construction permit PSD-FL-265 and could be carried over to the NGS Title V operating permit.

However, we request a revision to the facility PSD construction permit to explicitly allow the use of the aforementioned coal treated with a fuel binder at NGS. This application includes the use of such treated solid fuel as an alternative operating segment for the affected emissions units. This application includes the forms for NGS CFB Boiler No. 1, CFB Boiler No. 2 and ancillary solid fuel handling emissions units. Because the binder will be applied to the coal prior to receiving of the coal at the NGS site, the construction permit application does not involve any physical construction at NGS. Rather, it allows for the flexibility of handling and firing this type of treated solid fuel at NGS. The intent of this application is <u>not</u> to replace the current permitted fuels allowed to be fired in these units, but to add treated solid fuel as an additional operating segment for the emissions units included in this application.

Because the binder is applied to the coal prior to the coal being received by NGS and the binder will act as a dust suppressant, no increase in emissions will occur from material handling and storage operations. Also, as previously discussed, the use of a coal treated with a binder is considered a particulate emissions control technique allowed under the facility's current PSD permit.

The MSDS information for the types of binders that are proposed to be used under this application show that the binders are made up of organic compounds consisting of carbon, hydrogen and oxygen. The MSDS for the two binders are included in Attachment A. Based on the MSDS information, in general, combustion products are expected to contain hydrocarbons, CO, CO<sub>2</sub> and smoke. Further, under boiler combustion temperatures a more complete breakdown of the binder solids can be expected with combustion primarily resulting in CO<sub>2</sub> emissions. The quantity of binder solids in the treated coal is expected to be approximately 0.1%. Due to the low concentration of the binder in the coal and the fact that the combustion of the binder produces similar combustion products as the coal itself, use of coal treated with this type of binder is expected to have a negligible effect on overall stack emissions from the CFB boilers. As such, no change in the existing CFB boiler emission limits are included in this application.

In summary, this application seeks FDEP approval for use of treated solid fuel in the NGS CFB boilers. This process is already approved and in use at SJRPP. JEA seeks to revise the facility's PSD construction permit to add treated solid fuel as additional fuel operating segments for the

affected emission units included in this application. Further, by this application, JEA requests that this change be incorporated into the facility's Title V operation permit. This application does not seek to change any other conditions of the existing NGS permit, and as such there is no increase in emission limits requested with the approval of this activity. The anticipated permit changes associated with this application would simply include the inclusion of treated solid fuel as one of the permitted fuel types for solid fuel handling operations and for use in NGS CFB Boilers No. 1 and 2.



## Department of Environmental ProtectionRECEIVED

**Division of Air Resources Management** 

AUG 26 2003

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE AU OF AIR REGULATION

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

#### I. APPLICATION INFORMATION

### **Identification of Facility**

1.	Facility Owner/Company Name: JEA		
2.	Site Name: Northside Generating Station		
3.	Facility Identification Number: 0310045		[ ] Unknown
4.	Facility Location: Street Address or Other Locator: 4377 Hec	kscher Drive	
	City: Jacksonville County: I	Duval	Zip Code: 32226
5.	Relocatable Facility?  [ ] Yes [X] No	6. Existing Perm [X] Yes	nitted Facility? [ ] No

#### **Application Contact**

1.	Name and Title of Application Contact:	N. Bert Gianazza -	Environmental Services
2.	Application Contact Mailing Address:		
	Organization/Firm: JEA		
	Street Address: 21 West Church Street		
	City: Jacksonville	State: Florida	Zip Code: 32202
3.	Application Contact Telephone Number	'S:	
	Telephone: (904)665-6247	Fax: (904)	)665-7376

#### **Application Processing Information (DEP Use)**

1. Date of Receipt of Application:	8/34/03
2. Permit Number:	1310045-012-AC 0310045-013-AV
3. PSD Number (if applicable):	PSN-FL-245 B
4. Siting Number (if applicable):	

1

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

### **Purpose of Application**

### **Air Operation Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)
[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.
[ ] Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
Current construction permit number:
[ ] Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.
Current construction permit number:
Operation permit number to be revised:
[X] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.
Operation permit number to be revised/corrected: Include with renewal operating permit currently being processed (Application submittal date of June 19, 2003)
[ ] Title V air operation permit revision for reasons other than construction or modification o an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.
Operation permit number to be revised:
Reason for revision:
Air Construction Permit Application
This Application for Air Permit is submitted to obtain: (Check one)
[X] Air construction permit to construct or modify one or more emissions units.
[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

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### Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: James M. Chansler, P.E., D.P.A. Vice President, Operations and Maintenance

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: JEA

Street Address: 21 West Church Street

City: Jacksonville

State: Florida

Zip Code: 32202

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: (904) 665-4433

Fax: (904) 665-7990

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative\*(check here [], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature

8.21.03

Date

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

### **Professional Engineer Certification**

1. Professional Engineer Name: Bert Gianazza

Registration Number: 38640

2. Professional Engineer Mailing Address:

Organization/Firm: JEA Tower 9 Street Address: 21 W Church St

City: Jacksonville

State: FL

Zip Code: 32202

3. Professional Engineer Telephone Numbers:

Telephone: (904) 665-6247

Fax: (904) 665-7376

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

- 4. 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.

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

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

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

Signature

(seal)

\* Attach any exception to certification state

DEP Form No. 62-210.900(1) – Form Effective: 2/11/99

STATE OF

### **Scope of Application**

Emissions		Permit	Processing
Unit ID	Description of Emissions Unit	Туре	Fee
026	NGS – Circulating Fluidized Bed Boiler No. 2	ACM2	NA
027	NGS – Circulating Fluidized Bed Boiler No. 1	ACM2	NA
028	NGS – Materials Handling & Storage Operations	ACM2	NA
029	NGS – Crusher Building Baghouse Exhaust (DC1)	ACM2	NA
031	NGS – Fuel Silo Dust Collectors (DC2 and DC3)	ACM2	NA

### **Application Processing Fee**

Check one: [ ] Attached - Amount: \$	[X]	Not Applicable
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#### **Construction/Modification Information**

1. Description of Proposed Project or Alterations: This application is for a construction permit to allow the Northside Generating Station (NGS) the flexibility to fire coal treated with a latex binder in existing NGS Circulating Fluidized Bed (CFB) Boilers Nos. 1 and 2. Approval of this construction permit application will not replace or eliminate the fuels that the emission units are currently allowed to fire. Rather, its purpose is to give the facility the flexibility to burn this type of fuel if market conditions and fuel supply conditions so merit. This application includes Emission Unit Information Forms (Section III) for the two CFB boilers and coal handling operations. Although information on emission rates, emission limits, compliance provisions, monitoring, etc. are given in these forms, much of this information is identical to information previously submitted in the facility's Title V renewal application, as the use of coal treated with the latex binder should result in no increase in emissions.

This construction permit application is to allow for a change in operation in that it is to give the facility the flexibility of using a treated coal in the CFB boilers. There is no physical construction associated with this construction permit. As such, the Projected or Actual Date of Commencement of Construction and Projected Date of Completion of Construction fields below are left blank.

This application also seeks to have this change incorporated into the Title V renewal permit. The Title V renewal application for this facility was submitted to the Department on June 19, 2003.

- 2. Projected or Actual Date of Commencement of Construction:
- 3. Projected Date of Completion of Construction:

DEP Form No. 62-210.900(1) – Form

<b>Application Comment</b>		
	·	

### II. FACILITY INFORMATION

#### A. GENERAL FACILITY INFORMATION

### Facility Location and Type

1.	Facility UTM Coor	dinates:				
	Zone: 17	East (kn	n): 446.70	Nort	h (km): 3365.10	
2.	•	•		(DD 2.0)	4/GG\ 01/22/2	
	Latitude (DD/MM/	88): 30/25/51	Longitude	: (DD/MN	1/SS): 81/33/3	
3.	Governmental	4. Facility Status	5. Facility M	1ajor	6. Facility SIC(s):	
	Facility Code:	Code:	Group SIG	C Code:		
	4	A	49		4911	
7.	Facility Comment (	limit to 500 characters	):			
1						

### **Facility Contact**

1.	Name and Title of Facility Contact: N. Bert Gianazza – Environmental Services			
2.	Facility Contact Mailing Address: Organization/Firm: JEA			
	Street Address: 21 West Church Street			
	City: Jacksonville	State: Florida	Zip Code: 32202	
3.	Facility Contact Telephone Numbers: Telephone: (904) 665-6247	Fax: (904)	665-7376	

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### **Facility Regulatory Classifications**

### Check all that apply:

1. [ ] Small B	Business Stationary Source?	[	] Unknown
2. [X] Major S	Source of Pollutants Other than Hazardous	s Air Po	ollutants (HAPs)?
3. [ ] Synthet	ic Minor Source of Pollutants Other than	HAPs?	
4. [X] Major S	Source of Hazardous Air Pollutants (HAPs	s)?	
5. [ ] Synthet	ic Minor Source of HAPs?		·
6. [X] One or	More Emissions Units Subject to NSPS?		
7. [ ] One or	More Emission Units Subject to NESHAL	<b>P</b> ?	
8. [X] Title V	Source by EPA Designation?		
9. Facility Regu	latory Classifications Comment (limit to 2	200 cha	aracters):

### **List of Applicable Regulations**

Emissions unit applicable regulations hereby incorporates by reference the Title V core list of applicable regulations that all Title V sources are presumptively subject.	
Facility-wide applicable regulations specified in construction permit PSD-FL-265 are hereby incorporated by reference.	
Facility-wide applicable regulations specified in operation permit 0310045-008-AV are hereby incorporated by reference.	

DEP Form No. 62-210.900(1) – Form

### **B. FACILITY POLLUTANTS**

### **List of Pollutants Emitted**

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions	5. Pollutant
Emitted	Ciassii.	lb/hour	tons/year	Cap	Comment
СО	A				
NOX	A		3,600	Construction Permit No. PSD-FL-265	Consecutive 12- month period limit is for NGS Units 1, 2, and 3 combined
РМ	Α		881	Construction Permit No. PSD-FL-265	Consecutive 12- month period limit is for stack emissions from NGS Units 1, 2, and 3 combined.
PM10	A				
SO2	A		12,284	Construction Permit No. PSD-FL-265	Consective 12-month period limit is for NGS Units 1, 2, and 3 combined
VOC	A				
РВ	В				
H114	В				
SAM	В				
H107	A				
H106	A		_		
H095	A				
H104	A				
H113	A				
H133	A				
HAPS	A				

DEP Form No. 62-210.900(1) – Form

### C. FACILITY SUPPLEMENTAL INFORMATION

### **Supplemental Requirements**

1. Area Map Showing Facility Location:
[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2. Facility Plot Plan:
[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3. Process Flow Diagram(s):
[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5. Fugitive Emissions Identification:
[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
6. Supplemental Information for Construction Permit Application:
[X] Attached, Document ID:Attachment A[] Not Applicable
7. Supplemental Requirements Comment: Supplemental documents were included with the
Title V renewal application for this facility which was submitted on June 19, 2003. Because
the proposed change covered by this permit application will not affect the documents
submitted with the Title V Renewal Application, Waiver Requested is checked for each
document. This is in accordance with the application instructions. Because all applicable Additional Supplemental Requirements for Title V Air Operation Permit Applications were
submitted with the June 19, 2003 submittal and will not change as a result of this permit
application, Not Applicable is indicated for those items.
·

### Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
[ ] Attached, Document ID: [X] Not Applicable
O. List of Equipment/Activities Descripted and Journal Ave.
9. List of Equipment/Activities Regulated under Title VI:
[ ] Attached, Document ID:
[ ] Equipment/Activities On site but Not Required to be Individually Listed
[X] Not Applicable
10. Alternative Methods of Operation:
[ ] Attached, Document ID: [ X ] Not Applicable
11. Alternative Modes of Organtics (Emissions Tordina)
11. Alternative Modes of Operation (Emissions Trading):
[ ] Attached, Document ID: [ X ] Not Applicable
12. Identification of Additional Applicable Requirements:
[ ] Attached, Document ID: [X] Not Applicable
12. Disk Managaman Disa W. (Co. Co.)
13. Risk Management Plan Verification:
[ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention
Office (CEPPO). Verification of submittal attached (Document ID:) or
previously submitted to DEP (Date and DEP Office:)
[ ] Plan to be submitted to CEPPO (Date required:)
[X] Not Applicable
14. Compliance Report and Plan:
[ ] Attached, Document ID: [ X ] Not Applicable
15. Compliance Certification (Hard-copy Required):
[ ] Attached, Document ID: [X] Not Applicable
[ ] / Mached, Document ID [ X ] Not Applicable

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<b>Emissions</b>	Unit	<b>Information</b>	<b>Section</b>	1	of	5

#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

### A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

### **Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in This S	Section: (Check one)				
process or production unit, or activity, wh	[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).				
[ ] This Emissions Unit Information Section a process or production units and activities (stack or vent) but may also produce fugit	which has at least one defin				
[ ] This Emissions Unit Information Section a process or production units and activities		•			
2. Regulated or Unregulated Emissions Unit?	(Check one)				
[X] The emissions unit addressed in this Emis emissions unit.	sions Unit Information Sect	tion is a regulated			
[ ] The emissions unit addressed in this Emis emissions unit.	ssions Unit Information Sect	tion is an unregulated			
3. Description of Emissions Unit Addressed in NGS – Circulating Fluidized Bed Boiler No	`	haracters):			
4. Emissions Unit Identification Number: ID: 026		[ ] No ID [ ] ID Unknown			
5. Emissions Unit Status Code: Date: Feb. 11, 2002	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [X]			
9. Emissions Unit Comment: (Limit to 500 Ch This construction permit application is to al in NGS CFB Boiler No. 2 and NGS CFB Bo	low for firing of coal treated				

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

#### **Emissions Unit Control Equipment**

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

This application does not affect the control equipment/method for this emissions unit.

Initial sulfur dioxide (SO<sub>2</sub>) control is achieved through limestone injection into the circulating fluidized bed (CFB) boiler. Further SO<sub>2</sub> control is achieved using an add-on spray dryer absorber. Calcium acting to control SO<sub>2</sub> may be introduced into the CFB or spray dryer from a variety of sources, such as crushed limestone, slaked lime, bed ash and fly ash.

Particulate matter (PM) consisting of flyash, the  $SO_2$  control reaction products and unreacted calcium oxide is controlled using a fabric filter dust collector downstream of the spray dryer. Selective non catalytic reduction (SNCR) is used, as needed, to reduce oxides of nitrogen ( $NO_x$ ) emissions by reacting ammonia with  $NO_x$  to form molecular nitrogen and water.

2. Control Device or Method Code(s): 041, 013, 018, and 107

#### **Emissions Unit Details**

1.	Package Unit:		
	Manufacturer:	Model Number:	
2.	Generator Nameplate Rating: 297.5	MW	
3.	Incinerator Information: Not applicable		
	Dwell Temperature:		°F
	Dwell Time:		seconds
	Incinerator Afterburner Temperature:		°F

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

Emissions	Unit Inforn	nation Section	1 0:	f 5	
CHIBSIONS		ianon Seenon	1 1 0.		

### B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

### **Emissions Unit Operating Capacity and Schedule**

l.	Maximum Heat Input Rate: 2,7	764	mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr	tons/day
3.	Maximum Process or Throughp	out Rate:	
4.	Maximum Production Rate:	_	
5.	Requested Maximum Operating	g Schedule:	
		24 hours/day	7 days/week
		52 weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule Construction permit only for putests. Continuous compliance v	on permit PSD-FL-265. The rrposes of determining capacity	rate is included in the

Emissions	Unit	Information	on Section	1	οf	5
		liiivi mati			UI.	•

### C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

### **List of Applicable Regulations**

	<del></del>
Emissions unit applicable regulations hereby incorporates by reference the Title V core list of applicable regulations that all Title V sources are presumptively subject	State: Rule 62-204.800(17) - Specified Subparts of 40 CFR 73 Adopted by Reference
Applicable regulations specified in construction permit PSD-FL-265 are hereby incorporated by reference	State: Rule 62-204.800(18) - Specified Subparts and Appendices of 40 CFR 75 Adopted by Reference
Federal: 40 CFR 60 Subpart Da – Standards of Performance for Electric Utility Steam Gernerators for Which Construction is Commenced after September 18, 1978	State: Rule 62-204.800(20) - Specified Portions of 40 CFR 77 Adopted by Reference
Federal: 40 CFR 60 Subpart A – General Provisions	State: Rule 62-214 – Requirements for Sources Subject to the Federal Acid Rain Program
Federal: 40 CFR 72 – Permits Regulation (Acid Rain)	State: Rule 62-296.405 – Fossil Fuel Steam Generators with More Than 250 Million Btu per Hour Heat Input
Federal: 40 CFR 73 – Sulfur Dioxide Allowance System	State: Rule 62-296.702 – Fossil Fuel Steam Generators
Federal: 40 CFR 75 – Continuous Emission Monitoring	State: Rule 62-297.401 – Compliance Test Methods
Federal: 40 CFR 77 – Excess Emissions	Local: Jacksonville Environmental Protection Board, Rule 2 – Air Pollution
State: Rule 62-204.800(8)(b)2 – 40 CFR 60 Subpart Da adopted by reference	Ordinance Code, City of Jacksonville (JOC), Title X, Chapter 376, Odor Control
State: Rule 62-204.800(8)(c) - NSPS Controlling Standards	Ordinance Code, City of Jacksonville (JOC), Title V, Chapter 362, Air and Water Pollution.
State: Rule 62-204.800(8)(d) – General Provisions of 40 CFR 60 Subpart A adopted	
State: Rule 62-204.800(8)(e) – Specified appendices of 40 CFR Part 60 adopted	
State: Rule 62-204.800(16) – Specified Subparts and Appendices of 40 CFR 72 Adopted by Reference	

DEP Form No. 62-210.900(1) – Form Effective: 2/11/99

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Emissions	Unit	<b>Information</b>	Section	1	of	5
	~ 1Ext			-	OI.	_

### D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

### **Emission Point Description and Type**

1.	Identification of Point on Pl Flow Diagram? EU026	ot Plan or	2. Emission Po	int Type Code: 1	
3.	Descriptions of Emission Po 100 characters per point):	oints Comprising	g this Emissions U	Jnit for VE Tracking	(limit to
4.	ID Numbers or Descriptions NGS – Circulating Fluidized – Circulating Fluidized Bed separate flues, one for each	d Bed Boiler No Boiler No. 1 (E	. 2 (EU026) share	es a common stack wi	th NGS
5.	Discharge Type Code: V	6. Stack Heig 495	ht: feet	7. Exit Diameter: 15.0	feet
8.	Exit Temperature: 144°F (approx)	Rate:	umetric Flow	10. Water Vapor:	%
11	11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: feet				
13	. Emission Point UTM Coord Zone: 17 E	linates: ast (km): 446.6	70 Nort	h (km): 3,365.070	
14	Emission Point Comment (I Boiler No. 2 (EU026) share No. 1 (EU027). The comm	s a common stac	ck with NGS – Ci	rculating Fluidized B	ed Boiler

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Emissions Unit Information Section	1	of	5	
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### E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

		(All Emis	sions Units)		
Se	gment Description and Ra	te: Segment	1 of2		
Segment Description (Process/Fuel Type) (limit to 500 characters):     Coal treated with a binder used in Circulating Fluidized Bed Boiler No. 2					
2.	Source Classification Code 10100218	e (SCC):	3. SCC Units:	: Tons Burned	
4.	Maximum Hourly Rate: 138 (approx)	5. Maximum A 1,211,000		6. Estimated Annual Activity Factor:	
7.	Maximum % Sulfur: 8 (approx)	8. Maximum %	% Ash:	9. Million Btu per SCC Unit: 20 (approx)	
	10. Segment Comment (limit to 200 characters): This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted segments still apply.				
Se	E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)  Segment Description and Rate: Segment2_ of2_				
<ol> <li>Segment Description (Process/Fuel Type) (limit to 500 characters):         A blend of coal treated with a binder and other permitted fuels used in Circulating Fluidized Bed Boiler No. 2     </li> </ol>					
2.	2. Source Classification Code (SCC): 3. SCC Units: Tons Burned				
4.	Maximum Hourly Rate: 138 (approx)	5. Maximum A 1,211,000	Annual Rate: (approx)	6. Estimated Annual Activity Factor:	
7.	Maximum % Sulfur: 8 (approx)	8. Maximum 9	∕₀ Ash:	9. Million Btu per SCC Unit: 20 (approx)	
10. Segment Comment (limit to 200 characters): This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted					

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segments still apply.

### F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
СО			EL
NO <sub>X</sub>	107		EL
PM	018		EL
PM <sub>10</sub>	018		EL
SO <sub>2</sub>	041	013	EL
voc			EL
H114	013	018	EL
PB	018		EL
SAM	041	013	EL
H107	013		EL
H106	013		NS
HAPS			NS

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<b>Emissions Unit Information Section</b>	1_	_ of _	_5
Pollutant Detail Information Page	1	of	15

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

### **Emissions-Limited and Preconstruction Review Pollutants Only)**

### **Potential/Fugitive Emissions**

1 otentias i ugitive Dimissions			
1. Pollutant Emitted: CO	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions:		4. Synthetically	
350 lb/hour (24-hour block average)	1,533 tons/year	Limited? [ ]	
5. Range of Estimated Fugitive Emissions:	•		
	to to	ns/year	
6. Emission Factor: 350 lb/hr (24-hour block a	average)	7. Emissions	
Reference: Construction permit PSD-	- '	Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): The CO emissions limit of 350 lb/hour on a 24-hour average (excluding startup and shutdown) is set by construction permit PSD-FL-265. The CO emissions limit of 1,533 tons/year is set by construction permit PSD-FL-265.			
9. Pollutant Potential/Fugitive Emissions Comhourly and annual emission rates are set by consaffected by the use of coal treated with a binder application.	struction permit PSD-FL-	265 and are not	
Allowable Emissions Allowable Emissions	_lof2		
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable	
3. Requested Allowable Emissions and Units:	4. Equivalent Allowal	ble Emissions:	
350 lb/hr (24-hour block average)	350 lb/hour	1,533 tons/year	
5. Method of Compliance (limit to 60 characte will be demonstrated using CEMS.	ers): Compliance with the	CO emission limits	
6. Allowable Emissions Comment (Desc. of O This CO emissions limit is based on a 24-ho shutdown and malfunction. The 24-hour ble midnight. The CO limit and compliance de those included in construction permit PSD-l treated with a binder as covered under this of	our block average, exclud ock average is calculated termination methods give FL-265 and are not affected.	ing periods of startup, from midnight to in here are the same as ed by the use of coal	

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Pollutant Detail Information Page2	of15			
G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION				
(Regulated Emissions Units -				
<b>Emissions-Limited and Precons</b>	truction Review Pollutants Only)			
Allowable Emissions Allowable Emissions	_2 of2			
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable			
OTHER	Emissions:			
1. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
1,533 tons per year	lb/hour 1,533 tons/year			
5. Method of Compliance (limit to 60 character	rs): Compliance with the annual CO emissions			
limit will be demonstrated by summing the h	nourly CO emission rate data from the CEMS.			
1	perating Method) (limit to 200 characters): The			
CO limit and compliance determination methods given here are the same as those included				
in construction permit PSD-FL-265 and are not affected by the use of coal treated with a				
binder as covered under this construction pe	rmit application.			

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<b>Emissions Unit Information Section</b>	1_	_ of _	5	-
Pollutant Detail Information Page	3	of	15	

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

### **Emissions-Limited and Preconstruction Review Pollutants Only)**

### **Potential/Fugitive Emissions**

1. Pollutant Emitted: NO <sub>X</sub>	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions:		4. Synthetically	
249 lb/hour (30-dary rolling average)	1,090 tons/year	Limited? [ ]	
5. Range of Estimated Fugitive Emissions:			
[ ] 1 [ ] 2 [ ] 3	to to	ns/year	
6. Emission Factor: 0.09 lb/mmBtu (30-day ro	olling average)	7. Emissions	
Reference: Construction permit PSD-I	FL-265	Method Code:	
<u> </u>		0	
8. Calculation of Emissions (limit to 600 chara	•	DOD EL ACC	
The NO <sub>x</sub> Emissions limit of 0.09 lb/mmBtu is s	-	PSD-FL-265.	
The heat input rate to EU026 is 2,764 mmBtu/h		./h	
Hourly $NO_x$ emissions rate = (0.09 lb/mmBtu)(3 Annual $NO_x$ emissions rate = (0.09 lb/mmBtu)(	· ·		
Annual NO <sub>x</sub> emissions rate = $(0.09 \text{ to/minbtu})$ = 1,090 ton/yr	2,70 <del>4</del> IIIIIDiWIII J(0,700 II	11/y1/(1011/2,000 10) ~	
1,000 told yl			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits. The above hourly and annual emission rates are based on the lb/mmBtu limit given in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application.			
Allowable Emissions Allowable Emissions	_1of2		
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable	
3. Requested Allowable Emissions and Units:	4. Equivalent Allowal	ble Emissions:	
0.09 lb/mmBtu on a 30-day rolling average	249 lb/hour	1,090 tons/year	
5. Method of Compliance (limit to 60 characters): Compliance with the NO <sub>x</sub> emission limit will be demonstrated using CEMs.			
6. Allowable Emissions Comment (Desc. of C This NO <sub>x</sub> emissions limit is based on a 30-c startup, shutdown and malfunction. The NO given here are the same as those included in affected by the use of coal treated with a bin application. Equivalent pound per hour and informational purposes only and do not con	lay rolling average, excluded a limit and compliance do construction permit PSD ader as covered under this litton per year emissions as	ding periods of etermination methods of FL-265 and are not construction permit	

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Allowable Emissions Allowable Emissions 2 of 2

§ <u>—</u>	<del></del>
Allowable Emissions Allowable Emissions	_2of2
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
RULE	Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.6 lb/mmBtu on a 30-day rolling average	1,658 lb/hour 7,264 tons/year
5. Method of Compliance (limit to 60 character	rs):
6. Allowable Emissions Comment (Desc. of Op This NO <sub>x</sub> emissions limit is based on a 30-da startup, shutdown and malfunction. This NO Equivalent pound per hour and ton per year only and do not constitute limits.	ay rolling average, excluding periods of

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Pollutant Detail Information Page	5	_ of _	15	
G EMISSIONS UNIT	POLLI	LITAN	T DETAIL INF	ORN

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

### **Potential/Fugitive Emissions**

1. Pollutant Emitted: PM	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions:		4. Synthetically	
30 lb/hour (3-hour average)	133 tons/year	Limited? [ ]	
5. Range of Estimated Fugitive Emissions:	•		
	to to	ns/year	
6. Emission Factor: 0.011 lb/mmBtu (3-hour a	verage)	7. Emissions	
Reference: Construction permit PSD-F	T -265	Method Code:	
·		0	
8. Calculation of Emissions (limit to 600 chara	, , , , , , , , , , , , , , , , , , ,		
The PM Emissions limit of 0.011 lb/mmBtu is s	-	: PSD-FL-265.	
The heat input rate to EU026 is 2,764 mmBtu/h			
Hourly PM emissions rate = (0.011 lb/mmBtu)(	•		
Annual PM emissions rate = (0.011 lb/mmBtu)( = 133 ton/yr	2,764 mmBtu/hr)(8,760 l	(ton/2,000 lb) =	
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 charac	ters): Equivalent	
pound per hour and ton per year emissions are g			
not constitute limits. The above hourly and ann	ual emission rates are bas	sed on the lb/mmBtu	
limit given in construction permit PSD-FL-265	and are not affected by the	e use of coal treated	
with a binder as covered under this construction	permit application.		
Allowable Emissions Allowable Emissions	_1 of2		
1. Basis for Allowable Emissions Code:	2. Future Effective Da	ate of Allowable	
OTHER	Emissions:		
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:	
0.011 lb/mmBtu based on a 3-hour average	30 lb/hour	133 tons/year	
5. Method of Compliance (limit to 60 characte	, <del>-</del>	-	
compliance tests while firing coal and while	<u> </u>		
Compliance testing while firing petroleum of	-	•	
two years of operation and then annually the			
be conducted while firing coal if petroleum			
during the previous quarter or less than 400	hours during the previou	s federal fiscal year.	
6. Allowable Emissions Comment (Desc. of O			
This PM emissions limit is based on a 3-hou		-	
determination methods given here are the sa		<u>-</u>	
PSD-FL-265 and are not affected by the use			
this construction permit application. Equivalent pound per hour and ton per year emissions			
are given for informational purposes only ar	nd do not constitute limits	S.	

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Pollutant Detail Information Page \_\_6\_ of \_\_15\_\_

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable	
RULE	Emissions:	
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:	
0.03 lb/mmBtu based on a 3-hour average	83 lb/hour 363 tons/year	
5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial		

- 5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted.
- 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This PM emissions limit is based on a 3-hour average. The PM emissions limit is from NSPS Subpart Da. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

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Emissions Unit Information Section	1	of_	5		
Pollutant Detail Information Page	7	of _	15	_	
G. EMISSIONS UNIT POI					MATION
(Regulate Emissions-Limited and Pre					ints Only)
Potential/Fugitive Emissions	COIIS	.,	tion it	oview i oliutu	ints only)
1. Pollutant Emitted: PM <sub>10</sub>		2.	Total I	Percent Efficie	ency of Control:
3. Potential Emissions:					4. Synthetically
30 lb/hour (3-hour average)			133	tons/year	Limited? [ ]
5. Range of Estimated Fugitive Emissions	s:				
	3			to to	ns/year
6. Emission Factor: 0.011 lb/mmBtu (3-hour average) 7. Emissions					
Reference: Construction permit PSD-FL-265  Method Cod 0			Method Code: 0		
8. Calculation of Emissions (limit to 600	chara	cter	s):		
The PM <sub>10</sub> Emissions limit of 0.011 lb/mm			by cons	struction perm	nit PSD-FL-265.
The heat input rate to EU026 is 2,764 mml					
Hourly $PM_{10}$ emissions rate = (0.011 lb/mi		, , ,		•	
Annual PM <sub>10</sub> emissions rate = $(0.011 \text{ lb/m})$	mBtu	ı)(2,	764 mn	1Btu/hr)(8,760	0 hr/yr)(ton/2,000 lb)
= 133  ton/yr					
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent					
pound per hour and ton per year emissions are given for informational purposes only and do					
not constitute limits. The above hourly and annual emission rates are based on the lb/mmBtu					
limit given in construction permit PSD-FL				•	ne use of coal treated
with a binder as covered under this constru	ection	per	mit app	lication.	

Allowable Emissions Allowable Emissions 1 of 1

for less than 400 hours during the previous federal fiscal year.

are given for informational purposes only and do not constitute limits.

Basis for Allowable Emissions Code:

**OTHER** 

3. Requested Allowable Emissions and Units:

0.011 lb/mmBtu based on a 3-hour average

5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted.

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This PM<sub>10</sub> emissions limit is based on a 3-hour average. The PM<sub>10</sub> limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application. Equivalent pound per hour and ton per year emissions

Compliance testing while firing petroleum coke will be conducted annually thereafter. The annual compliance test may be conducted while firing coal if petroleum coke has been fired

2. Future Effective Date of Allowable

133 tons/year

4. Equivalent Allowable Emissions:

30 lb/hour

**Emissions:** 

Emissions Unit Information Section $\_$	1_	_ of _	5	
Pollutant Detail Information Page	8	of	15	

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

#### **Emissions-Limited and Preconstruction Review Pollutants Only)**

#### Potential/Fugitive Emissions

1. Pollutant Emitted: SO <sub>2</sub>	2. Total Percent Efficiency of Control:		
3. Potential Emissions:		4. Synthetically	
553 lb/hour (24-hour block average)	1,816 tons/year	Limited? [ ]	
5. Range of Estimated Fugitive Emissions:			
[ ] 1 [ ] 2 [ ] 3	to to	ns/year	
6. Emission Factor: 0.20 lb/mmBtu (24-hour b	olock average) and	7. Emissions	
0.15 lb/mmBtu (30-day re	olling average)	Method Code:	
Reference: Construction permit PSD-F	FL-265	0	
8. Calculation of Emissions (limit to 600 chara	icters):		
The SO <sub>2</sub> Emissions limits of 0.20 lb/mmBtu (24	I-hour block average) and	0.15 lb/mmBtu (30-	
day rolling average) are set by construction perm			
The heat input rate to EU026 is 2,764 mmBtu/hr.			
Hourly SO <sub>2</sub> emissions rate (24-hour average) = (0.20 lb/mmBtu)(2,764 mmBtu/hr) = 553 lb/hr			
Hourly $SO_2$ emissions rate (30-day average) = (0.15 lb/mmBtu)(2,764 mmBtu/hr) = 415 lb/hr			
Annual SO <sub>2</sub> emissions rate = $(0.15 \text{ lb/mmBtu})(2,764 \text{ mmBtu/hr})(8,760 \text{ hr/yr})(\text{ton/2,000 lb})$			
= 1,816 ton/yr			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent			
pound per hour and ton per year emissions are given for informational purposes only and do			
not constitute limits. The above hourly and annual emission rates are based on the lb/mmBtu			
limit given in construction permit PSD-FL-265 and are not affected by the use of coal treated			
with a binder as covered under this construction permit application.			
Allowable Emissions1 of3			
1. Basis for Allowable Emissions Code:	2. Future Effective Da	ate of Allowable	
OTHER Emissions:			

## 5. Method of Compliance (limit to 60 characters): Compliance with the SO<sub>2</sub> emission limit will be demonstrated using CEMs.

4. Equivalent Allowable Emissions:

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This SO<sub>2</sub> emissions limit is based on a 24-hour block average, excluding periods of startup, shutdown and malfunction. The 24-hour block average is calculated from midnight to midnight. The SO<sub>2</sub> limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

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3. Requested Allowable Emissions and Units:

0.20 lb/mmBtu (24-hour block average)

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Allowable Emissions Allowable Emissions	_2of3			
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Date of Allowable Emissions:			
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
0.15 lb/mmBtu (30-day rolling average)	415 lb/hour 1,816 tons/year			
5. Method of Compliance (limit to 60 character will be demonstrated using CEMs.	s): Compliance with the SO <sub>2</sub> emission limit			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This SO <sub>2</sub> limit is based on a 30-day rolling average, excluding periods of startup, shutdown and malfunction. The SO <sub>2</sub> limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.				
Allowable Emissions Allowable Emissions	_3 of3			
Basis for Allowable Emissions Code:     RULE	2. Future Effective Date of Allowable Emissions:			
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:			
0.6 lb/mmBtu (30-day rolling average)	1,658 lb/hour 7,264 tons/year			
5. Method of Compliance (limit to 60 character	rs):			
	verage, excluding periods of startup, shutdown is from NSPS Subpart Da. Equivalent pound			

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G. EMISSIONS UNIT POLLU		RMATION	
` •	missions Units -		
Emissions-Limited and Precons	truction Review Polluta	ints Only)	
Potential/Fugitive Emissions			
1. Pollutant Emitted: VOC	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions:		4. Synthetically	
14 lb/hour (3-hour average)	61.5 tons/year	Limited? [ ]	
5. Range of Estimated Fugitive Emissions:			
[ ] 1 [ ] 2 [ ] 3		ns/year	
6. Emission Factor: 14 lb/hour (3-hour average	e) and 61.5 tons/year	7. Emissions	
Reference: Construction permit PSD-	FL-265	Method Code:	
8. Calculation of Emissions (limit to 600 chara	acters):		
The VOC emissions limit of 14 lb/hour is set by	•	D-FL-265.	
The VOC emissions limit of 61.5 tons/year is se	et by construction permit	PSD-FL-265.	
O Dellutant Batanti-l/Eusitiva Envisaiona Com		otana). The above	
9. Pollutant Potential/Fugitive Emissions Com-	•		
hourly and annual emission rates are based on conditions given in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this			
construction permit application.			
• ••			
Allowable Emissions Allowable Emissions	_1of2		
1. Basis for Allowable Emissions Code:	2. Future Effective D	ate of Allowable	
OTHER	Emissions:	<del>_</del>	
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:	
14 lb/hr (3-hour average)	14 lb/hour	61.5 tons/year	
5. Method of Compliance (limit to 60 characte	ers): Using appropriate EI	PA Methods, initial	
compliance tests while firing coal and while firing petroleum coke were conducted.			
Compliance testing will be conducted once within every five years thereafter while firing			
petroleum coke or coal.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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this construction permit application.

This VOC emissions limit is based on a 3-hour average. The VOC limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under

Emissions Unit Information Section	1	of	_5	
Pollutant Detail Information Page	11	_ of _	15	_
Allowable Emissions Allowable Emission	ns	2	of	2

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
OTHER	Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
61.5 tons per year	lb/hour 61.5 tons/year

- 5. Method of Compliance (limit to 60 characters): Compliance with the annual limit is demonstrated by demonstrating compliance with the short-term emissions limit.
- 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The VOC limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application.

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Pollutant Detail Information Page	12	of	15	

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

### Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions				
1. Pollutant Emitted: H114	2. Total Percent Efficie	ncy of Control:		
3. Potential Emissions: 0.03 lb/hour (6-hour average)	0.13 tons/year	4. Synthetically Limited? [ ]		
5. Range of Estimated Fugitive Emissions:  [ ] 1 [ ] 2 [ ] 3	to to	ns/year		
6. Emission Factor: 0.03 lb/hour (6-hour average) Reference: Construction permit PSD-l		7. Emissions Method Code: 0		
8. Calculation of Emissions (limit to 600 characters): The mercury emissions limit of 0.03 lb/hour is set by construction permit PSD-FL-265. Annual mercury emissions rate = (0.03 lb/hr)(8,760 hr/yr)(ton/2,000 lb) = 0.13 tons/year				
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent ton per year emissions are given for informational purposes only and do not constitute a limit. The above hourly emission rate is based on construction permit PSD-FL-265 and is not affected by the use of coal treated with a binder as covered under this construction permit application.				
Allowable Emissions	_1of1			
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable		
3. Requested Allowable Emissions and Units: 0.03 lb/hour (6-hour average)	4. Equivalent Allowal 0.03 lb/hour	ble Emissions: 0.13 tons/year		
5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted. As stipulated in construction permit PSD-FL-265, initial compliance tests only are required to show compliance with this emissions limit.				
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This mercury emissions limit is based on a 6-hour average. The mercury limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application. Equivalent ton per year emissions are given for informational purposes only and do not constitute a limit.				

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Pollutant Detail Information Page	13	of	15	

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

#### **Potential/Fugitive Emissions**

1. Pollutant Emitted: PB	2. Total Percent Efficie	ency of Control:			
3. Potential Emissions:		4. Synthetically			
0.07 lb/hour (3-hour average)	0.31 tons/year	Limited? [ ]			
5. Range of Estimated Fugitive Emissions:	0.5 1 10110/ ) 041	2			
[ ] 1 [ ] 2 [ ] 3	to to	ns/year			
6. Emission Factor: 0.07 lb/hour (3-hour average)	ige)	7. Emissions			
Reference: Construction permit PSD-F	FL-265	Method Code: 0			
8. Calculation of Emissions (limit to 600 chara	icters):				
The lead emissions limit of 0.07 lb/hour is set by	y construction permit PS	D-FL-265.			
Annual lead emissions rate = $(0.07 \text{ lb/hr})(8,760)$	hr/yr)(ton/2,000 lb) = 0.3	1 tons/year			
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 charac	ters): Equivalent ton			
per year emissions are given for informational p	urposes only and do not	constitute a limit. The			
above hourly emission rate is based on construc	tion permit PSD-FL-265	and is not affected by			
the use of coal treated with a binder as covered	under this construction po	ermit application.			
Allowable Emissions1 of1					
1. Basis for Allowable Emissions Code:	2. Future Effective Da	ate of Allowable			
OTHER	Emissions:				
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:			
0.07 lb/hr (3-hour average) 0.07 lb/hour 0.31 tons/year					
5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial					
compliance tests while firing coal and while firing petroleum coke were conducted. As					
stipulated in construction permit PSD-FL-265, initial compliance tests only are required to					
show compliance with this emissions limit.					
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):					
This lead emissions limit is based on a 3-hour average. The lead limit and compliance					
determination methods given here are the same as those included in construction permit					
PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under					
this construction permit application. Equivalent ton per year emissions are given for					
informational purposes only and do not cons					
,,,,,,,,	<del>-</del> -				

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Emissions Unit Information Section	1	_ of	_5	
Pollutant Detail Information Page	14	of	15	

## Emissions-Limited and Preconstruction Review Pollutants Only)

#### Potential/Fugitive Emissions

2 Overheine 2 millione				
1. Pollutant Emitted: SAM	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:		4. Synthetically		
1.1 lb/hour (3-hour average)	4.82 tons/year	Limited? [ ]		
5. Range of Estimated Fugitive Emissions:				
[ ] 1 [ ] 2 [ ] 3	to to	ns/year		
		7. Emissions		
6. Emission Factor: 1.1 lb/hour (3-hour average)	36)	Method Code:		
Reference: Construction permit PSD-		0		
8. Calculation of Emissions (limit to 600 chara	•			
The sulfuric acid mist emissions limit of 1.1 lb/	<del>-</del>	-		
Annual sulfuric acid mist emissions rate = $(1.1)$	lb/hr)(8,760 hr/yr)(ton/2,0	000 lb)		
= 4.82	tons/year			
0 0 0 11 1 10 11 10 11 10 11 10 11	. (1' ' 200 1			
9. Pollutant Potential/Fugitive Emissions Com	•	, -		
per year emissions are given for informational p	-			
above hourly emission rate is based on construct	=			
the use of coal treated with a binder as covered	under this construction po	ermit application.		
Allowable Emissions1 of1				
1. Basis for Allowable Emissions Code:	2. Future Effective Da	ate of Allowable		
OTHER	Emissions:			
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:		
1.1 lbs/hour (3-hour average)	1.1 lb/hour	4.82 tons/year		
5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial				
compliance tests while firing coal and while firing petroleum coke were conducted. As				
stipulated in construction permit PSD-FL-265, initial compliance tests only are required to				
show compliance with this emissions limit. Compliance with SO <sub>2</sub> limits based on CEMS				
data is used as a surrogate to indicate comp	liance with the SAM emis	ssions limit.		
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):				
This sulfuric acid mist emissions limit is based on a 3-hour average. The sulfuric acid mist				
limit and compliance determination methods given here are the same as those included in				
construction permit PSD-FL-265 and are no	_			
binder as covered under this construction p	<del>-</del>			
emissions are given for informational purpo				

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<b>Emissions Unit Information Section</b>	1	_ of	_5	
Pollutant Detail Information Page	15	of	15	

Emissions-Limited and Preconstruction Review Pollutants Only)

#### **Potential/Fugitive Emissions**

1. Pollutant Emitted: H107 2. Total Percent Efficiency of Control:					
3. Potential Emissions: 0.43 lb/hour (3-hour average)	1.88 tons/year	4. Synthetically Limited? [ ]			
5. Range of Estimated Fugitive Emissions:	to to	ns/year			
6. Emission Factor: 0.43 lb/hour (3-hour average Reference: Construction permit PSD-FI		7. Emissions Method Code:			
The hydrogen fluoride emissions limit of 0.43 lb. Annual hydrogen fluoride emissions rate = (0.43)	8. Calculation of Emissions (limit to 600 characters):  The hydrogen fluoride emissions limit of 0.43 lb/hr is set by construction permit PSD-FL-265.  Annual hydrogen fluoride emissions rate = (0.43 lb/hr)(8,760 hr/yr)(ton/2,000 lb)  = 1.88 tons/year				
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent ton per year emissions are given for informational purposes only and do not constitute a limit. The above hourly emission rate is based on construction permit PSD-FL-265 and is not affected by the use of coal treated with a binder as covered under this construction permit application.					
Allowable Emissions1 of1					
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable			
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:			
0.43 lb/hour (3-hour average) 0.43 lb/hour 1.88 tons/year					
5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted. As stipulated in construction permit PSD-FL-265, initial compliance tests only are required to show compliance with this emissions limit.					
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This hydrogen fluoride emissions limit is based on a 3-hour average. The hydrogen fluoride limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application. Equivalent ton per year emissions are given for informational purposes only and do not constitute a limit.					

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	Emissions	Unit	Infor	mation	Section	1	of	5	
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## H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation \_\_\_1\_\_ of \_\_\_2\_\_

1.	Visible Emissions Subtype: V10	2. Basis for Allowable C	pacity: [X] Other
3.	1 1 3	sceptional Conditions:	% min/hour
4.	Method of Compliance: Compliance with t using a continuous opacity monitor (COM).		will be demonstrated
5.	Visible Emissions Comment (limit to 200 c on a 6-minute block average and is based or malfunction. The VE limit and compliance as those included in construction permit PS coal treated with a binder as covered under	n excluding periods of start determination methods given D-FL-265 and are not affect	up, shutdown and en here are the same sted by the use of

## H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation \_\_\_2\_\_ of \_\_\_2\_\_

1.	Visible Emissions Subtype: V20	2. Basis for Allowable O	pacity:		
		[X] Rule	[ ] Other		
3.	Requested Allowable Opacity:				
	Normal Conditions: 20 % Ex	ceptional Conditions:	27 %		
	Maximum Period of Excess Opacity Allowe	ed:	6 min/hour		
4.	Method of Compliance: Compliance with t	he visible emissions limit v	vill be demonstrated		
	using a continuous opacity monitor (COM).				
5.	Visible Emissions Comment (limit to 200 c	•			
	on a 6-minute block average and is based or		<b>A</b> *		
	malfunction. This visible emissions limit is	s from NSPS Subpart Da. T	he VE limit and		
	compliance determination methods are not affected by the use of coal treated with a binder				
	as covered under this construction permit application.				

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<b>Emissions</b>	Unit	<b>Information Sec</b>	ction 1	of	5
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## I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor1_ of5_				
1. Parameter Code: VE	2. Pollutant(s):			
3. CMS Requirement:	[X] Rule [ ] Other			
4. Monitor Information:				
Manufacturer: KVB/MIP				
Model Number: LM3086EPA3	Serial Number: 730217			
5. Installation Date:	6. Performance Specification Test Date:			
	June 10, 2002			
7. Continuous Monitor Comment (limit to 200	characters):			
	NAMED INTO DAY OF THE OWN			

## I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

<u>Continuous Monitoring System:</u> Continuous Monitor \_\_\_2\_ of \_\_\_5\_

1.	Parameter Code: EM	2. Pollutant(s): CO
3.	CMS Requirement:	[ ] Rule [X] Other
4.	Monitor Information:	
	Manufacturer: TECO	
	Model Number: 48C	Serial Number: 48C-70175-365
5.	Installation Date:	6. Performance Specification Test Date:
		June 10, 2002
7.	Continuous Monitor Comment (limit to 200 construction permit PSD-FL-265.	characters): Use of CEMs required by

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<b>Emissions</b>	Unit	Infor	mation	Section	1	of	5	

# I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

<b>Continuous Monitoring System:</b> Continuous	Monitor3 of5							
1. Parameter Code: EM	2. Pollutant(s): NOX							
3. CMS Requirement:	[X] Rule [ ] Other							
4. Monitor Information:								
Manufacturer: TECO								
Model Number: 42C	Serial Number: 42C-69028-362							
5. Installation Date:	6. Performance Specification Test Date:							
	June 10, 2002							
7. Continuous Monitor Comment (limit to 20)	0 characters):							
	·							
I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)  Continuous Monitoring System: Continuous Monitor4_ of5_								
1. Parameter Code: EM	2. Pollutant(s): SO2							
3. CMS Requirement:	[X] Rule [ ] Other							
4. Monitor Information:								
Manufacturer: TECO								
Model Number: 43C	Serial Number: 43C-69843-364							
5. Installation Date:	6. Performance Specification Test Date: June 10, 2002							
7. Continuous Monitor Comment (limit to 20	0 characters):							

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	Emissions	Unit I	nformation	Section	1	of	5	
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## I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 5 of 5

1. Parameter Code: CO2 2. Pollutant(s):

3. CMS Requirement: [X] Rule [] Other

4. Monitor Information:
 Manufacturer: CAI
 Model Number: ZRH Serial Number: AOXO603T

5. Installation Date: 6. Performance Specification Test Date:
 June 10, 2002

7. Continuous Monitor Comment (limit to 200 characters):

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<b>Emissions</b>	Unit	Infori	nation	Section	1	of	5

### J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

### **Supplemental Requirements**

l.	Process Flow Diagram
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
6	Procedures for Startup and Shutdown
0.	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
7.	Operation and Maintenance Plan
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID:Attachment A [ ] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [X] Not Applicable
10	. Supplemental Requirements Comment: Supplemental documents were included with the
Ti	tle V renewal application for this facility which was submitted on June 19, 2003. Because
1	e proposed change covered by this construction permit application will not affect the
1	cuments submitted with the Title V Renewal Application, Waiver Requested is checked for
	ose documents. This is in accordance with the application instructions. Because all
_	plicable Additional Supplemental Requirements for Title V Air Operation Permit
	oplications were submitted with the June 19, 2003 submittal and will not change as a result this permit application, Not Applicable is indicated for those items.
"	and permit application, the rapplication to material for those items.

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<b>Emissions</b>	Unit	Information	Section	1	of	5	

## Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [ X ] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part – Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

Emissions Unit Information Section 2 of 5	En	nissions	Unit	Infor	mation	Section	2	of	5
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#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

## A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

#### **Emissions Unit Description and Status**

1.	Type of Emission	s Unit Addressed in This	Section: (Check one)					
[ X	process or produ		n addresses, as a single emiss hich produces one or more a n point (stack or vent).	, •				
[	] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.							
[	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.							
2.	Regulated or Unre	egulated Emissions Unit	? (Check one)					
[ X	The emissions uemissions unit.	nit addressed in this Em	issions Unit Information Sec	etion is a regulated				
]	[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.							
4.	4. Description of Emissions Unit Addressed in This Section (limit to 60 characters): NGS - Circulating Fluidized Bed Boiler No. 1							
4.	Emissions Unit Io ID: 027	lentification Number:		[ ] No ID [ ] ID Unknown				
5.	Emissions Unit Status Code:	6. Initial Startup Date: May 27, 2002	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [X]				
9.		g of coal treated with a la	Characters) This construction tex binder in NGS CFB Boil					
1								

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Emissions	Unit	Information	Section	2	of	5	

#### **Emissions Unit Control Equipment**

3. Control Equipment/Method Description (Limit to 200 characters per device or method):

This application does not affect the control equipment/method for this emissions unit.

Initial sulfur dioxide (SO<sub>2</sub>) control is achieved through limestone injection into the circulating fluidized bed (CFB) boiler. Further SO<sub>2</sub> control is achieved using an add-on spray dryer absorber. Calcium acting to control SO<sub>2</sub> may be introduced into the CFB or spray dryer from a variety of sources, such as crushed limestone, slaked lime, bed ash and fly ash.

Particulate matter (PM) consisting of flyash, the  $SO_2$  control reaction products and unreacted calcium oxide is controlled using a fabric filter dust collector downstream of the spray dryer. Selective non catalytic reduction (SNCR) is used, as needed, to reduce oxides of nitrogen ( $NO_x$ ) emissions by reacting ammonia with  $NO_x$  to form molecular nitrogen and water.

2. Control Device or Method Code(s): 041, 013, 018, and 107

#### **Emissions Unit Details**

1.	Package Unit:		
	Manufacturer:	Model Number:	
2.	Generator Nameplate Rating: 297.5	MW	
3.	Incinerator Information: Not applicable		
	Dwell Temperature:		°F
	Dwell Time:		seconds
	Incinerator Afterburner Temperature:		°F

<b>Emissions Unit Information Section</b>	2	of	5
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## B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

## **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate: 2,	764	mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr	tons/day
3.	Maximum Process or Through	put Rate:	
4.	Maximum Production Rate:	100	
5.	Requested Maximum Operation	g Schedule:	
		24 hours/day	7 days/week
		52 weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule Cinput rate is given in construct construction permit only for putests. Continuous compliance	ion permit PSD-FL-265. The urposes of determining capac	e rate is included in the ity during compliance stack

## C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

## **List of Applicable Regulations**

Emissions unit applicable regulations hereby incorporates by reference the Title V core list of applicable regulations that all Title V sources are presumptively subject	State: Rule 62-204.800(17) - Specified Subparts of 40 CFR 73 Adopted by Reference
Applicable regulations specified in construction permit PSD-FL-265 are hereby incorporated by reference	State: Rule 62-204.800(18) - Specified Subparts and Appendices of 40 CFR 75 Adopted by Reference
Federal: 40 CFR 60 Subpart Da – Standards of Performance for Electric Utility Steam Gernerators for Which Construction is Commenced after September 18, 1978	State: Rule 62-204.800(20) - Specified Portions of 40 CFR 77 Adopted by Reference
Federal: 40 CFR 60 Subpart A – General Provisions	State: Rule 62-214 – Requirements for Sources Subject to the Federal Acid Rain Program
Federal: 40 CFR 72 – Permits Regulation (Acid Rain)	State: Rule 62-296.405 – Fossil Fuel Steam Generators with More Than 250 Million Btu per Hour Heat Input
Federal: 40 CFR 73 – Sulfur Dioxide Allowance System	State: Rule 62-296.702 – Fossil Fuel Steam Generators
Federal: 40 CFR 75 – Continuous Emission Monitoring	State: Rule 62-297.401 – Compliance Test Methods
Federal: 40 CFR 77 – Excess Emissions	Local: Jacksonville Environmental Protection Board, Rule 2 – Air Pollution
State: Rule 62-204.800(8)(b)2 - 40 CFR 60 Subpart Da adopted by reference	Ordinance Code, City of Jacksonville (JOC), Title X, Chapter 376, Odor Control
State: Rule 62-204.800(8)(c) - NSPS Controlling Standards	Ordinance Code, City of Jacksonville (JOC), Title V, Chapter 362, Air and Water Pollution.
State: Rule 62-204.800(8)(d) – General Provisions of 40 CFR 60 Subpart A adopted	
State: Rule 62-204.800(8)(e) – Specified appendices of 40 CFR Part 60 adopted	
State: Rule 62-204.800(16) – Specified Subparts and Appendices of 40 CFR 72 Adopted by Reference	

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Emissions Unit Information Section \_\_\_2\_\_ of \_\_\_5\_\_

## D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

### **Emission Point Description and Type**

l	ification of Point on Pl Diagram? EU027	ot Plan or	2. Emission Point Type Code: 1		
	riptions of Emission Potharacters per point):	Points Comprising this Emissions Unit for VE Tracking (limit to			
NGS	umbers or Descriptions - Circulating Fluidize culating Fluidized Bed	d Bed Boiler No	. 2 (EU026) share	es a common stack wi	th NGS
	rate flues, one for each	•	CO21). The com	mon stack contains tv	•0
	arge Type Code:	6. Stack Heig	ht:	7. Exit Diameter:	
	V	495	feet	15.0	feet
8. Exit	Temperature:	9. Actual Vol	umetric Flow	10. Water Vapor:	
144°	F (approx)	Rate:	mmorr) softw		%
11. Max	imum Dry Standard Flo		pprox) acfm 12. Nonstack Er	 mission Point Height:	
		dscfm			feet
13. Emis	ssion Point UTM Coord	linates:			
Zone	e: 17 E	ast (km): 446.6	70 Norti	h (km): 3,365.070	
14. Emission Point Comment (limit to 200 characters): NGS – Circulating Fluidized Bed Boiler No. 2 (EU026) shares a common stack with NGS – Circulating Fluidized Bed Boiler No. 1 (EU027). The common stack contains two separate flues, one for each CFB boiler.					

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Emissions	Unit	<b>Information Section</b>	2	of	5	

## E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

(All Emissions Units)					
Segment Description and Ra	ite: Segment	_1 of2			
2. Segment Description (Process/Fuel Type) (limit to 500 characters): Coal treated with a binder used in Circulating Fluidized Bed Boiler No. 1					
4. Source Classification Cod 10100218	e (SCC):	3. SCC Units	: Tons Burned		
4. Maximum Hourly Rate: 138 (approx)	5. Maximum 1,211,000	Annual Rate: ) (approx)	6. Estimated Annual Activity Factor:		
8. Maximum % Sulfur: 8 (approx)	8. Maximum		9. Million Btu per SCC Unit: 20 (approx)		
10. Segment Comment (limit includes segment information application are in addition to still apply.	affected by the a	pplication. The			
E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)  Segment Description and Rate: Segment2_ of2_					
<ol> <li>Segment Description (Process/Fuel Type) (limit to 500 characters):         A blend of coal treated with a binder and other permitted fuels used in Circulating Fluidized Bed Boiler No. 1     </li> </ol>					
4. Source Classification Cod 10100299	4. Source Classification Code (SCC): 3. SCC Units: Tons Burned				
4. Maximum Hourly Rate: 138 (approx)	4. Maximum Hourly Rate: 5. Maximum Annual Rate: 6. Estimated Annual Activ		6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur: 8 (approx)	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 20 (approx)		
10. Segment Comment (limit to 200 characters): This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted segments still apply.					

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## F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
со			EL
NO <sub>X</sub>	107		EL
PM	018		EL
PM <sub>10</sub>	018		EL
SO <sub>2</sub>	041	013	EL
voc			EL
H114	013	018	EL
PB	018		EL
SAM	041	013	EL
H107	013		EL
H106	013		NS
HAPS			NS

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<b>Emissions Unit Information Section</b>	2	_ of _	5	
Pollutant Detail Information Page	1	of	15	

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

#### **Potential/Fugitive Emissions**

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:					
<ul> <li>3. Potential Emissions:</li> <li>350 lb/hour (24-hour block average)</li> <li>5. Range of Estimated Fugitive Emissions:</li> </ul>	1,533 tons/year  4. Synthetically Limited? [ ]					
	to tons/year					
6. Emission Factor: 350 lb/hr (24-hour block a Reference: Construction permit PSD-	Method Code:					
The CO emissions limit of 350 lb/hour on a 24-lis set by construction permit PSD-FL-265.	8. Calculation of Emissions (limit to 600 characters): The CO emissions limit of 350 lb/hour on a 24-hour average (excluding startup and shutdown) is set by construction permit PSD-FL-265. The CO emissions limit of 1,533 tons/year is set by construction permit PSD-FL-265.					
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The above hourly and annual emission rates are set by construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application.						
Allowable Emissions Allowable Emissions	_1 of2					
2. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:					
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:					
350 lb/hr (24-hour block average)	350 lb/hour 1,533 tons/year					
5. Method of Compliance (limit to 60 characte will be demonstrated using CEMS.	rs): Compliance with the CO emission limits					
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This CO emissions limit is based on a 24-hour block average, excluding periods of startup, shutdown and malfunction. The 24-hour block average is calculated from midnight to midnight. The CO limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application.						

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En	nissions Unit Information Section2	of	_5		
Pol	llutant Detail Information Page2	of _	_15		
	G. EMISSIONS UNIT POLLUT	ΓΑΝΊ	Γ DETAIL INFORMATION		
	(Regulated En	nissi	ons Units -		
	<b>Emissions-Limited and Preconst</b>	truct	ion Review Pollutants Only)		
All	owable Emissions Allowable Emissions	_2	_ of2		
2.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable		
	OTHER		Emissions:		
2.	Requested Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:		
	1,533 tons per year		lb/hour 1,533 tons/year		
5.	Method of Compliance (limit to 60 character	rs): C	compliance with the annual CO emissions		
	limit will be demonstrated by summing the h	ourl	y CO emission rate data from the CEMS.		
6.	6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The				
	CO limit and compliance determination methods given here are the same as those included				
	in construction permit PSD-FL-265 and are	not a	ffected by the use of coal treated with a		
	binder as covered under this construction permit application.				

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**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive Emissions						
1. Pollutant Emitted: NO <sub>X</sub>	2. Total Percent Efficie	ency of Control:				
3. Potential Emissions:		4. Synthetically				
249 lb/hour (30-dary rolling average)	1,090 tons/year	Limited? [ ]				
5. Range of Estimated Fugitive Emissions:						
[ ] 1 [ ] 2 [ ] 3		ns/year				
6. Emission Factor: 0.09 lb/mmBtu (30-day ro	lling average)	7. Emissions				
Reference: Construction permit PSD-F	L-265	Method Code: 0				
8. Calculation of Emissions (limit to 600 chara	•					
The NO <sub>x</sub> Emissions limit of 0.09 lb/mmBtu is so	-	PSD-FL-265.				
The heat input rate to EU026 is 2,764 mmBtu/h		L. 71				
Hourly NO <sub>x</sub> emissions rate = $(0.09 \text{ lb/mmBtu})(2 \text{ Annual NO}_x \text{ emissions rate} = (0.09 \text{ lb/mmBtu})(2 \text{ lb/mmBtu})(3 \text{ lb/mmBtu})$						
= 1,090  ton/yr	2,704 IIIIIDtu/III)(6,700 I	11/y1)(t011/2,000 10) —				
1,000 toldy.						
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 charac	ters): Fauivalent				
pound per hour and ton per year emissions are g	•	, <u>.</u>				
not constitute limits. The above hourly and ann						
limit given in construction permit PSD-FL-265						
with a binder as covered under this construction	permit application.					
Allowable Emissions Allowable Emissions	_1of2					
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable				
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	 ble Emissions:				
0.09 lb/mmBtu on a 30-day rolling average	•					
	249 lb/hour					
5. Method of Compliance (limit to 60 characte	rs): Compliance with the	e NO <sub>x</sub> emission limit				
will be demonstrated using CEMs.						
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):						
This NO <sub>x</sub> emissions limit is based on a 30-day rolling average, excluding periods of						
startup, shutdown and malfunction. The NO <sub>x</sub> limit and compliance determination methods						
given here are the same as those included in construction permit PSD-FL-265 and are not						
affected by the use of coal treated with a bin		-				
application. Equivalent pound per hour and	• •	re given for				
informational purposes only and do not constitute limits.						

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Emissions Unit Information Section2 of5					
Pollutant Detail Information Page4 of15					
Allowable Emissions Allowable Emissions	2 of2				
Basis for Allowable Emissions Code:     RULE	2. Future Effective Date of Allowable Emissions:				
3. Requested Allowable Emissions and Units: 0.6 lb/mmBtu on a 30-day rolling average	4. Equivalent Allowable Emissions: 1,658 lb/hour 7,264 tons/year				
5. Method of Compliance (limit to 60 characters	s):				
6. Allowable Emissions Comment (Desc. of Op	perating Method) (limit to 200 characters):				

This NO<sub>x</sub> emissions limit is based on a 30-day rolling average, excluding periods of startup, shutdown and malfunction. This NO<sub>x</sub> emissions limit is from NSPS Subpart Da. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

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Pollutant Detail Information Page	5_	_ of _	15		
G. EMISSIONS UNIT	POLL	UTAN	T DETAII	LINFORMATIO	ON
(Reg	ulated	Emissi	ions Units -	•	

#### Potential/Fugitive Emissions

Detential Contactors				
Potential Emissions:	•	4. Synthetically		
30 lb/hour (3-hour average)	133 tons/year	Limited? [ ]		
Range of Estimated Fugitive Emissions:				
[ ] 1 [ ] 2 [ ] 3	to to:	ns/year		
Emission Factor: 0.011 lb/mmBtu (3-hour	average)	7. Emissions		
Reference: Construction permit PSD-	FL-265	Method Code:		
	T E 200	0		
Calculation of Emissions (limit to 600 chara	racters):			
ne PM Emissions limit of 0.011 lb/mmBtu is	set by construction permit	PSD-FL-265.		
ne heat input rate to EU026 is 2,764 mmBtu/h				
•	` '			
,	(2,764 mmBtu/hr)(8,760 l	$\frac{1}{1} (\frac{1}{1} - \frac{1}{1}) = \frac{1}{1} $		
= 133  ton/yr				
Pollutant Potential/Fugitive Emissions Com	nment (limit to 200 charac	ters): Equivalent		
ound per hour and ton per year emissions are	given for informational pu	rposes only and do		
t constitute limits. The above hourly and ann	nual emission rates are bas	sed on the lb/mmBtu		
limit given in construction permit PSD-FL-265 and are not affected by the use of coal treated				
with a binder as covered under this construction permit application.				
Emission Factor: 0.011 lb/mmBtu (3-hour Reference: Construction permit PSD-Calculation of Emissions (limit to 600 charme PM Emissions limit of 0.011 lb/mmBtu is the heat input rate to EU026 is 2,764 mmBtu/bourly PM emissions rate = (0.011 lb/mmBtu) emual PM emissions rate = (0.011 lb/mmBtu) = 133 ton/yr  Pollutant Potential/Fugitive Emissions Combund per hour and ton per year emissions are got constitute limits. The above hourly and annuit given in construction permit PSD-FL-265	average) FL-265 facters): set by construction permit hr. (2,764 mmBtu/hr) = 30 lb. (2,764 mmBtu/hr)(8,760 lmment (limit to 200 characters); given for informational purpose and are not affected by the	7. Emissions Method Code 0 PSD-FL-265. /hr nr/yr)(ton/2,000 lb) ters): Equivalent poses only and do sed on the lb/mmBt		

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

#### Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable
OTHER	Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.011 lb/mmBtu based on a 3-hour average	30 lb/hour 133 tons/year

- 5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted. Compliance testing while firing petroleum coke will be conducted quarterly for the first two years of operation and then annually thereafter. The quarterly and annual testing may be conducted while firing coal if petroleum coke has been fired for less than 100 hours during the previous quarter or less than 400 hours during the previous federal fiscal year.
- 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This PM emissions limit is based on a 3-hour average. The PM limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

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Emissions Unit Information Section 2 of 5 Pollutant Detail Information Page 6 of 15 Allowable Emissions Allowable Emissions 2 of 1. Basis for Allowable Emissions Code: 2. Future Effective Date of Allowable **RULE Emissions:** 3. Requested Allowable Emissions and Units: 4. Equivalent Allowable Emissions: 0.03 lb/mmBtu based on a 3-hour average 83 lb/hour 363 tons/year 5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted. 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This PM emissions limit is based on a 3-hour average. The PM emissions limit is from NSPS Subpart Da. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

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Emissions-Limited and Preconstruction Review Pollutants Only)

#### **Potential/Fugitive Emissions**

	,			
1. Pollutant Emitted: PM <sub>10</sub>	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:		4. Synthetically		
30 lb/hour (3-hour average)	133 tons/year	Limited? [ ]		
5. Range of Estimated Fugitive Emissions:	100 00110/ 1011			
[ ] 1 [ ] 2 [ ] 3	to to	ns/year		
6. Emission Factor: 0.011 lb/mmBtu (3-hour a	verage)	7. Emissions		
Reference: Construction permit PSD-I	EI 265	Method Code:		
Reference. Construction permit FSD-1	rL-203	0		
8. Calculation of Emissions (limit to 600 characters): The PM <sub>10</sub> Emissions limit of 0.011 lb/mmBtu is set by construction permit PSD-FL-265. The heat input rate to EU026 is 2,764 mmBtu/hr. Hourly PM <sub>10</sub> emissions rate = (0.011 lb/mmBtu)(2,764 mmBtu/hr) = 30 lb/hr Annual PM <sub>10</sub> emissions rate = (0.011 lb/mmBtu)(2,764 mmBtu/hr)(8,760 hr/yr)(ton/2,000 lb) = 133 ton/yr				
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits. The above hourly and annual emission rates are based on the lb/mmBtu limit given in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application.				
Allowable Emissions Allowable Emissions				
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable		
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:		
0.011 lb/mmBtu based on a 3-hour average	30 lb/hour	133 tons/year		
5. Method of Compliance (limit to 60 character compliance tests while firing coal and while Compliance testing while firing petroleum of annual compliance test may be conducted where the for less than 400 hours during the previous	e firing petroleum coke w coke will be conducted an while firing coal if petrolet federal fiscal year.	ere conducted. mually thereafter. The um coke has been fired		
6. Allowable Emissions Comment (Desc. of Comment This PM <sub>10</sub> emissions limit is based on a 3-h determination methods given here are the sate PSD-FL-265 and are not affected by the use this construction permit application. Equivalent are given for informational purposes only as	nour average. The PM <sub>10</sub> linguage as those included in common treated with a biral alent pound per hour and	mit and compliance construction permit nder as covered under ton per year emissions		

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#### **Emissions-Limited and Preconstruction Review Pollutants Only)**

#### **Potential/Fugitive Emissions**

1. Pollutant Emitted: SO <sub>2</sub>	2. Total Percent Efficiency of Control:			
3. Potential Emissions:		4. Synthetically		
553 lb/hour (24-hour block average)	1,816 tons/year	Limited? [ ]		
5. Range of Estimated Fugitive Emissions:	_			
[ ] 1	to to:	ns/year		
6. Emission Factor: 0.20 lb/mmBtu (24-hour)	block average) and	7. Emissions		
0.15 lb/mmBtu (30-day r	olling average)	Method Code:		
Reference: Construction permit PSD-1	FL-265	0		
8. Calculation of Emissions (limit to 600 chara	acters):			
The SO <sub>2</sub> Emissions limits of 0.20 lb/mmBtu (24	4-hour block average) and	0.15 lb/mmBtu (30-		
day rolling average) are set by construction per	mit PSD-FL-265.			
The heat input rate to EU026 is 2,764 mmBtu/h				
Hourly $SO_2$ emissions rate (24-hour average) =	•	•		
Hourly $SO_2$ emissions rate (30-day average) = (	•			
Annual SO <sub>2</sub> emissions rate = $(0.15 \text{ lb/mmBtu})(2,764 \text{ mmBtu/hr})(8,760 \text{ hr/yr})(\text{ton/2,000 lb})$				
= 1,816 ton/yr				
9. Pollutant Potential/Fugitive Emissions Com				
pound per hour and ton per year emissions are g	given for informational pu	rposes only and do		
not constitute limits. The above hourly and annual emission rates are based on the lb/mmBtu				
limit given in construction permit PSD-FL-265 and are not affected by the use of coal treated				
with a binder as covered under this construction permit application.				
Allowable Emissions Allowable Emissions	1 of 3			

1	. Basis for Allowable Emissions Code:	Z.	Future Effective Date	of Allowable		
	OTHER		Emissions:			
3	. Requested Allowable Emissions and Units:	4.	. Equivalent Allowable Emissions:			
	0.20 lb/mmBtu (24-hour block average)		553 lb/hour	tons/year		
5	. Method of Compliance (limit to 60 character	s):	Compliance with the SC	O <sub>2</sub> emission limit		
	will be demonstrated using CEMs.					
6	6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):					
	This SO <sub>2</sub> emissions limit is based on a 24-ho	ur b	lock average, excluding	g periods of startup,		
	shutdown and malfunction. The 24-hour blo	ck a	verage is calculated from	m midnight to		
	midnight. The SO <sub>2</sub> limit and compliance det	erm	ination methods given h	nere are the same		
	as those included in construction permit PSD	-FL	-265 and are not affecte	ed by the use of		
	coal treated with a binder as covered under this construction permit application.					
	Equivalent pound per hour and ton per year e	mis	sions are given for infor	rmational purposes		
	only and do not constitute limits.		-	•		

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Allowable Emissions Allowable Emissions	2 of3
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.15 lb/mmBtu (30-day rolling average)	415 lb/hour 1,816 tons/year
5. Method of Compliance (limit to 60 character will be demonstrated using CEMs.	s): Compliance with the SO <sub>2</sub> emission limit
and malfunction. The SO <sub>2</sub> limit and compliant same as those included in construction permit of coal treated with a binder as covered under	verage, excluding periods of startup, shutdown nee determination methods given here are the t PSD-FL-265 and are not affected by the use
Allowable Emissions Allowable Emissions	3 of3
Basis for Allowable Emissions Code:     RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
0.6 lb/mmBtu (30-day rolling average)	1,658 lb/hour 7,264 tons/year
5. Method of Compliance (limit to 60 character	
6. Allowable Emissions Comment (Desc. of Op This SO <sub>2</sub> limit is based on a 30-day rolling a and malfunction. This SO <sub>2</sub> emissions limit is per hour and ton per year emissions are given constitute limits.	verage, excluding periods of startup, shutdown s from NSPS Subpart Da. Equivalent pound

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G. EMISSIONS UNIT	POLLU	JTANI	Γ DETA	IL INFOR	MATION
(Regu	ulated F	Emissic	ons Units	<b>3</b> -	
<b>Emissions-Limited and</b>	Precon	struct	ion Revi	ew Polluta	nts Only)

## Potential/Fugitive Emissions

rotentian rugitive Emissions		
1. Pollutant Emitted: VOC	2. Total Percent Efficie	ency of Control:
3. Potential Emissions:		4. Synthetically
14 lb/hour (3-hour average)	61.5 tons/year	Limited? [ ]
5. Range of Estimated Fugitive Emissions:		<u> </u>
	to to	ns/year
6. Emission Factor: 14 lb/hour (3-hour average	e) and 61.5 tons/year	7. Emissions
Reference: Construction permit PSD-l	FL-265	Method Code: 0
8. Calculation of Emissions (limit to 600 chara	•	
The VOC emissions limit of 14 lb/hour is set by	•	
The VOC emissions limit of 61.5 tons/year is se	t by construction permit	PSD-FL-265.
9. Pollutant Potential/Fugitive Emissions Com	ment (limit to 200 charac	eters): The above
hourly and annual emission rates are based on co	`	•
affected by the use of coal treated with a binder	as covered under this cor	nstruction permit
application.		
Allowable Emissions Allowable Emissions	_1 of2	
1. Basis for Allowable Emissions Code:	2. Future Effective Da	ate of Allowable
OTHER	Emissions:	
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:
14 lb/hr (3-hour average)	14 lb/hour	61.5 tons/year
5. Method of Compliance (limit to 60 characte		
compliance tests while firing coal and while		
Compliance testing will be conducted once	within every five years th	ereafter while firing
petroleum coke or coal.		
6. Allowable Emissions Comment (Desc. of O	<del>-</del>	
This VOC emissions limit is based on a 3-hodetermination methods given here are the sa	_	-
PSD-FL-265 and are not affected by the use		-
this construction permit application.	of cour ficated with a off	idei as covered under
tonon action perime approaction		

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Pollutant Detail Information Page	11	_ of	15	
Allowable Emissions Allowable Emission	ns	2	of	2

1.	Basis for Allowable Emissions Code:	2.	Future Effective Date	of Allowable	
	OTHER		Emissions:		
3.	Requested Allowable Emissions and Units:	4.	Equivalent Allowable	Emissions:	
	61.5 tons per year		lb/hour	61.5 tons/year	
5.	5. Method of Compliance (limit to 60 characters): Compliance with the annual limit is				

- 6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The VOC limit and compliance determination methods given here are the same as those
- VOC limit and compliance determination methods given here are the same as those included in construction permit PSD-FL-265 and are not affected by the use of coal treated with a binder as covered under this construction permit application.

Emissions Unit Information Section	ı2	of	_5	
Pollutant Detail Information Page	12	_ of _	15	

Emissions-Limited and Preconstruction Review Pollutants Only)

#### **Potential/Fugitive Emissions**

1. Pollutant Emitted: H114	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:		4. Synthetically		
0.03 lb/hour (6-hour average)	0.13 tons/year	Limited? [ ]		
	0.13 tons/year	Emmed: [ ]		
5. Range of Estimated Fugitive Emissions:				
		ns/year		
6. Emission Factor: 0.03 lb/hour (6-hour aver	age)	7. Emissions		
Reference: Construction permit PSD-	FL-265	Method Code: 0		
8. Calculation of Emissions (limit to 600 chara	acters):			
The mercury emissions limit of 0.03 lb/hour is	set by construction permit	PSD-FL-265.		
Annual mercury emissions rate = $(0.03 \text{ lb/hr})(8)$	.760  hr/yr)(ton/2,000 lb) =	= 0.13 tons/year		
		<b>,</b>		
9. Pollutant Potential/Fugitive Emissions Com	nment (limit to 200 charac	ters): Equivalent ton		
per year emissions are given for informational p	purposes only and do not o	constitute a limit. The		
above hourly emission rate is based on construction permit PSD-FL-265 and is not affected by				
the use of coal treated with a binder as covered	<del>-</del>			
Allowable Emissions Allowable Emissions	1 of 1			
Allowable Emissions Allowable Emissions _				
1. Basis for Allowable Emissions Code:	2. Future Effective Da	ate of Allowable		
OTHER	Emissions:			
3. Requested Allowable Emissions and Units:	4. Equivalent Allowal	ble Emissions:		
0.03 lb/hour (6-hour average)	0.03 lb/hour	0.12 tomakroom		
	0.03 10/nour	0.13 tons/year		
5. Method of Compliance (limit to 60 character	ers): Using appropriate EP	A Methods, initial		
compliance tests while firing coal and while	e firing petroleum coke w	ere conducted. As		
stipulated in construction permit PSD-FL-2				
show compliance with this emissions limit.				
		200 1		
6. Allowable Emissions Comment (Desc. of C				
This mercury emissions limit is based on a				
compliance determination methods given h				
construction permit PSD-FL-265 and are no				
binder as covered under this construction pe				
emissions are given for informational purpo	oses only and do not const	itute a limit.		

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#### **Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions				
1. Pollutant Emitted: PB	2. Total Percent Effici	ency of Control:		
3. Potential Emissions:  0.07 lb/hour (3-hour average)  5. Range of Estimated Fugitive Emissions:	0.31 tons/year	4. Synthetically Limited? [ ]		
6. Emission Factor: 0.07 lb/hour (3-hour avera Reference: Construction permit PSD-I	7. Emissions Method Code:			
8. Calculation of Emissions (limit to 600 chara The lead emissions limit of 0.07 lb/hour is set b Annual lead emissions rate = (0.07 lb/hr)(8,760	y construction permit PS			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Equivalent ton per year emissions are given for informational purposes only and do not constitute a limit. The above hourly emission rate is based on construction permit PSD-FL-265 and is not affected by the use of coal treated with a binder as covered under this construction permit application.				
Allowable Emissions Allowable Emissions	_1of1			
Basis for Allowable Emissions Code:     OTHER	2. Future Effective D Emissions:	ate of Allowable		
3. Requested Allowable Emissions and Units: 0.07 lb/hr (3-hour average)	4. Equivalent Allowa 0.07 lb/hour			
5. Method of Compliance (limit to 60 character compliance tests while firing coal and while stipulated in construction permit PSD-FL-2 show compliance with this emissions limit.	e firing petroleum coke w	ere conducted. As		
6. Allowable Emissions Comment (Desc. of Control This lead emissions limit is based on a 3-hounded determination methods given here are the sate PSD-FL-265 and are not affected by the use this construction permit application. Equivating informational purposes only and do not control to the sate of the sat	our average. The lead liminate as those included in a confident of coal treated with a billent ton per year emission.	it and compliance construction permit nder as covered under		

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**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive Emissions		
1. Pollutant Emitted: SAM	ency of Control:	
3. Potential Emissions:		4. Synthetically
1.1 lb/hour (3-hour average)	4.82 tons/year	Limited? [ ]
5. Range of Estimated Fugitive Emissions:		
[]1 []2 []3		ns/year
6. Emission Factor: 1.1 lb/hour (3-hour average	ge)	7. Emissions
Reference: Construction permit PSD-l		Method Code: 0
8. Calculation of Emissions (limit to 600 chara	•	
The sulfuric acid mist emissions limit of 1.1 lb/	•	-
Annual sulfuric acid mist emissions rate = $(1.1)$	tons/year	JUU 10)
- 4.82	ions/year	
9. Pollutant Potential/Fugitive Emissions Com	•	•
per year emissions are given for informational pabove hourly emission rate is based on construction	<del>-</del>	
the use of coal treated with a binder as covered	-	_
Allowable Emissions Allowable Emissions	_1of1	
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:
1.1 lbs/hour (3-hour average)	1.1 lb/hour	4.82 tons/year
5. Method of Compliance (limit to 60 characte		
compliance tests while firing coal and while		
stipulated in construction permit PSD-FL-2		
show compliance with this emissions limit. data is used as a surrogate to indicate compl	_	
6. Allowable Emissions Comment (Desc. of O This sulfuric acid mist emissions limit is ba		,
limit and compliance determination method		
construction permit PSD-FL-265 and are no		
binder as covered under this construction pe	•	
emissions are given for informational purpo		

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Pollutant Detail Information Page	15	of	15	

## G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

## (Regulated Emissions Units -

#### **Emissions-Limited and Preconstruction Review Pollutants Only)**

2. Total Percent Efficiency of Control:

#### **Potential/Fugitive Emissions**

1. Pollutant Emitted: H107

3. Potential Emissions:		4. Synthetically		
0.43 lb/hour (3-hour average)	1.88 tons/year	Limited? [ ]		
5. Range of Estimated Fugitive Emissions:				
[ ] 1 _ [ ] 2 [ ] 3		ns/year		
6. Emission Factor: 0.43 lb/hour (3-hour average	ge)	7. Emissions		
Reference: Construction permit PSD-FI	L-265	Method Code: 0		
8. Calculation of Emissions (limit to 600 characters) The hydrogen fluoride emissions limit of 0.43 lb. Annual hydrogen fluoride emissions rate = (0.43) = 1.88 t	/hr is set by construction	•		
9. Pollutant Potential/Fugitive Emissions Commper year emissions are given for informational purabove hourly emission rate is based on construct the use of coal treated with a binder as covered upon the coal treat	urposes only and do not of ion permit PSD-FL-265	constitute a limit. The and is not affected by		
Allowable Emissions Allowable Emissions	_lofl			
Basis for Allowable Emissions Code:     OTHER	2. Future Effective Da Emissions:	ate of Allowable		
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:		
0.43 lb/hour (3-hour average)	0.43 lb/hour	1.88 tons/year		
5. Method of Compliance (limit to 60 characters): Using appropriate EPA Methods, initial compliance tests while firing coal and while firing petroleum coke were conducted. As stipulated in construction permit PSD-FL-265, initial compliance tests only are required to show compliance with this emissions limit.				
6. Allowable Emissions Comment (Desc. of Op This hydrogen fluoride emissions limit is bas limit and compliance determination methods construction permit PSD-FL-265 and are not binder as covered under this construction per emissions are given for informational purpos	sed on a 3-hour average. given here are the same affected by the use of comit application. Equiva	The hydrogen fluoride as those included in oal treated with a lent ton per year		

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Emissions	Unit	Inform	ation	Section	2	of	5	
			auvu	Section	_	V.	J	

### H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

	(Only regulated Emissions Only Subject to a VE Emittation)				
<u>Vi</u>	Visible Emissions Limitation: Visible Emissions Limitation1 of2				
1.	Visible Emissions Subtype: V10	2. Basis for Allowable Opacity:  [ ] Rule [ X ] Other			
3.	1 1	acceptional Conditions: % ed: min/hour			
4.	Method of Compliance: Compliance with t using a continuous opacity monitor (COM)	he visible emissions limit will be demonstrated			
5.	on a 6-minute block average and is based of malfunction. The VE limit and compliance	haracters): The visible emissions limit is based in excluding periods of startup, shutdown and determination methods given here are the same D-FL-265 and are not affected by the use of this construction permit application.			
<u>Vi</u>	H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)  Visible Emissions Limitation: Visible Emissions Limitation2 of2				
1.	Visible Emissions Subtype: V20	2. Basis for Allowable Opacity: [X] Rule [ ] Other			
3.	Requested Allowable Opacity: Normal Conditions: 20 % Ex Maximum Period of Excess Opacity Allow	sceptional Conditions: 27 % 6 min/hour			
4.	Method of Compliance: Compliance with using a continuous opacity monitor (COM)	the visible emissions limit will be demonstrated.			
5.	· ·	characters): The visible emissions limit is based in excluding periods of startup, shutdown and is from NSPS Subpart Da.			

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# I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous	Monitor1 of5
1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information:	
Manufacturer: KVB/MIP	
Model Number: LM3086EPA3	Serial Number: 730216
5. Installation Date:	6. Performance Specification Test Date:
	July 14, 2002
7. Continuous Monitor Comment (limit to 20)	0 characters):
I COMMINICATION OF	NAME OF THE OFFICE
	ONITOR INFORMATION
(Only Regulated Emissions Units	s Subject to Continuous Monitoring)

1.	Parameter Code: EM	2. Pollutant(s): CO		
3.	CMS Requirement:	[	] Rule	[X] Other
4.	Monitor Information:			
ĺ	Manufacturer: TECO			
	Model Number: 48C		Serial Nu	mber: 48C-70175-365
5.	Installation Date:	6.	Performance Spe	cification Test Date:
			July	14, 2002
7.	Continuous Monitor Comment (limit to 200 construction permit PSD-FL-265.	cha	racters): Use of C	EMs required by
	tonoutation permit 102 12 200.			

<u>Continuous Monitoring System:</u> Continuous Monitor \_\_\_2\_ of \_\_\_5\_

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Emissions only into mation section	-		•

(Only Regulated Emissions Units Subject to Continuous Monitoring)				
Continuous Monitoring System: Continuous Monitor 3_ of 5_				
1. Parameter Code: EM	2. Pollutant(s): NOX			
3. CMS Requirement:	[X] Rule [ ] Other			
Monitor Information:     Manufacturer: TECO     Model Number: 42C	Serial Number: 42C-69020-362			
5. Installation Date:	6. Performance Specification Test Date: July 14, 2002			
7. Continuous Monitor Comment (limit to 20)	o Characters).			
I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)  Continuous Monitoring System: Continuous Monitor4_ of5_				
1. Parameter Code: EM	2. Pollutant(s): SO2			
3. CMS Requirement:	[X] Rule [ ] Other			
Monitor Information:     Manufacturer: TECO     Model Number: 43C	Serial Number: 43C-69844-364			
5. Installation Date:	6. Performance Specification Test Date: July 14, 2002			
7. Continuous Monitor Comment (limit to 20				

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## I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor 5 of 5

1.	Parameter Code: CO2	2. Pollutant(s):
3.	CMS Requirement:	[X] Rule [ ] Other
4.	Monitor Information:	
	Manufacturer: CAI	
	Model Number: ZRH	Serial Number: AOXO606T
5.	Installation Date:	6. Performance Specification Test Date:
		July 14, 2002
7.	Continuous Monitor Comment (limit to 200	characters):

<b>Emissions</b>	Unit	Inform	nation	Section	2	οf	5
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# J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

## **Supplemental Requirements**

1.	Process Flow Diagram
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
7.	Operation and Maintenance Plan
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID:Attachment A [ ] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [ X ] Not Applicable
10.	Supplemental Requirements Comment: Supplemental documents were included with the
	le V renewal application for this facility which was submitted on June 19, 2003. Because
	proposed change covered by this construction permit application will not affect the
	cuments submitted with the Title V Renewal Application, Waiver Requested is checked for
	ose documents. This is in accordance with the application instructions. Because all
	olicable Additional Supplemental Requirements for Title V Air Operation Permit
_	plications were submitted with the June 19, 2003 submittal and will not change as a result
of of	this permit application, Not Applicable is indicated for those items.

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	<b>Emissions</b>	Unit	Infor	mation	Section	2	of	5	
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### Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part – Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

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#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

### A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

#### **Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in This Section: (Check one)								
[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).								
] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.								
[X] 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. Regulated or Unregulated Emissions Unit? (Check one)								
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.								
[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.								
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Materials								
handling & storage operations consisting of Belt Conveyor No. 1 (EU028), Transfer Build	dings							
(EU028c, EU028g, EU028i, EU028q, EU028d, EU028v and EU028o) and Fuel Storage Domes								
A & B (EU028h).								
4. Emissions Unit Identification Number: [ ] No ID								
ID: 028 [ ] ID Unkr	own							
5. Emissions Unit   6. Initial Startup   7. Emissions Unit Major   8. Acid Rain	Unit?							
Status Code: Date: Group SIC Code: [ ]								
A 49								

- 9. Emissions Unit Comment: (Limit to 500 Characters) This emissions unit consists of multiple material handling and storage operations which are sources of fugitive emissions. The emission sources identified in this Information Section (Section 3a) are those with a 5% opacity standard. Emission sources that are part of emissions unit 28 that have a 10% opacity standard (from construction permit PSD-FL-265 and PSD-FL-265A) are covered in Information Section 3b. This emissions unit consists of the following emission sources with requested nomenclature and emissions unit identifier:
- Transfer buildings that contain conveyor transfer points for the transfer of coal. The following transfer buildings, with JEA nomenclature, are included as part of this emissions source. The transfer buildings are numbered sequentially as they occur in the process with Transfer Building No. 1 being the transfer building nearest the vessel unloading operations and Transfer Building No. 5 being the transfer building immediately upstream of the fuel storage buildings. Transfer Buildings No. 1 through 5 are associated with the transfer of raw coal, pet coke and limestone, while Transfer Building No. 6 is associated with the transfer of raw coal and pet coke and the Plant Transfer Building is associated with the transfer of crushed coal and pet coke.
  - Transfer Building No. 1 (EU028c)
  - Transfer Building No. 2 (EU028g)
  - Transfer Building No. 3 (EU028i)
  - Transfer Building No. 4 (EU028q)
  - Transfer Building No. 5 and limestone loadout chute (EU028d)
  - Transfer Building No. 6 (EU028v)
  - Plant Transfer Building (EU0280)
- The Fuel Storage Domes A & B (EU028h).
- Conveyors: Except for Belt Conveyor No. 1 (EU028), which is used to transfer materials from the vessel unloading operation to Transfer Building No. 1, all conveyors are enclosed. The enclosed conveyors are not a source of fugitive emissions. Fugitive emissions associated with the conveying of coal, pet coke and limestone in the enclosed conveyors would be associated with transfer points that are within the transfer buildings, which are discussed above.

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Emissions	<b>Unit Information</b>	Section	30	οf	5	
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#### **Emissions Unit Control Equipment**

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
Based on the requirements of construction permit PSD-FL-265 particulate matter emissions
from the emission sources covered under this emissions unit will be controlled, on an as
needed basis, by the use of wet suppression, water spray, coverings, and/or conditioned
materials. Particulate matter emissions from this emissions unit are fugitive emissions. The
operating scenario covered by this construction permit application involves the use of coal that
has been treated with a binder. The binder acts as a dust suppressant, as previously determined
by FDEP (see attachment A).

2. Control Device or Method Code(s): 061, 062, and 054 as needed

#### **Emissions Unit Details**

1.	Package Unit:		
	Manufacturer:	Model Number:	
2.	Generator Nameplate Rating:	MW	
3.	Incinerator Information: Not applicable		
	Dwell Temperature:		°F
	Dwell Time:		seconds
	Incinerator Afterburner Temperature:		٥F

<b>Emissions Unit Information Section</b> 3a of	i 5	
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## B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:		mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr	tons/day
3.	Maximum Process or Throughput Rate:	2,420,000 tons pe	r year coal/pet coke
4.	Maximum Production Rate:		
5.	Requested Maximum Operating Schedule	e:	
	24 hou	rs/day	7 days/week
	52 wee	eks/year	8,760 hours/year
6.	Operating Capacity/Schedule Comment (hourly throughputs differ for the different construction permit PSD-FL-265 limits that to 2.42 million tons per year. The maffected by the use of coal treated with a application.	t equipment covered ne annual coal/petrolo aximum annual proco	under this emissions unit, eum coke handling and usage ess throughput rates are not

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# C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

### **List of Applicable Regulations**

Emissions unit applicable regulations hereby incorporates by reference the Title V core list of applicable regulations that all	
Title V sources are presumptively subject.	
Applicable regulations specified in construction permit PSD-FL-265 are hereby incorporated by reference.	
Federal: 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation Plants	
Federal: 40 CFR 60 Subpart A – General Provisions	
State: Rule 62-204.800(8)(b)31 - 40 CFR 60 Subpart Y adopted by reference	
State: Rule 62-204.800(8)(c) - NSPS Controlling Standards	
State: Rule 62-204.800(8)(d) – General Provisions of 40 CFR 60 Subpart A adopted	
State: Rule 62-204.800(8)(e) – Specified appendices of 40 CFR Part 60 adopted	
State: Rule 62-297.401 – Compliance Test Methods	
Local: Jacksonville Environmental Protection Board, Rule 2 – Air Pollution	
Ordinance Code, City of Jacksonville (JOC), Title X, Chapter 376, Odor Control	
Ordinance Code, City of Jacksonville (JOC), Title V, Chapter 362, Air and Water Pollution.	

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# D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

### **Emission Point Description and Type**

Identification of Point on Pi Flow Diagram? EU028	lot Plan or	2. Emission Po	int Type Code: 4				
3. Descriptions of Emission P	oints Comprising	this Emissions I	Init for VE Tracking	(limit to			
100 characters per point):		S and Finishons (	Jime for V.E. Fracking	(mint to			
Belt Conveyor No. 1 (EU02	28)						
1	•	uilding No. 6 (EL	1028c, EU028g EU0	28i.			
	Transfer Building No. 1 through Transfer Building No. 6 (EU028c, EU028g, EU028i, EU028q, EU028d and EU028v)						
Plant Transfer Building (EU	,						
Fuel Storage Building vents	,						
4. ID Numbers or Descriptions		its with this Emis	sion Point in Comme				
15 Ivaniocis di Descriptions		ies with this Dillis		J11•			
5. Discharge Type Code:	6. Stack Heig	ht:	7. Exit Diameter:				
F		feet		feet			
8. Exit Temperature:	9. Actual Vol	umetric Flow	10. Water Vapor:				
77°F	Rate:		_	%			
		acfm					
11. Maximum Dry Standard Fl	ow Rate:	12. Nonstack Emission Point Height:					
	dscfm	Varies		feet			
10 F	<b>1.</b>						
13. Emission Point UTM Coor	dinates:						
Zone: East (km): North (km):							
Lone.	cast (km):	NOIL					
-			_	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
-	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			
14. Emission Point Comment (	limit to 200 char	acters): See Sect	ion III.A.9 for this en	nissions			

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#### E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

	(An Emi	ssions Chits,				
Segment Description and Rate: Segment1_ of5_						
<ol> <li>Segment Description (Process/Fuel Type) (limit to 500 characters):</li> <li>Belt Conveyor No. 1 – coal treated with a binder</li> </ol>						
2. Source Classification Code	e (SCC):	3. SCC Units:	<i>m</i> , , , , , ,			
30501099	1		Tons handled			
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity			
	2,420	0,000	Factor:			
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:			
10. Segment Comment (limit	to 200 characters	): The maximun	n annual rate is based on			
handling/usage limits of 2.42 i	million tons per	year coal/petrolet	am coke included in			
construction permit PSD-FL-2	265. This constru	action permit app	lication only includes segment			
information affected by the ap			,			
addition to currently permitted	•	_				
unusual to culturally permitted	. segments,	p	a segment sum apply.			
Segment Description and Rate: Segment 2 of 5						
1. Segment Description (Prod	1. Segment Description (Process/Fuel Type ) (limit to 500 characters):					

1.	Segment Description (Process/Fuel Type) (limit to 500 characters):
	Transfer Building No. 1 through Transfer Building No. 5 – coal treated with a binder

2.	Source Classification Code	3. SCC Units:			
30501099			Tons handled		
4.	Maximum Hourly Rate:	5. Maximum Annual Rate: 2,420,000		6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum %	6 Ash:	9.	Million Btu per SCC Unit:

<sup>10.</sup> Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limits of 2.42 million tons per year coal/petroleum coke included in construction permit PSD-FL-265. This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted segments still apply.

Emissions	Unit	Information	Section	3a	οf	5	
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### E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

a		2 2 2				
Segment Description and Ra	te: Segment	_3 of5				
	<ol> <li>Segment Description (Process/Fuel Type) (limit to 500 characters):</li> <li>Transfer Building No. 6 – coal treated with a binder</li> </ol>					
2. Source Classification Code 30501099	e (SCC):	3. SCC Units:	Tons handled			
4. Maximum Hourly Rate:	5. Maximum	Annual Date:	6. Estimated Annual Activity			
4. Maximum Hourly Rate.		0,000	Factor:			
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:			
10. Segment Comment (limit thandling/usage limits of 2.42 reconstruction permit PSD-FL-2 information affected by the apaddition to currently permitted	million tons per y 65. This constru plication. The se	year coal/petroler action permit appergments identifie	um coke included in blication only includes segment and in this application are in			
Segment Description and Ra	te: Segment	_4 of5				
Segment Description (Process/Fuel Type) (limit to 500 characters):     Plant Transfer Building – coal treated with a binder						
2. Source Classification Code 30501099	e (SCC):	3. SCC Units:	Tons handled			
4. Maximum Hourly Rate:	5. Maximum 2,42	Annual Rate: 0,000	6. Estimated Annual Activity Factor:			
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:			
10. Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limits of 2.42 million tons per year coal/petroleum coke included in construction permit PSD-FL-265. This construction permit application only includes segment information affected by the application. The segments identified in this application are in						

addition to currently permitted segments. All currently permitted segments still apply.

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Emissions	<b>Unit Information</b>	Section	3a	· of	5

<b>Segment Description and Rate:</b>	Segment	5	of	5

1.	Segment Description (Process/Fuel Type) (limit to 500 characters)
	Fuel Storage Buildings Vents – coal treated with a binder

2.	Source Classification Code	e (SCC):	3. SCC Units:		
	30501099		Tons handled		
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6. Estimated Annual Activity	
		2,420	0,000	Factor:	
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:	

<sup>10.</sup> Segment Comment (limit to 200 characters): The maximum annual rate is based on handling/usage limits of 2.42 million tons per year coal/petroleum coke included in construction permit PSD-FL-265. This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted segments still apply.

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# F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

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Pollutant Detail Information Page	of		

# G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

#### **Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions	
1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour	4. Synthetically tons/year Limited? [ ]
5. Range of Estimated Fugitive Emissions:	
[ ] 1 [ ] 2 [ ] 3	to tons/year
6. Emission Factor:	7. Emissions
Reference:	Method Code:
8. Calculation of Emissions (limit to 600 chara	acters):
emissions from this emissions unit was incl construction permit PSD-FL-265. The emis	ssion rates associated with the emission sources age as a result of the handling of coal treated application. Therefore, this section is not emissions limited pollutant and the change
Allowable Emissions Allowable Emissions	of
Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	lb/hour tons/year
5. Method of Compliance (limit to 60 characte	ers):
6. Allowable Emissions Comment (Desc. of C	Operating Method) (limit to 200 characters):

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### H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation \_\_\_1\_\_ of \_\_2\_

1.	Visible Emissions Subtype:	2.	Basi	s for Allowable	Opacit	ty:
	V05		[X]	Rule	_[X]	Other
3.	Requested Allowable Opacity:					
	Normal Conditions: 5 % Ex	сер	tional	Conditions:		%
	Maximum Period of Excess Opacity Allowe	ed:				min/hour
4.	Method of Compliance: Using EPA Metho				ssions	compliance test
	was conducted to show compliance with the	e vis	ible e	missions limit.		
5.	Visible Emissions Comment (limit to 200 c			-		•
	to Belt Conveyor No. 1, Transfer Building 1			•	_	· · · · · · · · · · · · · · · · · · ·
	Plant Transfer Building and the Fuel Storag			_		
	along with compliance determination require					*
	PSD-FL-265. The VE limit and compliance					•
	handling of coal treated with a binder as co	vere	d by t	his construction	permi	t application.

### H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation \_\_\_2\_\_ of \_\_\_2\_

1.	Visible Emissions Subtype:	2. Basis for Allowable Op	pacity:	
	V20	[X] Rule	[ ] Other	
3.	Requested Allowable Opacity: Normal Conditions: 20 % Ex	ceptional Conditions:	%	
	Maximum Period of Excess Opacity Allowe	<u>-</u>		
4.	Method of Compliance: Using EPA Metho was conducted to show compliance with the	-	ons compliance test	
5.	Visible Emissions Comment (limit to 200 c Y and applies to affected facilities when pro- determination methods are not affected by to covered by this construction permit applicat	ocessing coal. The VE limit he handling of coal treated v	and compliance	

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Emissions	<b>Unit Information</b>	Section	3a	of	5

# I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor of

			<del></del>
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 (limit to 200	cha	racters): Not applicable

Emissions	<b>Unit Inf</b>	ormation	Section	3a	of	5

## J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

#### **Supplemental Requirements**

1.	Process Flow Diagram
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification  [ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment  [ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities  [ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown  [ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
7.	Operation and Maintenance Plan  [ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application [X] Attached, Document ID:Attachment A[ ],Not Applicable
9.	Other Information Required by Rule or Statute  [ ] Attached, Document ID: [X] Not Applicable
Ti the do the ap	Supplemental Requirements Comment: Supplemental documents were included with the tle V renewal application for this facility which was submitted on June 19, 2003. Because a proposed change covered by this construction permit application will not affect the cuments submitted with the Title V renewal application, Waiver Requested is checked for ose documents. This is in accordance with the application instructions. Because all plicable Additional Supplemental Requirements for Title V Air Operation Permit opplications were submitted with the June 19, 2003 submittal and will not change as a result this permit application, Not Applicable is indicated for those items.

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<b>Emissions</b>	Unit	Information	Section	3a	of	5	

### Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable
12. Alternative Medica of Orientian (Envirolent Technology)
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:
[X] Not Applicable

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Emissions Unit Information Section 3	b a	of :	5
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#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

### A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

#### **Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in This	Section: (Check one)				
process or production unit, or activity, w	[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).				
[ ] This Emissions Unit Information Section process or production units and activitie (stack or vent) but may also produce fug	s which has at least one defin				
[X] 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. Regulated or Unregulated Emissions Unit	? (Check one)				
[X] The emissions unit addressed in this Ememissions unit.	issions Unit Information Sec	ction is a regulated			
[ ] The emissions unit addressed in this Ememissions unit.	issions Unit Information Sec	ction is an unregulated			
3. Description of Emissions Unit Addressed in handling and storage operations consisting Unloader and Spillage Conveyor (EU028a)	g of Vessel Hold (EU028a) a	•			
4. Emissions Unit Identification Number:		[ ] No ID			
ID: 028		[ ] ID Unknown			
5. Emissions Unit Status Code: Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit?			
<ul> <li>9. Emissions Unit Comment: (Limit to 500 Comments)</li> <li>emissions unit 28 emission sources that are in opacity limit. These emission sources include</li> <li>Vessel Hold (EU028a)</li> <li>Vessel Unloader and Spillage Conveyor (Euclidean Conveyor (Euclid</li></ul>	volved in the handling of co the following:				

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Emissions	Unit	Information	Section	3h	of	5
Emissions.	UIIII	mation mation	SCCHOL	30	VI.	9

#### **Emissions Unit Control Equipment**

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
Based on the requirements of construction permit PSD-FL-265 particulate matter emissions
from this emissions unit will be controlled, on an as needed basis, by the use of wet
suppression, water spray, coverings, and/or conditioned materials. Particulate matter
emissions from this emissions unit are fugitive emissions. The operating scenario covered by
this construction permit involves the use of coal that has been treated with a binder. The binder
acts as a dust suppressant, as previously determined by FDEP (see attachment A).

2. Control Device or Method Code(s): 061, 062, and 054 as needed

#### **Emissions Unit Details**

1.	Package Unit:		
Manufacturer:		Model Number:	
2.	Generator Nameplate Rating:	MW	
3.	Incinerator Information: Not applicable		
	Dwell Temperature:		°F
	Dwell Time:		seconds
	Incinerator Afterburner Temperature:		°F

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## B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:		mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr	tons/day
3.	Maximum Process or Throughput Rate:	2.42 million tons per y	year coal/pet coke
4.	Maximum Production Rate:		
5.	Requested Maximum Operating Schedule	<del></del>	
	24 hou	rs/day	7 days/week
	52 weeks/year		8,760 hours/year
6.	Operating Capacity/Schedule Comment (PSD-FL-265 limits the annual coal/pet cotons per year. The maximum annual processed treated with a binder as covered under the coal treated with a binder the coal treated with a bin	oke combined handling and ess throughput rates are n	d usage to 2.42 million not affected by the use of

Emissi	ons U	nit In	formation	Section	3b	of	5

## C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

### **List of Applicable Regulations**

Emissions unit applicable regulations hereby incorporates by reference the Title V core list of applicable regulations that all	
Title V sources are presumptively subject.	
Applicable regulations specified in construction permit PSD-FL-265 are hereby incorporated by reference.	
State: Rule 62-297.401 – Compliance Test Methods	
Local: Jacksonville Environmental Protection Board, Rule 2 – Air Pollution	
Ordinance Code, City of Jacksonville (JOC), Title X, Chapter 376, Odor Control	
Ordinance Code, City of Jacksonville (JOC), Title V, Chapter 362, Air and Water Pollution.	
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Emissions	Unit	<b>Information</b>	Section	3b	of	5
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# D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

### **Emission Point Description and Type**

1. Identification of Point on Plo Flow Diagram? EU28a	ot Plan or	2. Emission Po	int Type Code: 4	
<ul> <li>3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <ul> <li>Vessel Hold (EU028a) (referred to as Shiphold in construction permit PSD-FL-265) is the hold of the vessel from which the material is being unloaded at the new Northside dock.</li> <li>Vessel Unloader and Spillage Conveyor (EU028a) includes the vessel unloading operations at the new Northside dock.</li> </ul> </li> <li>4 ID Numbers or Descriptions of Emission Units with this Emission Point in Common:</li> </ul>				
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:				
5. Discharge Type Code:	6. Stack Heig	ht: feet	7. Exit Diameter:	feet
8. Exit Temperature: 77°F	9. Actual Vol Rate:	umetric Flow acfm	10. Water Vapor:	%
11. Maximum Dry Standard Flow Rate: dscfm  12. Nonstack Emission Point Height: Varies  feet				feet
13. Emission Point UTM Coord		No-t	h (km):	
Zone: East (km): North (km):  14. Emission Point Comment (limit to 200 characters): Fugitive emissions from the vessel hold and the vessel unloader and spillage conveyors are associated with limestone, coal and pet coke unloading operations at the new Northside dock.				

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## E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

Segment Description and Ra	Segment Description and Rate: Segment l of l		
1. Segment Description (Proc Vessel Hold - Coal treated wi	• • •	limit to 500 cha	aracters):
Vessel Unloader and Spillage	Conveyor – Coal	treated with a l	oinder
		==	
2. Source Classification Code	e (SCC):	3. SCC Units	
30501099 4. Maximum Hourly Rate:	5. Maximum A	Annual Data:	Tons handled  6. Estimated Annual Activity
4. Waxiiiuiii Houriy Raic.	2,420		Factor:
7. Maximum % Sulfur:	8. Maximum 9	<u> </u>	9. Million Btu per SCC Unit:
10. Segment Comment (limit			
		•	e included in construction permit
application will not affect the			under this construction permit
application only includes segn	_	_	<u>=</u>
identified in this application a		•	
permitted segments still apply			
Segment Description and Ra	ite: Segment	of	
1. Segment Description (Pro	cess/Fuel Type)	(limit to 500 ch	naracters):
2 Comes Classification Cod	- (CCC).	3. SCC Unit	
2. Source Classification Cod	e (SCC):	3. SCC Unit	.S:
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity
			Factor:
7. Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:
10. Commant Commant //!!	10 200 abazzata	١.	
10. Segment Comment (limit	to 200 characters	);	

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# F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant
	Device Code	Device Code	Regulatory Code
		-	
	-		

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Emissions Un	it Information Section _	3b	_ of _	5
Pollutant Deta	ail Information Page	0	f	

## G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

#### Emissions-Limited and Preconstruction Review Pollutants Only)

Emissions-Limited and Frecons	truction Review Foliuta	ints Omy)		
Potential/Fugitive Emissions				
1. Pollutant Emitted:	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:	tons/year	4. Synthetically Limited? [ ]		
5. Range of Estimated Fugitive Emissions:				
[ ] 1 [ ] 2 [ ] 3	to to	ns/year		
6. Emission Factor:		7. Emissions		
Reference:		Method Code:		
8. Calculation of Emissions (limit to 600 characters):				
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): A discussion of emissions from this emissions unit was included in the PSD permit application for construction permit PSD-FL-265. The emission rates associated with the emission sources making up this emissions unit will not change as a result of the handling of coal treated with a binder as covered under this permit application. Therefore, this section is not completed because it does not pertain to an emissions limited pollutant and the change covered by this permit application does not result in a change in emissions from this emissions unit.				
Allowable Emissions Allowable Emissions	of			
1. Basis for Allowable Emissions Code:	2. Future Effective De Emissions:	2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa	ble Emissions:		
	lb/hour	tons/year		
5. Method of Compliance (limit to 60 characters):				
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit t	o 200 characters):		

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## H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Vi</u>	sible Emissions Limitation: Visible Emissi	ons L	imitation _	1 of _	1
1.	Visible Emissions Subtype: V10	2.	Basis for All Rule		pacity: [X] Other
3.	Requested Allowable Opacity: Normal Conditions: 10 % Ex Maximum Period of Excess Opacity Allow	•	onal Condi	tions:	% min/hour
4.	Method of Compliance: Using EPA Metho was conducted to show compliance with the	-			compliance testing
5.	Visible Emissions Comment (limit to 200 cto the Vessel Hold and Vessel Unloader and limit along with compliance determination permit PSD-FL-265 and PSD-FL-265A. The methods are not affected by the handling of construction permit application.	l Spil requii ne VE	lage Converements are Elimit and c	yor. The vi included in compliance	isible emissions a construction determination
<u>Vi</u>	sible Emissions Limitation: Visible Emiss	ions I		of _	
1.	Visible Emissions Subtype:	2.	Basis for A  [ ] Rule	llowable O	pacity:  Other
3.	Requested Allowable Opacity: Normal Conditions: % E: Maximum Period of Excess Opacity Allow	-	ional Condi	tions:	% min/hour
4.	Method of Compliance:				
5.	Visible Emissions Comment (limit to 200 c	harac	ters):		

Emissions	Unit	Information	Section	3h	οf	5	
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### I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

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# J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

#### **Supplemental Requirements**

1.	Process Flow Diagram
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
_	Dance James for Charten and Chutderen
0.	Procedures for Startup and Shutdown  [ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
	[ ] Marver Requested
7.	
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	- II
	[X] Attached, Document ID:Attachment A [ ] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [X] Not Applicable
10	. Supplemental Requirements Comment: Supplemental documents were included with the
	tle V renewal application for this facility which was submitted on June 19, 2003. Because
	e proposed change covered by this construction permit application will not affect the
	cuments submitted with the Title V renewal application, Waiver Requested is checked for
	ose documents. This is in accordance with the application instructions. Because all plicable Additional Supplemental Requirements for Title V Air Operation Permit
_	oplications were submitted with the June 19, 2003 submittal and will not change as a result
	this permit application. Not Applicable is indicated for those items.

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### Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part – Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

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#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

### A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

#### **Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in This Section: (Check one)									
[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).									
[X] 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. Regulated or Unregulated Emissions Unit? (Check one)									
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.									
[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.									
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): NGS – Crusher Building Baghouse Exhaust (DC01).									
4. Emissions Unit Identification Number: [ ] No ID ID: 029 [ ] ID Unknown									
5. Emissions Unit Startup Status Code: A Date: 7. Emissions Unit Major Group SIC Code: 49 8. Acid Rain Unit?									
9. Emissions Unit Comment: (Limit to 500 Characters) This emissions unit consists of crushing operations for coal and petroleum coke.									

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#### **Emissions Unit Control Equipment**

	institution of Equipment							
1.	Control Equipment/Method Description (Limit to 200 characters per device or method):  Particulate matter emissions from the crushers and transfer points in the crusher building are controlled with a single bagbouse venting to a single stack							
	are controlled with a single baghouse venting to a single stack.							
ı								
<u> </u>	Cardeal Davies as Mathed Cade(a), 010							
<b> </b> 2.	Control Device or Method Code(s): 018							

#### **Emissions Unit Details**

1.	Package Unit:		•
	Manufacturer:	Model Number:	
2.	Generator Nameplate Rating:	MW	
3.	Incinerator Information: Not applicable		
	Dwell Temperature:		°F
	Dwell Time:		seconds
	Incinerator Afterburner Temperature:		°F

Emissions Unit Information Section 4 of	5	
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# B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:		mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr	tons/day
3.	Maximum Process or Through	aput Rate: 2,420,000 tons per year	
4.	Maximum Production Rate:		
5.	Requested Maximum Operation	ng Schedule:	
		24 hours/day	7 days/week
		52 weeks/year	8,760 hours/year
6.	number PSD-FL-265 limits the million tons per year. The maximum services are number 1.00 million tons per year.	Comment (limit to 200 characters): Co e annual coal/petroleum coke handling timum annual throughput rates are not overed under this construction permit a	and usage rate to 2.42 affected by the use of

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Lmissions	Unit	inior	mation Section	4	OI	5

# C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

### **List of Applicable Regulations**

Emissions unit applicable regulations hereby incorporates by reference the Title	
V core list of applicable regulations that all	
Title V sources are presumptively subject.	
Applicable regulations specified in	
construction permit PSD-FL-265 are	
hereby incorporated by reference.	
Federal: 40 CFR 60 Subpart Y – Standards	
of Performance for Coal Preparation	
Plants	
Federal: 40 CFR 60 Subpart A – General	
Provisions	
State: Rule 62-204.800(8)(b)31 - 40 CFR 60	
Subpart Y adopted by reference	
State: Rule 62-204.800(8)(c) - NSPS	
Controlling Standards	
State: Rule 62-204.800(8)(d) – General	
Provisions of 40 CFR 60 Subpart A	
adopted	
State: Rule 62-204.800(8)(e) – Specified	
appendices of 40 CFR Part 60 adopted	
State: Rule 62-297.401 – Compliance Test	
Methods	
Local: Jacksonville Environmental	
Protection Board, Rule 2 – Air Pollution	
Ordinance Code, City of Jacksonville	
(JOC), Title X, Chapter 376, Odor Control	
Ordinance Code, City of Jacksonville	
(JOC), Title V, Chapter 362, Air and	· · · · · · · · · · · · · · · · · · ·
Water Pollution.	
•	

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## D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

### **Emission Point Description and Type**

Identification of Point on Plant Flow Diagram? EU029	ot Plan or	2. Emission Po	int Type Code: 1					
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):								
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:								
5. Discharge Type Code:	6. Stack Heig 8 (appr	ht: rox) feet	7. Exit Diameter:	feet				
8. Exit Temperature: 77°F (approx)	9. Actual Vol Rate: 24,000 (ar	umetric Flow  pprox) acfm	10. Water Vapor:	%				
11. Maximum Dry Standard Flow Rate: dscfm 12. Nonstack Emission Point Height: feet								
13. Emission Point UTM Coord	linates:							
Zone: E	ast (km):	Nort	h (km):					
14. Emission Point Comment (I crushers and transfer points venting to a single exhaust.	in the crusher b	,						

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### E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

<b>Segment</b>	Description	and Rate:	Segment	1	of	2
			_			

1.	Segment Description (Process/Fuel Type) (limit to 500 characters): Crushing Operations – Coal treated with a binder						
2.	Source Classification Code (SCC): 3. SCC Units:						
	30501099			Tons processed			
4.	Maximum Hourly Rate:	5. Maximum Annual Rate: 2,420,000		6. Estimated Annual Activity Factor:			
7.	Maximum % Sulfur:	8. Maximum 9	9. Million Btu per SCC Unit:				
10	10. Segment Comment (limit to 200 characters): The maximum annual rate is based on a handling/usage limit of 2.42 million tons per year coal/pet coke included in construction permit PSD-FL-265. The use of coal treated with a binder as covered under this construction permit application will not affect the annual handling/usage limit. This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted segments still apply.						
Segment Description and Rate: Segment 2 of 2							
1.	Segment Description (Process/Fuel Type ) (limit to 500 characters):     Crushing Operations – Blend of coal treated with a binder and other permitted solid fuels						
2.	Source Classification Cod 30501099	e (SCC):	3. SCC Units:  Tons processed				
4.		5. Maximum 2,420		6. Estimated Annual Activity Factor:			
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:			

10. Segment Comment (limit to 200 characters): The maximum annual rate is based on a handling/usage limit of 2.42 million tons per year coal/pet coke included in construction permit PSD-FL-265. The use of coal treated with a binder as covered under this construction permit application will not affect the annual handling/usage limit. This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently permitted segments. All currently permitted segments still apply.

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<b>Emissions</b>	Unit	Inform	nation	Section	4	of	5
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# F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
_			
-			
_			

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Emissions Unit Information Section _	4	_ of _	5	
Pollutant Detail Information Page		of		

# G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive Emissions		• ,		
1. Pollutant Emitted:	2. Total Percent Efficiency of Control:			
3. Potential Emissions: lb/hour	tons/year	4. Synthetically Limited? [ ]		
5. Range of Estimated Fugitive Emissions:	to tons/year			
6. Emission Factor:  Reference:		7. Emissions Method Code:		
8. Calculation of Emissions (limit to 600 characters):				
9. Pollutant Potential/Fugitive Emissions Commemissions from this emissions unit was included permit PSD-FL-265. The emission rates associate a result of the handling of coal treated with a biral Therefore, this section is not completed because pollutant and the change covered by this permit emissions from this emissions unit.	I in the PSD permit appliated with this emissions under as covered under this it does not pertain to an	cation for construction init will not change as s permit application. emissions limited		
Allowable Emissions Allowable Emissions	of			
1. Basis for Allowable Emissions Code:	2. Future Effective D Emissions:	ate of Allowable		
3. Requested Allowable Emissions and Units:	4. Equivalent Allowa			
5 Mad 1 CO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	lb/hour	tons/year		
5. Method of Compliance (limit to 60 characte	rs):			
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit	to 200 characters):		

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## H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Vi</u>	(Only Regulated Emissions Onles Subject to a VE Emiliation)					
	<u>Visible Emissions Limitation:</u> Visible Emissions Limitation1 of2					
1.	Visible Emissions Subtype: VE05	Basis for Allowable     Rule	e Opacity: [X] Other			
3.	Requested Allowable Opacity: Normal Conditions: 5 % Ex Maximum Period of Excess Opacity Allower	cceptional Conditions: ed:	% min/hour			
4.	4. Method of Compliance: Using EPA Method 9, a 3-hour initial visible emissions test was conducted and a 30 minute renewal visible emissions test will be conducted once every five years.					
5.	5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265. The VE limit and compliance determination methods are not affected by the handling of coal treated with a binder as covered by this construction permit application.					
H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)  Visible Emissions Limitation: Visible Emissions Limitation2 of2						
<u>V</u> i	, , ,	-	_			
_	, , ,	-	of2			
_	visible Emissions Limitation: Visible Emissions Subtype:  VE20  Requested Allowable Opacity:	ions Limitation2  2. Basis for Allowabl  [X] Rule  cceptional Conditions:	of2 e Opacity:			
2.	Visible Emissions Limitation: Visible Emissions Subtype:  VE20  Requested Allowable Opacity:  Normal Conditions: 20 % Examinum Period of Excess Opacity Allow	2. Basis for Allowabl [X] Rule cceptional Conditions: ed:	e Opacity:  [ ] Other  % min/hour			

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Emissions	Ilnit	Inform	ation	Section	1	Ωf	5	
Cinissions	Unit	TUTOLII	iauon	Section	4	01	3	

# I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Emissions	Unit	Infor	mation	Section	4	of	5

# J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

## **Supplemental Requirements**

1.	Process Flow Diagram
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
6	Procedures for Startup and Shutdown
0.	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
7.	Operation and Maintenance Plan
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID:Attachment A [ ] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [X] Not Applicable
10	. Supplemental Requirements Comment: Supplemental documents were included with the
Ti	tle V renewal application for this facility which was submitted on June 19, 2003. Because
	e proposed change covered by this construction permit application will not affect the
l .	cuments submitted with the Title V renewal application, Waiver Requested is checked for
	ose documents. This is in accordance with the application instructions. Because all
1 -	plicable Additional Supplemental Requirements for Title V Air Operation Permit
	pplications were submitted with the June 19, 2003 submittal and will not change as a result
of	this permit application, Not Applicable is indicated for those items.

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

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## Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

<b>Emissions</b>	Unit	Informa	tion	Section	5	of	5

#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

# A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

### **Emissions Unit Description and Status**

1.	1. Type of Emissions Unit Addressed in This Section: (Check one)						
[	] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).						
[ X	process or produ		n addresses, as a single emiss s which has at least one defir itive emissions.				
[			n addresses, as a single emiss s which produce fugitive em				
2.	Regulated or Unre	egulated Emissions Unit	? (Check one)				
[ X	] The emissions uemissions unit.	unit addressed in this Em	issions Unit Information Sec	ction is a regulated			
] [	] The emissions uemissions unit.	unit addressed in this Em	issions Unit Information Sec	ction is an unregulated			
3.	3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): NGS – Fuel Silo Dust Collectors.						
4.		lentification Number:		[ ] No ID			
	ID: 031			[ ] ID Unknown			
5.	Emissions Unit	6. Initial Startup	7. Emissions Unit Major	8. Acid Rain Unit?			
	Status Code: A	Date:	Group SIC Code: 49	[ ]			
9.	9. Emissions Unit Comment: (Limit to 500 Characters): Emissions Unit No. 031 consists of ten fuel silos and two tripper transfer points. There are five fuel silos and one tripper transfer point associated with each of the two CFB units.						

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<b>Emissions Unit Information Section</b>	5	of	5	
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## **Emissions Unit Control Equipment**

1.	Control Equipment/Method Description (Limit to 200 characters per device or method): Particulate matter emissions from each set of CFB fuel silos are controlled by a baghouse. Therefore, this emissions unit consists of two baghouses, each venting to it's own stack.

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

## **Emissions Unit Details**

1.	Package Unit:		
	Manufacturer:	Model Number:	
2.	Generator Nameplate Rating:	MW	
3.	Incinerator Information: Not applicable		
	Dwell Temperature:		°F
	Dwell Time:		seconds
	Incinerator Afterburner Temperature:		°F

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<b>Emissions</b>	Unit	Informa	ation	Section	5	of	5

# B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

## **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:		mmBtu/hr
2.	Maximum Incineration Rate:	lb/hr	tons/day
3.	Maximum Process or Through	put Rate: 2,42,000 tons per	year
4.	Maximum Production Rate:		
5.	Requested Maximum Operatir	ng Schedule:	
		24 hours/day	7 days/week
		52 weeks/year	8,760 hours/year
6.	are fed to the fuel silos from the annual coal/petroleum cok	ne crusher building. Construe handling and usage rate to rates are not affected by the u	acters): Coal and petroleum coke action permit PSD-FL-265 limits 2.42 million tons per year. The use of coal treated with a binder

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# C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

## **List of Applicable Regulations**

Emissions unit applicable regulations	
hereby incorporates by reference the Title	
V core list of applicable regulations that all	
Title V sources are presumptively subject.	
Applicable regulations specified in	
construction permit PSD-FL-265 are	
hereby incorporated by reference.	
• •	
Federal: 40 CFR 60 Subpart Y – Standards	
of Performance for Coal Preparation	
Plants	
Federal: 40 CFR 60 Subpart A – General	
Provisions	
State: Rule 62-204.800(8)(b)31 - 40 CFR 60	
Subpart Y adopted by reference	
State: Rule 62-204.800(8)(c) - NSPS	
Controlling Standards	
State: Rule 62-204.800(8)(d) – General	
Provisions of 40 CFR 60 Subpart A	
adopted	
State: Rule 62-204.800(8)(e) - Specified	
appendices of 40 CFR Part 60 adopted	
State: Rule 62-297.401 – Compliance Test	
Methods	
Local: Jacksonville Environmental	
Protection Board, Rule 2 - Air Pollution	
Ordinance Code, City of Jacksonville	
(JOC), Title X, Chapter 376, Odor Control	
Ordinance Code, City of Jacksonville	
(JOC), Title V, Chapter 362, Air and	·
Water Pollution.	

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Emissions	Unit	Informa	ation	Section	5	of	5	
	~	**************************************	****		•	V.	_	

# D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

## **Emission Point Description and Type**

1.	Identification of Point on Ple Flow Diagram? EU031	2. Emission Point Type Code: 3				
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): The fuel silos dust collector for Unit 1 (DC-03) is located on the tripper floor at the south end of the Unit 1 fuel silos. The fuel silos dust collector for Unit 2 (DC-02) is located in the Plant Transfer Building.						
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:						
5.	Discharge Type Code: H	6. Stack Heig	ht: feet	7. Exit Diameter:	feet	
8.	Exit Temperature: 77°F (approx)		umetric Flow 0 (DC-03) (approx) 2) (approx) acfm	10. Water Vapor:	%	
11	. Maximum Dry Standard Flo	ow Rate: dscfm	12. Nonstack Emission Point Height: feet			
13	B. Emission Point UTM Coord	dinates:				
	Zone: E	ast (km):	North (km):			
14	l. Emission Point Comment ( emissions unit are controlle		,		rom this	

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Emissions	Unit	Inform	ation	Section	5	Ωf	5	
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# E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

Segment	Descript	tion and	Rate:	Segment	1	of	2	

1.	Handling/storage of coal treated with a binder							
3.	Source Classification Code 30501099	e (SCC):	3. SCC Units:	Tons processed				
4.	Maximum Hourly Rate:	5. Maximum A 2,420		6. Estimated Annual Activity Factor:				
7.	Maximum % Sulfur:	8. Maximum %	% Ash:	9. Million Btu per SCC Unit:				
10.	Segment Comment (limit thandling/usage limit of 2.4 permit PSD-FL-265. The construction permit application permit application. The segments permitted segments. All constructions application.	2 million tons pe use of coal treate ation will not affo ation only include identified in this	er year coal/pet of d with a binder ect the annual has es segment infor a application are	coke included in construction as covered under this andling/usage limit. This rmation affected by the in addition to currently				
Se	gment Description and Ra	ite: Segment2	2_ of _2_					
1.	Segment Description (Process/Fuel Type ) (limit to 500 characters):     Handling/storage of coal treated with a binder blended with other permitted solid fuels.							
2.	2. Source Classification Code (SCC): 30501099  3. SCC Units: Tons processed							
4.	Maximum Hourly Rate:	5. Maximum 2,420		6. Estimated Annual Activity Factor:				
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:				
10	10. Segment Comment (limit to 200 characters): The maximum annual rate is based on a handling/usage limit of 2.42 million tons per year coal/pet coke included in construction permit PSD-FL -265. The use of coal treated with a binder as covered under this							

construction permit application will not affect the annual handling/usage limit. This construction permit application only includes segment information affected by the application. The segments identified in this application are in addition to currently

permitted segments. All currently permitted segments still apply.

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<b>Emissions</b>	Unit	Infort	nation	Section	5	οf	5
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# F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

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Emissions Unit Information Section	5	_ of _	5
Pollutant Detail Information Page		of	

# G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive Emissions	
1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour	tons/year 4. Synthetically Limited? [
5. Range of Estimated Fugitive Emissions:	to tons/year
6. Emission Factor:  Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 chara	
9. Pollutant Potential/Fugitive Emissions Comemissions from this emissions unit was included permit PSD-FL-265. The emission rates associate a result of the handling of coal treated with a biral Therefore, this section is not completed because pollutant and the change covered by this permit emissions from this emissions unit.	If in the PSD permit application for construction ated with this emissions unit will not change ander as covered under this permit application. It is it does not pertain to an emissions limited
Allowable Emissions Allowable Emissions	of
1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
	lb/hour tons/year
5. Method of Compliance (limit to 60 characte	rs):
6. Allowable Emissions Comment (Desc. of O	perating Method) (limit to 200 characters):

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Emissions Unit Information Section 5	of	5
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# H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

<u>Visible Emissions Limitation:</u> Visible Emissions Limitation \_\_\_1\_\_ of \_\_\_2\_

1.	Visible Emissions Subtype:	2.	Bas	is for Allowable	llowable Opacity:			
	VE05		[	] Rule		X] Other		
3.	Requested Allowable Opacity:							
		-	tiona	l Conditions:		%		
	Maximum Period of Excess Opacity Allowe	ed:				min/hour		
						• • •		
4.	4. Method of Compliance: Using EPA Method 9, a 3-hour initial visible emissions test was							
	conducted at both fuel silo dust collector stacks and a 30 minute renewal visible emissions							
-	test will be conducted once every five years.  5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit along							
5.	with compliance determination requirement			•		_		
ļ	265. The VE limit and compliance determi							
	of coal treated with a binder as covered und					_		
1	or cour greated with a sinder as covered and	.01		instruction poin	т ар	priodition.		
	H. VISIBLE EMISSIONS INFORMATION							
	(Only Regulated Emissions Units Subject to a VE Limitation)							
<u>Vi</u>	sible Emissions Limitation: Visible Emissi	ions	Limi	itation2	of_	2		
2.	Visible Emissions Subtype:	2.	Bas	is for Allowabl	e Opa	acity:		
	VE20		[ X	] Rule	[	] Other		
3.	Requested Allowable Opacity:							
		-	tiona	d Conditions:		%		
	Maximum Period of Excess Opacity Allow	ed:				min/hour		
	Mathad of Camplian on Daina EDA Matha	aо	in					
4.	Method of Compliance: Using EPA Method	u 2,	an m	itial visible em	ission	is test was		
4.	conducted.	u 9,	an m	itial visible em	ISSION	is test was		
	conducted.							
	Visible Emissions Comment (limit to 200 c	hara		s): This visible o	emiss	ions limit is from		
	Visible Emissions Comment (limit to 200 c NSPS Subpart Y. The VE limit and comple	hara	e det	s): This visible or ermination met	emiss	ions limit is from are not affected by		
	Visible Emissions Comment (limit to 200 con NSPS Subpart Y. The VE limit and complete the handling of coal treated with a binder as	hara	e det	s): This visible or ermination met	emiss	ions limit is from are not affected by		
	Visible Emissions Comment (limit to 200 c NSPS Subpart Y. The VE limit and comple	hara	e det	s): This visible or ermination met	emiss	ions limit is from are not affected by		
	Visible Emissions Comment (limit to 200 con NSPS Subpart Y. The VE limit and complete the handling of coal treated with a binder as	hara	e det	s): This visible or ermination met	emiss	ions limit is from are not affected by		

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Emissions Unit Information Section 5	of	5
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# I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor of

1.	Parameter Code:	2.	Pollutant(s):	
3.	CMS Requirement:	[	] Rule [ ] Other	
4.	Monitor Information:			
	Manufacturer:			
	Model Number:		Serial Number:	
5.	Installation Date:	6. Performance Specification Test Date:		
7.	Continuous Monitor Comment (limit to 200	cha	aracters):	
1				

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Emissions Unit Information Section \_\_\_ 5 \_\_ of \_\_ 5\_\_\_

# J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

## **Supplemental Requirements**

1.	Process Flow Diagram
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
2.	Fuel Analysis or Specification
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
3.	Detailed Description of Control Equipment
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
4.	Description of Stack Sampling Facilities
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
5.	Compliance Test Report
1	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown
	[ ] Attached, Document ID: [ ] Not Applicable [X] Waiver Requested
7.	Operation and Maintenance Plan
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[X] Attached, Document ID:Attachment A[] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [X] Not Applicable
10	). Supplemental Requirements Comment: Supplemental documents were included with the
	tle V renewal application for this facility which was submitted on June 19, 2003. Because
	e proposed change covered by this construction permit application will not affect the
	ocuments submitted with the Title V renewal application, Waiver Requested is checked for
	ose documents. This is in accordance with the application instructions. Because all
	oplicable Additional Supplemental Requirements for Title V Air Operation Permit
	pplications were submitted with the June 19, 2003 submittal and will not change as a result
01	this permit application, Not Applicable is indicated for those items.

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Emissions	Unit	Information	Section	5	of	5	

## Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [ X ] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [ X ] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

## Attachment A

**Supplemental Information for Construction Permit Application** 



# Department of **Environmental Protection**

jeb Bush Governor

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Strubs Secretary

October 1, 2001

Mr. Jay Worley SJRPP Group Leader Jacksonville Electric Authority 11201 New Berlin Road Jacksonville, Florida 32226

Re: Recognition of Latex Binder as a Dust Suppressant

Dear Mr. Worley,

We have received your request to begin using a new formulation of latex binder (COVOL 298-1, made by DOW Chemical Company) on your coal as a means of suppressing fugitive dust. It is our understanding that this material will be used instead of the latex binder (Latex DL 298NA, made by DOW Chemical Company) that was previously approved on September 20, 2000, and that you will no longer be using, the Latex DL 298NA.

It is our opinion that this particular material is nearly identical to the previously approved Latex DL 298NA and falls within the classification of "chemical dust suppressant" that is authorized by your Title V permit (see Facility-wide condition II.9., and Appendix TV-3, condition 57.). For inspection purposes, please retain on-site a copy of the material safety data sheet (MSDS), a copy of your contract with the coal supplier specifying the material that will be applied to your coal, and a certification from the supplier accompanying each delivery that attests that this is the only material that has been applied to your coal. If the supplier changes the material, you must inform the Department and receive approval prior to combusting the new product.

Under the provisions of Rule 62-297.310(7)(b), F.A.C., if, at any time, the Department has reason to believe that any of your emission limits are not being met (i.e. increased particulate matter, etc.), it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely.

Bureau of Air Regulation

cc: Buck Oven, P.E., DEP James Marining, P.E., RESD

"More Protection, Less Process"

Princed on recycled paper.



# Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Scruhs Secretary

September 20, 2000

Mr. Jay Worley SJRPP Group Leader Jacksonville Electric Authority 11201 New Berlin Road Jacksonville, Florida 32226

Re: Recognition of Latex Binder as a Dust Suppressant

Dear Mr. Worley,

We have received your request to begin using a latex binder on your coal as a means of suppressing fugitive dust (Latex DL 298NA, made by DOW Chemical Company). We have also received a certification from your Professional Engineer detailing the lack of detrimental environmental effects resulting from the use of this product.

It is our opinion that this particular material falls within the classification of "chemical dust suppressant" that is authorized by your Title V permit (see Facility-wide condition II.9., and Appendix TV-3, condition 57.). For inspection purposes, please retain on-site a copy of the material safety data sheet (MSDS), a copy of your contract with the coal supplier specifying the material that will be applied to your coal, and a certification from the supplier accompanying each delivery that attests that this is the only material that has been applied to your coal. If the supplier changes the material, you must inform the Department and receive approval prior to combusting the new product.

Under the provisions of Rule 62-297.310(7)(b), F.A.C., if, at any time, the Department has reason to believe that any of your emission limits are not being met (i.e. increased particulate matter, etc.), it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

Should you have any questions regarding this matter, please contact Jonathan Holtom, P.E., at (850) 921-9531, or write to me at the above letter head address.

Sincerely,

C.H. Fancy, P

Chief

Bureau of Air Regulation

cc: Kennard Kosky, P.E., Golder Associates Buck Oven, P.E., DEP James Manning, P.E., RESD

"More Protection, Less Process"

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 989-636-4400

Product: COVOL 298-1

Product Code: 88220

Effective Date: 07/04/01 Date Printed: 07/05/01 MSD: 007085

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary Carboxylated Styrene/Butadiane/
Acrylate/Acetate Polymer
Water CAS# 007732-18-5 38-60t

3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Milky white liquid emulsion. Slight odor. Dike and contain spills.
 Avoid dilution of spills.

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause moderate irritation. May cause slight corneal injury. Vapors or mists may cause eye irritation.

SKIN: Short single exposure not likely to cause significant skin irritation. Prolonged or repeated exposure may cause slight skin irritation. Material may stick to skin causing irritation upon removal. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.

INGESTION: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

(Continued on Page 2)
• or (R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET PAGE: 2

Product Name: COVOL 298-1

Product Code: 88220

Effective Date: 07/04/01 Date Printed: 07/05/01

MSD: 007085

#### 3. HAZARDS IDENTIFICATION (CONTINUED)

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

#### 4. FIRST AID

EYE: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes.

SKIN: Wash off in flowing water or shower.

INGESTION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

#### 5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

PLASH POINT: Not applicable. METHOD USED: Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable.

GP.

FLAMMABILITY LIMITS:

LFL: Not applicable. UFL: Not applicable.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to organic compounds, carbon dioxide, carbon monoxide and dense smoke.

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn. Upon burning the produce generates dense black make.

EXTINGUISHING MEDIA: To extinguish combustible residues of this

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Product Name: COVOL 295-1

Product Code: \$8220

Effective Date: 07/04/01 Date Printed: 07/05/01 MSD: 007085

#### 5. FIRE FIGHTING MEASURES (CONTINUED)

product use water fog, carbon dioxide, dry chemical, or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical, or foam.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCRA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls/Personal Protection.

PROTECT THE ENVIRONMENT: Contain liquid to prevent contamination of soil, surface water or ground water.

CLEARUP: Recover and recycle spilled latex if possible, otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

#### 7. HANDLING AND STORAGE

ANDLING: Practice reasonable care to avoid repeated, prolonged skin contact.

STORAGE: Store between 40F and 110F. May coagulate if frozen at 32F, OC. Material may develop bacteria odor on long-term storage. No safety problems known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most obdojcions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

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Product Name: COVCL 298-1

Product Code: 88220

Effective Date: 07/04/01 Date Printed: 07/05/01 MSD: 00708

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

EYE/FACE PROTECTION: Use chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: If respiratory irritation is experienced, use an approved air-purifying respirator.

EXPOSURE GUIDELINES: None established.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

AFFEARANCE: Milky white liquid emulsion.

ODOR: Slight odor.

VAPOR PRESSURE: 17.5 mmHg @ 20C VAPOR DENSITY: (air = 1) 0.62 BOILING POINT: 212F, 100C

SOLUEILITY IN WATER: Latex as sold is dilutable. Polymer

component is insoluble.

SPECIFIC GRAVITY: Not determined

#### 10. STABILITY AND REACTIVITY

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CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: May coagulate if frozen. The dry resin is combustible.

INCOMPATIBILITY WITH OTHER MATERIALS: Addition of chemicals, such as acids or multivalent metal salts, may cause coagulation.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health

(Continued on Page 5)

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Product Name: COVOL 298-1

Product Code: 88220

Effective Date: 07/04/01

Date Printed: 07/05/01

MSD: 007085

Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: Single dose oral ID50 has not been determined.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

#### ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight.

Latex dispersions will color water a milky white.

DEGRADATION & PERSISTENCE: The polymeric component is not expected to biodegrade.

ECOTOXICITY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 >100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

As a service to ite customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess

(Continued on Page 6) or (R) Indicates a Trademark of The Dow Chemical Company

Product Name: COVOL 298-1

Product Code: 68220

Effective Date: 07/04/01 Date Printed: 07/05/01 MSD: 007085

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-256-2436 or 989-632-1556 for further details.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are plent to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

## U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:

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MATERIAL SAFETY DATA SHEET

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Product Name: COVOL 298-1

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Date Printed: 07/05/01

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RESULATORY INFORMATION: (CONTINUED)

This product contains a chemical(s) known to the State of California to cause cancer.

STATE RIGHT-TO-RNOW: This product is not known to contain any substances subject to the disclosure requirements of

New Jersey Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 16. OTHER INFORMATION

MSDS STATUS: Revised Section 2 (added compositional ranges).

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The Information Herein Is Given In Good Faith, Bur No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company For
Further Information.

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## **BEST AVAILABLE COPY**

#### MATERIAL SAFETY DATA SHEET

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1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-HOUR EMERGENCY PHONE NUMBER: 517-636-4400

Product: COVOL 298

Product Code: 82953

MSD: 005213 Effective Date: 01/07/99 Date Printed: 12/14/00

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary carboxylated styrene/ butadiene polymer Water

40-62%

38-50% CAS# 007732-18-5

3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Milky white liquid emulsion. Slight odor. No significant immediate \*

\* hazards for emergency response are known. Dike and contain spills. \*

\* Avoid dilution of spills.

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause slight transient (temporary) eye irritation. Corneal injury is unlikely.

irritatic--- سعناء

SKIN: Short single osure not likely to cause significant skin I or repeated exposure may cause slight rial may stick to skin causing irritation \* prolonged exposure is not likely to being absorbed through the skin in

> 11 toxicity is considered to be 's anticipated from swallowing to normal handling operations.

to vapors is not likely to be

Dow Chamical Company

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Product: COVOL 298

Product Code: 82953

Effective Date: 01/07/99 Date Printed: 12/14/00 MSD: 005213

#### 3. HAZARDS IDENTIFICATION (CONTINUED)

SYSTEMIC & OTHER EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

#### 4. FIRST AID

EYES: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce

promiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult &

physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

#### 5. FIRE FIGHTING MEASURES

#### FLAMMABLE PROPERTIES:

FLASH POINT: Not applicable METHOD USED: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

#### FLAMMABILITY LIMITS:

LFL: Not applicable UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to hydrocarbons, carbon monoxide and dense smoke.

(Continued on Page 3) or (R) Indicates a Trademark of The Dow Chemical Company Product: COVOL 298

Product Code: 82953

#### 5. FIRE FIGHTING MEASURES (CONTINUED)

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

THE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Avoid contact with eyes and skin.

PROTECT THE ENVIRONMENT: Contain material to prevent contamination of soil, surface water or ground water.

CLEANUP: Recover and recycle spilled latex if possible, otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

#### 7. HANDLING AND STORAGE

HANDLING: Practice reasonable care to avoid repeated, prolonged skin contact. Addition of chemicals may cause coagulation.

STORAGE: Store at temperatures between 40F and 110F. May coagulate if frozen at 32F, 0C. Material may develop bacteria odor on long-term storage. No safety problems known.

(Continued on Page 4)

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Product Code: 82953

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT
EYE/FACE PROTECTION: Use safety glasses.

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: No respiratory protection should be needed.

EXPOSURE GUIDELINE(S): None established.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Milky white liquid emulsion.

ODOR: Slight odor.

VAPOR PRESSURE: 17.5 mmHg @ 200

VAPOR DENSITY: 0.624 6 80F BOILING POINT: 212F, 100C

SOLUEILITY IN WATER: Latex as sold is dilutable. Polymer

component is insoluble.

SPECIFIC GRAVITY: .980 - 1.040

The physical data listed are for a series of latexes. For specific properties on any given latex, see the product bulletin.

#### 10. SEEFLITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: Active ingredient decomposes at elevated temperatures. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

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HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence \_

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10. STABILITY AND REACTIVITY (CONTINUED)

of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the effress or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: The oral LD50 for rats is > 5000mg/kg for similar materials.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

#### ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight. Latex dispersions will color water a milky white.

DEGRADATION & TRANSFORMATION: The polymeric component is not expected to biodegrade.

ECOTOXICOLOGY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL METHOD: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT

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#### DISPOSAL CONSIDERATIONS: (CONTINUED)

PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 517-832-1556 for further details.

#### 14. TRANSPORT INFORMATION

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

- U. S. DEPARTMENT OF TRANSPORTATION (D.O.T.):
  This product is not regulated by DOT when shipped domestically by land.
- 15. REGULATORY INFORMATION (Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

# U.S. PEGULATIONS

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REGULATORY INFORMATION: (CONTINUED)

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CANADIA: REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

16. OTHER INFORMATION

MSDS STATUS: Revised Section 13

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Express or implied, is Made: Consult The Dow Chemical Company For
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