



FOSTER WHEELER ENVIRONMENTAL CORPORATION

December 15, 1998

Mr. Syed Arif
Florida Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Street, Suite 23
Tallahassee, FL 32301

Dear Mr. Arif:

**SUBJECT: JEA NORTHSIDE REPOWERING PROJECT
DRAFT PSD APPLICATION (REMAINDER)**

Enclosed please find a set of the hard copy printouts from the ELSA program comprising the actual Application Forms. These should be inserted behind the cover sheet for Attachment F-1 of the application package provided to you last week. Also enclosed are a set of additional calculations, which should be inserted in Appendix C of the PSD Report (Attachment F-9) and a set of additional process flow diagrams, which should be inserted in Attachment F-6. With the exception of the transmittal letter and confidential vendor data, this comprises the total draft PSD Application package.

Please contact Bert Gianazza of JEA (904-665-6247) with any questions or comments on the draft application. We will be calling you to set up a meeting in the near future to go through the application. We would appreciate your comments as soon as possible, and no later than the end of December, so that we may incorporate them into the actual application which we plan to file in early 1999.

Very truly yours,

Douglas J. Fulle
Lead Scientist, Air quality

Enclosure

cc. Mike Halpin (FDEP)(w/enc.)
Al Linero (FDEP)(w/o enc.)
Bert Gianazza (JEA)(w/o enc.)
Liz Deken (FWENC)(w/o enc.)

"DRAFT"

PLANT EMISSION COMPARISON

	767 MW Net Unit 1/Unit 3 (Existing)			1035 MW Net Units 1 & 2 / Unit 3 (530 MW / 505 MW)			250 MW Net Cedar Bay CFB Unit Permit Limits			330 MW Net Indiantown PC Unit Permit Limits		
	Permit (or AP42) Rates		Calculated tons/yr**	Proposed Permitted Emissions***			lbs/mmbtu	lbs/hr	tons/yr	lbs/mmbtu	lbs/hr	tons/yr
	lbs/mmbtu*	lb/hr*		lbs/mmbtu	lbs/hr	tons/yr						
NOx	0.445 / 0.3	1231/1510	4439	0.09 / 0.3	249 / 1510	3600	0.17	542.1	2208	0.17	582	2549
SO2	1.98	5479/9965	13649	0.15 / 1.98	415 /9965	12284	0.2	765.3	2598	0.17	582	2549
PM	0.125	346/629	979	0.011 / 0.125	30/ 629	881	0.018	57.3	234	0.018	61.6	270
Opacity	<40%			<10% (units 1&2) / <40% (unit 3)			<20%			< 10%		
CO	0.038	105/191	430	0.22	608	5326.78	0.175	558	2274	0.11	376	1649
VOC	0.0051	14/26	47	0.01	27.6	242.13	0.015	48	195	0.0036	12.3	54
H2SO4	0.0684	189.3/344.3	599	0.0078	21.6	188.86	0.000466	1.5	6.1	0.0004	1.45	6.35
NH3 slip	NA	NA	NA	<40 ppmvd			<10 ppmvd			<50 ppmvd		
Lead	0.00001	0.028/0.05	0.08195	0.0000261	0.072	0.63	0.0000603	0.18	0.78	0.0000187	0.064	0.28
Mercury	0.00000075	0.0021/0.0038	0.006	0.0000105	0.029	0.25	0.0000289	0.09	0.38	0.0000114	0.039	0.172
Fluoride	0.00025	0.69/1.26	2	0.000157	0.434	3.80	0.000744	2.37	9.7	0.0015	5.08	22.25
Beryllium****	0.00000019	.00053/0.0096	0.0015	no permit limit			0.000087	0.03	0.11	0.00000273	0.0093	0.041

*Represents emissions from Unit 1/Unit 3 based on AP-42 factors (or permit limit where applicable) assuming a heat content of 150,000 BTU/gal for residual oil, and units operating at maximum load. Permit limit values are shown in bold type.

**Average of 1994 and 1995 actual emissions

***Emission rates (lb/mmbtu and lb/hr) are per unit for proposed CFBs and Unit 3. Unit 3 data is included only for NOx, SO2, PM, and opacity.

The parameters listed below opacity only apply to the proposed CFBs, and tons/yr shown are combined total for both CFBs.

Values shown are for worst case fuel (coal). Typical values when burning pet coke will be lower.

****Beryllium is no longer a PSD regulated pollutant, but will be addressed in FARC analysis.

TERMS AND ABBREVIATIONS

AP-42 - Air Pollution emission factor document developed by the Environmental Protection Agency.

CFB - circulating fluidized bed

hr - hour

lbs - pounds

MMBTU - million british thermal units; unit of heat input

MW - megawatt (represents 1 million watts); unit of electrical power

PC - pulverized coal

ppmvd - part per million by volume on a dry basis

yr - year

**Department of
Environmental Protection**

**DIVISION OF AIR RESOURCES MANAGEMENT
APPLICATION FOR AIR PERMIT - LONG FORM**

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : JEA	
2. Site Name : JEA - NGS/SJRPP	
3. Facility Identification Number : 310045	<input type="checkbox"/> Unknown
4. Facility Location : Northside Generating Station	
Street Address or Other Locator : 4377 Heckscher	Zip Code : 32226
City : Jacksonville	County : Duval
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

I. Part 1 - 1

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Walter P. Bussells
Title : Managing Director & CEO

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

Organization/Firm : JEA
Street Address : 21 West Church Street
City : Jacksonville
State : FL Zip Code : 32202

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

Telephone : (904)665-7220 Fax : (904)665-7366

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.*

Signature

Date

* Attach letter of authorization if not currently on file.

I. Part 2 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
001	NGS Boiler No. 1	-
002	NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)	-
003	NGS Boiler No. 3	-
026	NGS - Circulating Fluidized Bed Boiler No. 2	AC1A
027	NGS - Circulating Fluidized Bed Boiler No. 1	AC1A
028	NGS - Materials Handling & Storage Operations	AC1A
029	NGS - Crusher House	AC1A
031	NGS - Boiler Fuel Silos	AC1A
032	NGS - Limestone Receiving Bins	AC1A
033	NGS - Limestone Dryers/Mills	AC1A
034	NGS - Limestone Crusher Conveyor Transfers	AC1A
035	NGS - Limestone Feed Silos	AC1A
036	NGS - Fly Ash Waste Bins	AC1A
037	NGS - Fly Ash Transfer & Storage Systems	AC1A

I. Part 3 - 1

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
038	NGS - Bed Ash Transfer & Storage Systems	AC1A
039	NGS - Fly & Bed Ash Silo Hydrators	AC1A

Purpose of Application and Category

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

This Application for Air Permit is submitted to obtain :

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

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

Current construction permit number :

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

Operation permit to be renewed :

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

Current construction permit number :

Operation permit to be revised :

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

Operation permit to be revised/corrected :

- Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

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

This Application for Air Permit is submitted to obtain :

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

Current operation/construction permit number(s) :

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

Operation permit to be renewed :

- Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

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

This Application for Air Permit is submitted to obtain :

I. Part 4 - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Current operation permit number(s), if any :

0310045-002-AV

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

Current operation permit number(s) :

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

I. Part 4 - 3

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

Effective : 3-21-96

Application Processing Fee

Check one :

Attached - Amount : \$7500.00 Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :	
JEA Northside Units 1 & 2 Repowering Project - Construction of two Circulating Fluidized Bed boilers associated ancillary equipment and processes.	
See Attached PSD Application.	
2. Projected or Actual Date of Commencement of Construction :	01-Aug-1999
3. Projected Date of Completion of Construction :	01-Apr-2002

Professional Engineer Certification

1. Professional Engineer Name : Elizabeth Deken Registration Number : 0050963	
2. Professional Engineer Mailing Address :	
Organization/Firm : Foster Wheeler Environmental Corp.	
Street Address : RR3, Box 780	
City : Poplar Bluff	State : MO Zip Code : 63901
3. Professional Engineer Telephone Numbers :	
Telephone : (573)785-2720	Fax : (573)840-9683

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 pollutant 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 [] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions 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)

Date

* Attach any exception to certification statement.

I. Part 6 - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Application Contact

1. Name and Title of Application Contact :

Name : Bert Gianazza
Title : Professional Engineer

2. Application Contact Mailing Address :

Organization/Firm : JEA
Street Address : 21 West Church Street
City : Jacksonville
State : FL Zip Code : 32202

3. Application Contact Telephone Numbers :

Telephone : (904)665-6247 Fax : (904)665-7376

Application Comment

The Repowering Project, as proposed, triggers review under the Prevention of Significant Deterioration (PSD) Program. In addition, several of the new emissions units are subject to various New Source Performance Standards (NSPS). These NSPS include Subparts Da, Y, and OOO.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : 17 East (km) : 446.90 North (km) : 3366.30			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 30 25 51 Longitude (DD/MM/SS) : 81 33 3			
3. Governmental Facility Code : 4	4. Facility Status Code : A	5. Facility Major Group SIC Code : 49	6. Facility SIC(s) : 4911
7. Facility Comment : .			

Facility Contact

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

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	
The facility is a major source as defined by both EPA and the FDEP under the PSD, Federal Operating Permit, and the Hazardous Air Pollutant programs..	

II. Part 2 - 1

B. FACILITY REGULATIONS

Rule Applicability Analysis

The proposed Repowering Project is subject to the Preconstruction Review Requirements of Chapter 62-212, F.A.C. Specifically, the Project is subject to Chapter 62-212.300, F.A.C. (General) for all pollutants and is also subject to Chapter 62-212.400, F.A.C., Prevention of Significant Deterioration for NO_x, TSP, PM₁₀, CO, VOC, total fluorides and mercury.

B. FACILITY REGULATIONS

List of Applicable Regulations

Rule 62-256.450, F.A.C. - Burning for Cold or Frost Protection

Rule 62-256.500, F.A.C. - Land Clearing

Rule 62-256.600, F.A.C. - Industrial, Commercial, Municipal, and Research Open Burning

Rule 62-256.700, F.A.C. - Open Burning Allowed

Rule 62-257.301, F.A.C. - Notification Procedure and Fee

Rule 62-257.400, F.A.C. - Fee Schedule

Rule 62-257.900, F.A.C. - Form

Rule 62-296.320(1), F.A.C. - Volatile Organic Compound Emissions or Organic Solvents Emissions

Rule 62-296.320(2), F.A.C. - Objectionable Odor Prohibited

Rule 62-296.320(3), F.A.C. - Open Burning

Rule 62-296.320(4)(b), F.A.C. - General Visible Emissions Standard

Rule 62-296.320(4)(c), F.A.C. - Unconfined Emissions of Particulate Matter

Jacksonville, Title X, Environmental Affairs, Rule 360.109 Entry on Property

II. Part 3b - 1

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

Effective : 3-21-96

B. FACILITY REGULATIONS

List of Applicable Regulations

Jacksonville, Title X, Environmental Affairs, Rule 360.301 Compliance Plans

Jacksonville, Title X, Environmental Affairs, Rule 360.503 Activities Pursuant to Attainment Plan

Jacksonville EPB, Rule 1.902 Compliance Plan

Jacksonville EPB, Rule 1.903 Compliance Agreements

Jacksonville EPB, Rule 1.904 Compliance Agreements Embodying Compliance Plan

Jacksonville EPB, Rule 2.104 Registration and Reports

Jacksonville EPB, Rule 2.106 General Restrictions

Jacksonville EPB, Rule 2.107 Air Pollution Prohibited

Jacksonville EPB, Rule 2.201 Adoption of 62-210, F.A.C.

Jacksonville EPB, Rule 2.501 Adoption of 62-256, F.A.C.

Jacksonville EPB, Rule 2.902 Asbestos Removal

Jacksonville EPB, Rule 2.1103 C.2., E-Air Pollution Nuisance

Jacksonville EPB, Rule 2.1301 Adoption of 62-4, F.A.C.

Jacksonville EPB, Rule 2.501 Adoption of 62-213

II. Part 3b - 2

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

Effective : 3-21-96

B. FACILITY REGULATIONS

List of Applicable Regulations

Rule 62-213.460, F.A.C. - Permit Shield

40 CFR Part 61, Subpart M - National Emission Standard for Asbestos

40 CFR Part 61, Appendix C - Quality Assurance Procedures

Rule 62-256.300, F.A.C., Prohibitions

Rule 62-281.300, F.A.C., Applicability

Rule 62-281.400, F.A.C., Compliance Requirements

Rule 62-281.500(1), (2),(3), & (4), F.A.C., Establishment Certification

Rule 62-281.600, F.A.C., Industrial, Commercial, Municipal, and Research Open Burning

Rule 62-281.700, F.A.C., Open Burning Allowed

Rule 62-281.600, F.A.C., Training Requirements

Rule 62-281.700, F.A.C., Equipment Certification

Rule 62-281.900, F.A.C., Forms

Jacksonville, Title X, Rule 360.109 Entry on Property

40 CFR Part 82.160 Approved Equipment Testing Organization

II. Part 3b - 3

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

Effective : 3-21-96

B. FACILITY REGULATIONS

List of Applicable Regulations

40 CFR Part 82.34 Prohibitions

40 CFR Part 82.36 Approved Refrigerant Recycling Equipment

40 CFR Part 82.38 Approved Independent Standards Testing Organizations

40 CFR Part 82.40 Technician Training and Certification

40 CFR Part 82.154 Prohibitions

40 CFR Part 82.156 Required Practice

40 CFR Part 82.158 Standards for Recycling and Recovery Equipment

40 CFR Part 82.161 Technician Certification

40 CFR Part 82.162 Certification by Owners of Recovery and Recycling Equipment

40 CFR Part 82.164 Reclaimer Certification

40 CFR Part 82.166(k) Reporting and Recordkeeping Requirements for Owners/Operators

Rule 62-204.800(11), F.A.C. - Title V Rule Adoption

Rule 62-210.300(1)(2), F.A.C. - Air Operation Permits

Rule 62-210.300(3)(a), F.A.C. - Exemptions

II. Part 3b - 4

DEP Form No. 62-210.900(1) - Form
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B. FACILITY REGULATIONS

List of Applicable Regulations

Rule 62-210.370(3), F.A.C. - Annual Operating Report

Rule 62-210.900(1)(5), F.A.C. - Annual Operating Reports

Rule 62-213.205, F.A.C. - Annual Emissions Fee

Rule 62-213.400, F.A.C. - Permits and Permit Revisions

Rule 62-213.410, F.A.C. - Changes Without Permit Revision

Rule 62-213.415, F.A.C. - Trading of Emissions Within a Source

Rule 62-256.300, F.A.C. - Prohibitions

40 CFR Part 82.42 Certifications, Recordkeeping, and Public Notification Requirements

Rule 62-213.400, F.A.C., Permit Shield

II. Part 3b - 5

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
CO	A
NOX	A
SO2	A
PM	A
VOC	A
PB	B
H114	B
FL	B
SAM	B
HAPS	A
H106	A
PM10	A

II. Part 4 - 1

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 1

1. Pollutant Emitted :	CO	
2. Requested Emissions Cap :	0.0000 (lbs/hour)	0.0000 (tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 1

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 2

1. Pollutant Emitted :	NOX
2. Requested Emissions Cap :	(lbs/hour) 3600.0000 (tons/year)
3. Basis for Emissions Cap Code :	OTHER
4. Facility Pollutant Comment :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.

II. Part 4b - 2

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 3

- | | |
|-----------------------------------|---|
| 1. Pollutant Emitted : | SO2 |
| 2. Requested Emissions Cap : | (lbs/hour) 12284.0000 (tons/year) |
| 3. Basis for Emissions Cap Code : | OTHER |
| 4. Facility Pollutant Comment : | <p>Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.</p> |

II. Part 4b - 3

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 4

1. Pollutant Emitted :	PM
2. Requested Emissions Cap :	(lbs/hour) 881.0000 (tons/year)
3. Basis for Emissions Cap Code :	OTHER
4. Facility Pollutant Comment :	<p>Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community committment.</p>

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 5

1. Pollutant Emitted :	VOC	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 5

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 6

1. Pollutant Emitted :	PB	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 6

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D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 7

1. Pollutant Emitted :	H114	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 7

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 8

1. Pollutant Emitted :	FL	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 8

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 9

1. Pollutant Emitted :	SAM	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 9

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 10

1. Pollutant Emitted :	HAPS	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 11

1. Pollutant Emitted :	H106	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

II. Part 4b - 11

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 12

1. Pollutant Emitted :	PM10	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	Not Applicable	

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	F-4
2. Facility Plot Plan :	F-5
3. Process Flow Diagram(s) :	F-6
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	F-7
5. Fugitive Emissions Identification :	F-8
6. Supplemental Information for Construction Permit Applic	F-9

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt
8. List of Equipment/Activities Regulated under
9. Alternative Methods of Operation :
10. Alternative Modes of Operation (Emissions
11. Identification of Additional Applicable
12. Compliance Assurance Monitoring
13. Risk Management Plan Verification :
14. Compliance Report and Plan :
15. Compliance Certification (Hard-copy Requir

Emissions Unit 001

NGS Boiler No. 1

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

NGS Boiler No. 1

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS Boiler No. 1		
2. Emissions Unit Identification Number : 001 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : This unit will be repowered under the proposed modification. It will operate of a period of time after existing NGS Unit No. 2 is repowered and in commercial operation. See Attachment F-10 for detailed discussion.		

Emissions Unit Information Section _____

Emissions Unit Control Equipment _____

1. Description :

2. Control Device or Method Code :

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

Emissions Unit Information Section 1
NGS Boiler No. 1

Emissions Unit Details

1. Initial Startup Date :	16-Nov-1965	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	298	MW
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	2892	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	0	
4. Maximum Production Rate :		
5. Operating Capacity Comment :		
Generator Nameplate Rating is 297.5 MW		
Maximum Heat Input shown is for Gas Firing. Maximum heat input while firing oil is 2767 mmBtu/hr		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week

52 weeks/year

8,760 hours/year

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

Emissions Unit Information Section 1
NGS Boiler No. 1

Rule Applicability Analysis

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List of Applicable Regulations

Rule 62-210.700(2), (3), (4), & (6), F.A.C., Excess Emissions

Rule 62-214.300, F.A.C. Applicability

Rule 62-214.340(5), F.A.C., Exemptions

Rule 62-296.405(1)(a), (b), (c)1.a., F.A.C., Fossil Fuel Steam Generators

Rule 62-296.405(1)(e), (f), & (g), F.A.C., Fossil Fuel Steam Generators

Rule 62-297.310, F.A.C., General Test Requirements

Rule 297.401(5) & (9), F.A.C., Test Methods

Rule 62-204.800(14), F.A.C., 40 CFR Part 72 - Acid Rain Permits (As Noted)

40 CFR Part 72.6 - Applicability

40 CFR 72.9 - Standard Requirements

40 CFR 72 Subpart B - Designated Representative

40 CFR 72 Subpart C - Acid Rain Permit Applications

Jacksonville EPB, Rule 2.1001 Stationary Sources Adoption of 62-296

Jacksonville EPB, Rule 2.1101 Stationary Sources Adoption of 62-297

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List of Applicable Regulations

Jacksonville EPB, Rule 2.301 Adoption of 62-210

40 CFR 72.40 General

40 CFR 73 Subpart E - Acid Rain Permit Contents

40 CFR 72.90 Annual Compliance Certification Report

Rule 62-204.800(15), F.A.C., Sulfur Dioxide Allowance System (As Noted)

40 CFR 73.35 - Compliance

40 CFR 73.50 - Scope and Submission of Transfers

40 CFR 73.51 - Prohibition

40 CFR 75.2 - Applicability

40 CFR 75.4 - Compliance Dates

40 CFR 75.5 Prohibition

40 CFR Part 75, Subpart B Monitoring Provisions - except 75.15, 75.16, 75.17, & 75.18)

40 CFR Part 75, Subpart C - Operation and Maintenance Procedures

40 CFR Part 75, Subpart D - Missing Data Substitution Procedures

III. Part 6b - 2

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List of Applicable Regulations

40 CFR Part 75, Subpart F - Recordkeeping Requirements

40 CFR Part 75 Appendix A - Specifications and Test Procedures

40 CFR Part 75, Subpart G - Reporting Requirements

40 CFR Part 75 Appendix B - Quality Assurance and Quality Control Procedures

40 CFR Part 75 Appendix C Missing Data Statistical Estimation Procedures

40 CFR 77.3 Offset Plans

40 CFR 77.5(b) Deductions of Allowances

40 CFR 77.6 Excess Emission Penalties for SO₂ and NO_x

Rule 62-204.800(11), F.A.C., 40 CFR Part 70 (As Noted)

Rule 62-204.800(12), F.A.C., 40 CFR Part 72 (As Noted)

Rule 62-204.800(13), F.A.C., 40 CFR Part 73 (As Noted)

Rule 62-204.800(16), F.A.C., 40 CFR Part 77 (As Noted)

Rule 62-214.350, F.A.C., Certification

Rule 62-214.430(1) & (2), F.A.C., Implementation and Termination of Compliance Options.

Rule 62-296.702, F.A.C.

III. Part 6b - 3

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List of Applicable Regulations

40 CFR 75 Appendix D - Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units

40 CFR 75 Appendix 2 - Optional NO_x Emissions Estimation Protocol for Gas-Fired and Oil-Fired Units

Rule 62-210.300(5), F.A.C., Notification of Start-up

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

NGS Boiler No. 1

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	NGS Stack 1	
2. Emission Point 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 : Unit #1 Steam Generator		
5. Discharge Type Code :	V	
6. Stack Height :	250	feet
7. Exit Diameter :	16.0	feet
8. Exit Temperature :	266	°F
9. Actual Volumetric Flow Rate :	0	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	0	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates :		
Zone :	17	East (km) : 446.970 North (km) : 3365.230
14. Emission Point Comment : Flow Rate is too High for ELSA - 1,000,000 ACFM		

III. Part 7a - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

NGS Boiler No. 1

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : No. 6 Fuel Oil	
2. Source Classification Code (SCC) : 10100401	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 18.20	5. Maximum Annual Rate : 159,467.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 152	
10. Segment Comment : Max rates based on oil with a heat content of 152 MBtu/kgal. Max rates vary with heat content. Unit has no fuel sulfur limit, only a max emission rate for SO ₂ of 1.98 lb/mmBtu on a 24-hour basis.	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

NGS Boiler No. 1

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Natural Gas	
2. Source Classification Code (SCC) : 10100601	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 2.89	5. Maximum Annual Rate : 25,334.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 3	
10. Segment Comment : Max rates based on a heat content of 1000 MBtu/MCF. Max Rates Vary with Heat Content Boiler co-fires natural gas, No. 6 Fuel Oil, and On-Spec. Used Oil.	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

NGS Boiler No. 1

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : On-Spec Used Oil	
2. Source Classification Code (SCC) : 10100401	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 18.20	5. Maximum Annual Rate : 1,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 152	
10. Segment Comment : NGS can fire upto 1,000,000 gallons of on-spec used oil per year.	

III. Part 8 - 3

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

Emissions Unit Information Section 1

NGS Boiler No. 1

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM			EL
2 - PM10			NS
3 - SO2			EL
4 - NOX			NS
5 - CO			NS
6 - VOC			NS
7 - HAPS			NS
8 - H107			NS
9 - HCL			NS
10 - H133			NS
11 - SAM			NS

III. Part 9a - 1

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

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	830.0000000 lb/hour	1,514.9000000 tons/year
4. Synthetically Limited?		
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor 0	Units lb/mmBtu	
Reference 62-296.702		
7. Emissions Method Code :	0	
8. Calculations of Emissions :		
$(0.1 \text{ lb/mmBtu})(2767 \text{ mmBtu/hr}) = 276.7 \text{ lb/hr}$		
$(0.3 \text{ lb/mmBtu})(2767 \text{ mmBtu/hr}) = 830.1 \text{ lb/hr}$		
$\{(0.1 \text{ lb/mmBtu})(2767 \text{ mmBtu/hr})(8760 \text{ hr/yr} - (3\text{hr/day})(365 \text{ day/yr})) + (0.3 \text{ lb/mmBtu})(2767 \text{ mmBtu/hr})(3\text{hr/day})(365 \text{ day/yr})\} / 2000 \text{ lb/ton} = 1514.9 \text{ tons}$		
$276.7 \text{ lb/hr} \times (8760 - 1095) \text{ hr/yr} / 2000 \text{ lb/ton} = 1060.5 \text{ Tons}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Annual emissions includes allowable soot blowing activities 3 hr/day at 0.3 lb/mmBtu		

III. Part 9b - 1

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		lb/hour tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	SO2	
2. Total Percent Efficiency of Control :	%	
3. Potential Emissions :	5,479.0000000 lb/hour	23,997.0000000 tons/year
4. Synthetically Limited?	[] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor	2	Units lb/mmBtu
Reference	62-296.405	
7. Emissions Method Code :	0	
8. Calculations of Emissions :	$(2767 \text{ lb/mmBtu})(1.98 \text{ lb-SO}_2\text{/mmBtu}) = 5478.7 \text{ lb/hr}$ $(5478.7 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 23996.7 \text{ tons}$	
9. Pollutant Potential/Estimated Emissions Comment :	Emission Limit set by regulation.	

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	3,600.000000 tons/year
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		
Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.		

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : CO		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

III. Part 9b - 5

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : HAPS		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		tons/year
		lb/hour
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		tons/year
		to
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : H107		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
lb/hour		tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 1

NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : HCL		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : H133		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	lb/mmBtu
4. Equivalent Allowable Emissions :	
	276.70 lb/hour 1,060.50 tons/year
5. Method of Compliance :	EPA Method 5, If firing oil 400 hours or more per year.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The emission limitation is set at 0.1 lb/mmBtu, not including excess emissions.

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Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 1

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	lb/mmBtu
4. Equivalent Allowable Emissions :	
	830.10 lb/hour 454.50 tons/year
5. Method of Compliance :	EPA Method 5, If firing oil 400 hours or more per year.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The excess emission limitation is set at 0.3 lb/mmBtu.

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	1.98	lb/mmBtu	
4. Equivalent Allowable Emissions :	5,478.70	lb/hour	23,996.70 tons/year
5. Method of Compliance :	Annual EPA Methods 6, 6A, 6B, or 6C or Fuel Sampling		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :			

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 3

Allowable Emissions 3

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	12,284.00	tons per year	
4. Equivalent Allowable Emissions :	lb/hour	12,284.00	tons/year
5. Method of Compliance :	Acid Rain CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.		

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	3,600.00 tons
4. Equivalent Allowable Emissions :	lb/hour 3,600.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community committment.

Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 1

Allowable Emissions 3

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	881.00 tons per year
4. Equivalent Allowable Emissions :	lb/hour 881.00 tons/year
5. Method of Compliance :	Operating Records & Test Data
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.

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Emissions Unit Information Section 1
NGS Boiler No. 1

Pollutant Information Section 3

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	AMBIENT
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.14 lb/mmBtu
4. Equivalent Allowable Emissions :	lb/hour tons/year
5. Method of Compliance :	Acid Rain CEM for SO2
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The limit of 0.143 lb/mmBtu (24-hour block average) is requested to ensure that NGS Unit 1 does not contribute to air quality violations. Limit applies after Repowered NGS Unit 2 commences operations.

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

Emissions Unit Information Section 1
NGS Boiler No. 1

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	40
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 40 %
	Exceptional Conditions : 100 %
Maximum Period of Excess Opacity Allowed :	6 min/hour
4. Method of Compliance :	
	Annual DEP Method 9 if firing oil for 400 hours or more
5. Visible Emissions Comment :	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
NGS Boiler No. 1

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :	60
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 60 % Exceptional Conditions : 100 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Annual DEP Method 9 if firing oil for 400 hours or more
5. Visible Emissions Comment :	60% Opacity -Excess Emission during Soot Blowing and Load Changes >40% Opacity during Startup, Shutdown and Malfunctions

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J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
NGS Boiler No. 1

Continuous Monitoring System Continuous Monitor 1

1. Parameter Code : CO2	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : KVB Model Number : 41H Ver 3.1.4 Serial Number : 41H-48394-280	
5. Installation Date :	01-Aug-1994
6. Performance Specification Test Date :	29-Dec-1994
7. Continuous Monitor Comment :	

Continuous Monitoring System Continuous Monitor 2

1. Parameter Code : EM	2. Pollutant(s): NOX
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : TECO Model Number : 42D Ver 3.1.4 Serial Number : 42D-47916-279	
5. Installation Date :	01-Aug-1994
6. Performance Specification Test Date :	29-Dec-1994
7. Continuous Monitor Comment :	

III. Part 11 - 1

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
NGS Boiler No. 1

Continuous Monitoring System Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant(s): SO2
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : TECO Model Number : 43B Ver 3.1.4 Serial Number : 43B-46895-276	
5. Installation Date :	01-Aug-1994
6. Performance Specification Test Date :	29-Dec-1994
7. Continuous Monitor Comment : 40 CFR Part 75	

Continuous Monitoring System Continuous Monitor 4

1. Parameter Code : FLOW	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : USI Model Number : 100 VER 3.1.4 Serial Number : 9401685	
5. Installation Date :	01-Aug-1994
6. Performance Specification Test Date :	29-Dec-1994
7. Continuous Monitor Comment : Stack Gas Flow 40 CFR Part 75	

III. Part 11 - 2

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

NGS Boiler No. 1

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

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L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

NGS Boiler No. 1

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Waived
2. Fuel Analysis or Specification :	Waived
3. Detailed Description of Control Equipment :	Waived
4. Description of Stack Sampling Facilities :	Waived
5. Compliance Test Report :	07/06/1998
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	F-10

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alternative Modes of Operation (Emissions Trading) :	NA

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12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA
14. Acid Rain Application (Hard-copy Required) :	
NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 002

NGS Boiler No. 2
(Long-Term Reserve Shutdown - 3/1/84)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)		
2. Emissions Unit Identification Number : 002 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : This unit will be repowered under the proposed modification and after repowering will be identified as EU026. EU026 will be in operation simultaneously with existing Unit 1 prior to the repowering of Unit 1. See Attachment F-10 for detailed discussion.		

Emissions Unit Information Section _____

Emissions Unit Control Equipment _____

1. Description :

2. Control Device or Method Code :

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

Emissions Unit Information Section 2
 NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Emissions Unit Details

1. Initial Startup Date :	16-Nov-1966	
2. Long-term Reserve Shutdown Date :	01-Mar-1984	
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	298 MW	
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	2352 mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr tons/day
3. Maximum Process or Throughput Rate :	
4. Maximum Production Rate :	
5. Operating Capacity Comment :	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
24 hours/day		7 days/week
52 weeks/year		8,760 hours/year

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

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Rule Applicability Analysis

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List of Applicable Regulations

Rule 62-210.700(2), (3), (4), & (6), F.A.C., Excess Emissions

Rule 62-214.300, F.A.C. Applicability

Rule 62-214.340(5), F.A.C., Exemptions

Rule 62-296.405(1)(a), (b), (c)1.a., F.A.C., Fossil Fuel Steam Generators

Rule 62-296.405(1)(e), (f), & (g), F.A.C., Fossil Fuel Steam Generators

Rule 62-297.310, F.A.C., General Test Requirements

Rule 297.401(5) & (9), F.A.C., Test Methods

Rule 62-204.800(14), F.A.C., 40 CFR Part 72 - Acid Rain Permits (As Noted)

40 CFR Part 72.6 - Applicability

40 CFR 72.9 - Standard Requirements

40 CFR 72 Subpart B - Designated Representative

40 CFR 72 Subpart C - Acid Rain Permit Applications

Jacksonville EPB, Rule 2.1001 Stationary Sources Adoption of 62-296

Jacksonville EPB, Rule 2.1101 Stationary Sources Adoption of 62-297

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List of Applicable Regulations

Jacksonville EPB, Rule 2.301 Adoption of 62-210

40 CFR 72.40 General

40 CFR 73 Subpart E - Acid Rain Permit Contents

40 CFR 72.90 Annual Compliance Certification Report

Rule 62-204.800(15), F.A.C., Sulfur Dioxide Allowance System (As Noted)

40 CFR 73.35 - Compliance

40 CFR 73.50 - Scope and Submission of Transfers

40 CFR 73.51 - Prohibition

40 CFR 75.2 - Applicability

40 CFR 75.4 - Compliance Dates

40 CFR 75.5 Prohibition

40 CFR Part 75, Subpart B Monitoring Provisions - except 75.15, 75.16, 75.17, & 75.18)

40 CFR Part 75, Subpart C - Operation and Maintenance Procedures

40 CFR Part 75, Subpart D - Missing Data Substitution Procedures

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List of Applicable Regulations

40 CFR Part 75, Subpart F - Recordkeeping Requirements

40 CFR Part 75 Appendix A - Specifications and Test Procedures

40 CFR Part 75, Subpart G - Reporting Requirements

40 CFR Part 75 Appendix B - Quality Assurance and Quality Control Procedures

40 CFR Part 75 Appendix C Missing Data Statistical Estimation Procedures

40 CFR 77.3 Offset Plans

40 CFR 77.5(b) Deductions of Allowances

40 CFR 77.6 Excess Emission Penalties for SO₂ and NO_x

Rule 62-204.800(11), F.A.C, 40 CFR Part 70 (As Noted)

Rule 62-204.800(12), F.A.C., 40 CFR Part 72 (As Noted)

Rule 62-204.800(13), F.A.C., 40 CFR Part 73 (As Noted)

Rule 62-204.800(16), F.A.C., 40 CFR Part 77 (As Noted)

Rule 62-214.350, F.A.C., Certification

Rule 62-214.430(1) & (2), F.A.C., Implementation and Termination of Compliance Options.

Rule 62-296.702, F.A.C.

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List of Applicable Regulations

40 CFR 75 Appendix D - Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units

40 CFR 75 Appendix 2 - Optional NO_x Emissions Estimation Protocol for Gas-Fired and Oil-Fired Units

Rule 62-210.300(5), F.A.C., Notification of Start-up

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Stack 2	
2. Emission Point 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 : Unit #2 Steam Generator		
5. Discharge Type Code :	V	
6. Stack Height :	290	feet
7. Exit Diameter :	16.4	feet
8. Exit Temperature :	250	°F
9. Actual Volumetric Flow Rate :	900000	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	0	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates :		
Zone :	17	
East (km) :	446.910	
North (km) :	3365.220	
14. Emission Point Comment :		

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : No. 6 Fuel Oil	
2. Source Classification Code (SCC) : 10100401	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 15.50	5. Maximum Annual Rate : 135,550.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 1.80	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 152	
10. Segment Comment : Maximum rates based on oil with a heat content of 152 mmBtu/kgal. Unit has no fuel sulfur limit, only a max emission rate for SO2 of 1.98 lb/mmBtu on a 24-hour basis.	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) :	
Natural Gas	
2. Source Classification Code (SCC) : 10100601	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 2.35	5. Maximum Annual Rate : 20,604.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment :	
Maximum rates based on heat content of 1000 mmBtu/mmcf. Maximum rates vary with heat content.	

III. Part 8 - 2

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

Emissions Unit Information Section 2
 NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO			NS
2 - NOX			NS
3 - PM			EL
4 - SO2			EL
5 - VOC			NS
6 - SAM			NS
7 - H107			NS
8 - H106			NS
9 - H133			NS
10 - HAPS			NS
11 - PM10			NS

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

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : CO		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
705.9000000 lb/hour		1,289.0000000 tons/year
4. Synthetically Limited?		
[] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor		
Reference 62-296.702		Units lb/mmBtu
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Short Term Allowables		
$(0.1 \text{ lb/mmBtu})(2352 \text{ mmBtu/hr})=235.2 \text{ lb/hr}$		
$(0.3 \text{ lb/mmBtu})(2352 \text{ mmBtu/hr})=705.9 \text{ lb/hr}$		
Long Term Allowables		
$[(235.2 \text{ lb/hr})(8760 \text{ hr/yr} - (3 \text{ hr/day})(365 \text{ day/yr})) + (705.9 \text{ lb/hr})(3 \text{ hr/day})(365 \text{ day/yr})] / 2000 = 1289.0$ tons		
9. Pollutant Potential/Estimated Emissions Comment :		
Maximum short term emissions based on soot blowing at 0.3 lb/mmBtu.		
Maximum Long term emissions based on soot blowing activities 3 hr/day at 0.3 lb/mmBtu.		

III. Part 9b - 3

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

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

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

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : SO2		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
4,657.0000000	lb/hour	20,397.5000000 tons/year
4. Synthetically Limited?		
[] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
to		tons/year
6. Emissions Factor		
Reference	62-296.405	Units lb/mmBtu
7. Emissions Method Code :		
0		
8. Calculations of Emissions :		
1.98 mmBtu/hr x 2352 mmBtu/hr = 4657 lb/hr		
4657 lb/hr x 8760 hr/yr x ton/2000 lb = 20397.5 tons per year		
9. Pollutant Potential/Estimated Emissions Comment :		
Allowable emission limit is set at 1.98 lb/mmBtu.		

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

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : SAM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
lb/hour		tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : H107		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : H106		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : H133		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2
 NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : HAPS		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
lb/hour		tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 2
 NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	%	
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	lb/mmBtu
4. Equivalent Allowable Emissions :	
	235.20 lb/hour 901.40 tons/year
5. Method of Compliance :	EPA Method 5, If firing oil 400 hours or more per year.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The emission limitation is set at 0.1 lb/mmBtu, not including excess emissions. Long term emissions based on 7,665 hours per year and exclude soot blowing emissions.

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Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Information Section 3

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	lb/mmBtu
4. Equivalent Allowable Emissions :	
	705.90 lb/hour 386.50 tons/year
5. Method of Compliance :	EPA Method 5, If firing oil 400 hours or more per year.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The excess emission limitation is set at 0.3 lb/mmBtu.

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	1.98 lb/mmBtu
4. Equivalent Allowable Emissions :	4,657.00 lb/hour 20,397.00 tons/year
5. Method of Compliance :	Annual EPA Methods 6, 6A, 6B, or 6C, or Fuel Sampling
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	

III. Part 9c - 3

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	40
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 40 %
	Exceptional Conditions : 60 %
Maximum Period of Excess Opacity Allowed :	2 min/hour
4. Method of Compliance :	
	Annual VE using EPA Method 9
5. Visible Emissions Comment :	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :	60
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 60 %
	Exceptional Conditions : %
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
	Annual VE using EPA Method 9
5. Visible Emissions Comment :	
	Soot blowing VE limit 3 hrs/day

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

Emissions Unit Information Section

III. Part 11 - 1

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K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :

PM : E SO2 : E NO2 : U

4. Baseline Emissions :

PM :	292.6000 lb/hour	874.0000 tons/year
SO2 :	4635.6000 lb/hour	13839.0000 tons/year
NO2 :		0.0000 tons/year

5. PSD Comment :

Baseline calculated using allowable and operating data for 73/74 for SO2 & PM and 86/87 data for NOx emissions.

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III. Part 12 - 3

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L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 2

NGS Boiler No. 2 (Long-Term Reserve Shutdown - 3/1/84)

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Waived
2. Fuel Analysis or Specification :	Waived
3. Detailed Description of Control Equipment :	Waived
4. Description of Stack Sampling Facilities :	Waived
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statute :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 003

NGS Boiler No. 3

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3

NGS Boiler No. 3

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS Boiler No. 3		
2. Emissions Unit Identification Number : 003 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : This unit will be included in the multi-unit cap established as part of a community commitment for PM, NOx, and SO2. See Attachment F-10 for detailed discussion.		

Emissions Unit Information Section 3

NGS Boiler No. 3

Emissions Unit Control Equipment 1

1. Description :

This unit is equipped with low-NOx burners to reduce formation of NOx emissions.

2. Control Device or Method Code : 24

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Emissions Unit Details

1. Initial Startup Date :	28-Jun-1977	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	564	MW
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	5260	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	0	
4. Maximum Production Rate :		
5. Operating Capacity Comment :	Generator Nameplate Rating is 563.7 MW; 5260 mmBtu/hr for gas firing & 5033 mmBtu/hr on oil.	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Rule Applicability Analysis

This unit will not be a part of the proposed construction activities associated with the repowering of existing NGS Boilers No. 1 and 2. Unit will be affected by the applicant's community commitment to reduce emissions of NOx, SO2, and PM. See Attachment F-10 for details.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
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List of Applicable Regulations

Rule 62-210.700(2), (3), (4), & (6), F.A.C., Excess Emissions

Rule 62-214.300, F.A.C. Applicability

Rule 62-214.340(5), F.A.C., Exemptions

Rule 62-296.405(1)(a), (b), (c)1.a., (d)(1), F.A.C., Fossil Fuel Steam Generators

Rule 62-296.405(1)(e), (f), & (g), F.A.C., Fossil Fuel Steam Generators

Rule 62-297.310, F.A.C., General Test Requirements

Rule 297.401(5) & (9), F.A.C., Test Methods

Rule 62-204.800(14), F.A.C., 40 CFR Part 72 - Acid Rain Permits (As Noted)

40 CFR Part 72.6 - Applicability

40 CFR 72.9 - Standard Requirements

40 CFR 72 Subpart B - Designated Representative

40 CFR 72 Subpart C - Acid Rain Permit Applications

Jacksonville EPB, Rule 2.1001 Stationary Sources Adoption of 62-296

Jacksonville EPB, Rule 2.1101 Stationary Sources Adoption of 62-297

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
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List of Applicable Regulations

Jacksonville EPB, Rule 2.301 Adoption of 62-210

40 CFR 72.40 General

40 CFR 73 Subpart E - Acid Rain Permit Contents

40 CFR 72.90 Annual Compliance Certification Report

Rule 62-204.800(15), F.A.C., Sulfur Dioxide Allowance System (As Noted)

40 CFR 73.35 - Compliance

40 CFR 73.50 - Scope and Submission of Transfers

40 CFR 73.51 - Prohibition

40 CFR 75.2 - Applicability

40 CFR 75.4 - Compliance Dates

40 CFR 75.5 Prohibition

40 CFR Part 75, Subpart B Monitoring Provisions - except 75.15, 75.16, 75.17, & 75.18)

40 CFR Part 75, Subpart C - Operation and Maintenance Procedures

40 CFR Part 75, Subpart D - Missing Data Substitution Procedures

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

40 CFR Part 75, Subpart F - Recordkeeping Requirements

40 CFR Part 75 Appendix A - Specifications and Test Procedures

40 CFR Part 75, Subpart G - Reporting Requirements

40 CFR Part 75 Appendix B - Quality Assurance and Quality Control Procedures

40 CFR Part 75 Appendix C Missing Data Statistical Estimation Procedures

40 CFR 77.3 Offset Plans

40 CFR 77.5(b) Deductions of Allowances

40 CFR 77.6 Excess Emission Penalties for SO₂ and NO_x

Rule 62-204.800(11), F.A.C., 40 CFR Part 70 (As Noted)

Rule 62-204.800(12), F.A.C., 40 CFR Part 72 (As Noted)

Rule 62-204.800(13), F.A.C., 40 CFR Part 73 (As Noted)

Rule 62-204.800(16), F.A.C., 40 CFR Part 77 (As Noted)

Rule 62-214.350, F.A.C., Certification

Rule 62-214.430(1) & (2), F.A.C., Implementation and Termination of Compliance Options.

Rule 62-296.702, F.A.C.

III. Part 6b - 3

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List of Applicable Regulations

40 CFR 75 Appendix D - Optional SO2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 3

NGS Boiler No. 3

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	NGS Stack 3		
2. Emission Point 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 : Unit #3 Steam Generator			
5. Discharge Type Code :	V		
6. Stack Height :	350	feet	
7. Exit Diameter :	15.5	feet	
8. Exit Temperature :	305	°F	
9. Actual Volumetric Flow Rate :	0	acfm	
10. Percent Water Vapor :	0.00	%	
11. Maximum Dry Standard Flow Rate :	0	dscfm	
12. Nonstack Emission Point Height :	0	feet	
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	446.850
		North (km) :	3365.210
14. Emission Point Comment : Flow Rate is to High for ELSA - 1,500,000 ACFM			

III. Part 7a - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

NGS Boiler No. 3

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : No. 6 Fuel Oil	
2. Source Classification Code (SCC) : 10100401	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 33.10	5. Maximum Annual Rate : 290,060.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 152	
10. Segment Comment : Max rates based on oil only at a heat content of 152 MBtu/kgal. Max rates vary with heat content. Unit has no fuel sulfur limit, only a max emission rate for SO2 of 1.98 lb/mmBtu on a 24-hour basis	

III. Part 8 - 1

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

NGS Boiler No. 3

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Natural Gas	
2. Source Classification Code (SCC) : 10100601	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 5.26	5. Maximum Annual Rate : 46,078.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment : Max rates based on a heat content of 1000 MBtu/MCF. Actual Rates Vary with Heat Content Boiler co-fires natural gas, No. 6 Fuel Oil, and On-Spec. Used Oil.	

III. Part 8 - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

NGS Boiler No. 3

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : On-Spec Used Oil	
2. Source Classification Code (SCC) : 10100401	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 33.10	5. Maximum Annual Rate : 1,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 152	
10. Segment Comment : NGS can fire up to 1,000,000 gallons of on-spec used oil per year.	

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

Emissions Unit Information Section 3
 NGS Boiler No. 3

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM			EL
2 - PM10			NS
3 - SO2			EL
4 - NOX			EL
5 - CO			NS
6 - VOC			NS
7 - HAPS			NS
8 - H107			NS
9 - HCL			NS
10 - H133			NS
11 - SAM			NS

III. Part 9a - 1

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	1,509.9000000 lb/hour 2,755.6000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 50px;">to</div> <div style="text-align: right; margin-right: 50px;">tons/year</div>	
6. Emissions Factor Reference 62-296.702	Units lb/mmBtu
7. Emissions Method Code : 0	
8. Calculations of Emissions : Short Term allowables (0.1 lb/mmBtu)(5033 mmBtu/hr) = 503.3 lb/hr (0.3 lb/mmBtu)(5033 mmBtu/hr) = 1509.9 lb/hr Long Term Allowables {(503.3)(8760 hr/yr - (3hr/day)(365 day/yr)) + (1509.9 lb/hr)(3hr/day)(365 day/yr)}/2000 lb/ton = 2755.6 tons 276.7 lb/hr X (8760 - 1095) hr/yr / 2000 lb/ton = 1060.5 Tons	
9. Pollutant Potential/Estimated Emissions Comment :	

III. Part 9b - 1

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Maximum short term emissions based on soot blowing at 0.3 lb/mmBtu

Maximum long term emissions based on soot blowing activities 3 hr/day at 0.3 lb/mmBtu.

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	SO2	
2. Total Percent Efficiency of Control :	%	
3. Potential Emissions :	9,965.000000 lb/hour	43,648.200000 tons/year
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor	2	Units lb/mmBtu
Reference	62-296.405	
7. Emissions Method Code :	0	
8. Calculations of Emissions :	Short Term $(5033 \text{ lb/mmBtu})(1.98 \text{ lb-SO}_2/\text{mmBtu}) = 9965 \text{ lb/hr}$ $(9965 \text{ lb/hr})(8760 \text{ hr/yr})/(2000 \text{ lb/ton}) = 43648 \text{ tons}$	
9. Pollutant Potential/Estimated Emissions Comment :	Allowable emission limit is set at 1.98 lb/mmBtu.	

III. Part 9b - 4

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

Emissions Unit Information Section 3
 NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	1,509.900000 lb/hour	6,613.360000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor Reference 62-296		Units lb/mmBtu
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
$(0.3 \text{ lb/mmBtu})(5033 \text{ mmBtu/hr}) = 1509.9 \text{ lb/hr}$		
$(1509.9 \text{ lb/hr})(8760 \text{ hr/yr})/2000 \text{ lb/ton} = 6613 \text{ tons/year}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Emission limit is set at 0.3 lb/mmBtu per Regulation.		

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : CO		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : HAPS		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
	lb/hour	tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : H107		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : HCL		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : H133		
2. Total Percent Efficiency of Control :	%	
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : SAM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	lb/hour	tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor Reference	Units	
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

Emissions Unit Information Section
NGS Boiler No. 3

3

Pollutant Information Section

1

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	lb/mmBtu
4. Equivalent Allowable Emissions :	
	503.30 lb/hour 1,928.90 tons/year
5. Method of Compliance :	EPA Method 5, If firing oil 400 hours or more per year.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The emission limit is set at 0.1 lb/mmBtu, not including excess emissions. Long term emissions based on 7,665 hours per year and exclude soot blowing emissions.

III. Part 9c - 1

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Information Section 1

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	lb/mmBtu
4. Equivalent Allowable Emissions :	
	1,509.90 lb/hour 826.70 tons/year
5. Method of Compliance :	EPA Method 5, If firing oil 400 hours or more per year.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	The excess emissions limitation is set at 0.3 lb/mmBtu.

III. Part 9c - 2

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	1.98	lb/mmBtu	
4. Equivalent Allowable Emissions :	9,965.00	lb/hour	43,648.00 tons/year
5. Method of Compliance :	EPA Methods 6, 6A, 6B, or 6C or Fuel Sampling		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :			

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :			
3. Requested Allowable Emissions and Units :	0.30	lb/mmBtu	
4. Equivalent Allowable Emissions :	1,509.90	lb/hour	6,613.36 tons/year
5. Method of Compliance :	Continuous Emission Monitor		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Compliance based on 30-day rolling average.		

III. Part 9c - 4

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Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Information Section 1

Allowable Emissions 3

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	881.00	tons per year	
4. Equivalent Allowable Emissions :	lb/hour	881.00	tons/year
5. Method of Compliance :	Recodkeeping System		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community committment.		

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Information Section 4

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	3,600.00 Tons per Year
4. Equivalent Allowable Emissions :	lb/hour 3,600.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.

Emissions Unit Information Section 3
NGS Boiler No. 3

Pollutant Information Section 3

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	12,284.00 tons per year
4. Equivalent Allowable Emissions :	lb/hour 12,284.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission Cap is for the Northside Generating Station's Repowered Units 1 & 2, and existing Unit 3 only. The requested cap is part of a community commitment.

III. Part 9c - 7

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Effective : 3-21-96

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 40 %
	Exceptional Conditions : 60 %
	Maximum Period of Excess Opacity Allowed : 2 min/hour
4. Method of Compliance :	
	Annual VE test using DEP Method 9, if >400 hours using oil
5. Visible Emissions Comment :	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
NGS Boiler No. 3

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype : 60
2. Basis for Allowable Opacity : RULE
3. Requested Allowable Opacity : Normal Conditions : 60 % Exceptional Conditions : 100 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : Annual VE test using DEP Method 9, if > 400 hours on oil.
5. Visible Emissions Comment : 60% Opacity -Excess Emission during Soot Blowing and Load Changes >100% Opacity during Startup, Shutdown and Malfunctions

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Continuous Monitoring System Continuous Monitor 1

1. Parameter Code : CO2	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : TECO Model Number : 41H Ver 3.1.4 Serial Number : 41H-48550-2810	
5. Installation Date :	09-Jul-1994
6. Performance Specification Test Date :	05-May-1995
7. Continuous Monitor Comment : 40 CFR Part 75	

Continuous Monitoring System Continuous Monitor 2

1. Parameter Code : EM	2. Pollutant(s): NOX
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : TECO Model Number : 42D Ver 3.1.4 Serial Number : 42D-48008-279	
5. Installation Date :	09-Jul-1994
6. Performance Specification Test Date :	05-May-1995
7. Continuous Monitor Comment : 40 CFR Part 75	

III. Part 11 - 1

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

Emissions Unit Information Section 3

NGS Boiler No. 3

Continuous Monitoring System Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant(s): SO2
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : TECO Model Number : 43B Ver 3.1.4 Serial Number : 43B-46865-276	
5. Installation Date :	09-Jul-1994
6. Performance Specification Test Date :	05-May-1995
7. Continuous Monitor Comment : 40 CFR Part 75	

Continuous Monitoring System Continuous Monitor 4

1. Parameter Code : FLOW	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : USI Model Number : 100 VER 3.1.4 Serial Number : 9401639	
5. Installation Date :	09-Jul-1994
6. Performance Specification Test Date :	05-May-1995
7. Continuous Monitor Comment : 40 CFR Part 75 Stack gas flow	

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

Emissions Unit Information Section 3
NGS Boiler No. 3

Continuous Monitoring System Continuous Monitor 5

1. Parameter Code : VE	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : TECO Model Number : 400B VER 3.1.4 Serial Number : 400B-48382	
5. Installation Date :	
6. Performance Specification Test Date :	05-May-1995
7. Continuous Monitor Comment : Serial Number 400B-48381-B69/281 Installed 7/9/94 - ELSA would not allow entry into above field. Installation Date ~8/1/94 40 CFR Part 75	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 3

NGS Boiler No. 3

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :			
PM :	E	SO2 :	E
		NO2 :	E
4. Baseline Emissions :			
PM :	629.1300 lb/hour	2756.0000 tons/year	
SO2 :	9965.0000 lb/hour	43648.0000 tons/year	
NO2 :		1552.0000 tons/year	
5. PSD Comment :			
With respect to question 1. Unit is baseline since it "Commenced Construction" prior to January 6, 1975 (Rules 62-204.200(20) & 62-210.200(117), F.A.C.)			

III. Part 12 - 2

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 3

NGS Boiler No. 3

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Waived
2. Fuel Analysis or Specification :	Waived
3. Detailed Description of Control Equipment :	Waived
4. Description of Stack Sampling Facilities :	Waived
5. Compliance Test Report :	06/24/1998
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alternative Modes of Operation (Emissions Trading) :	NA

III. Part 13 - 1

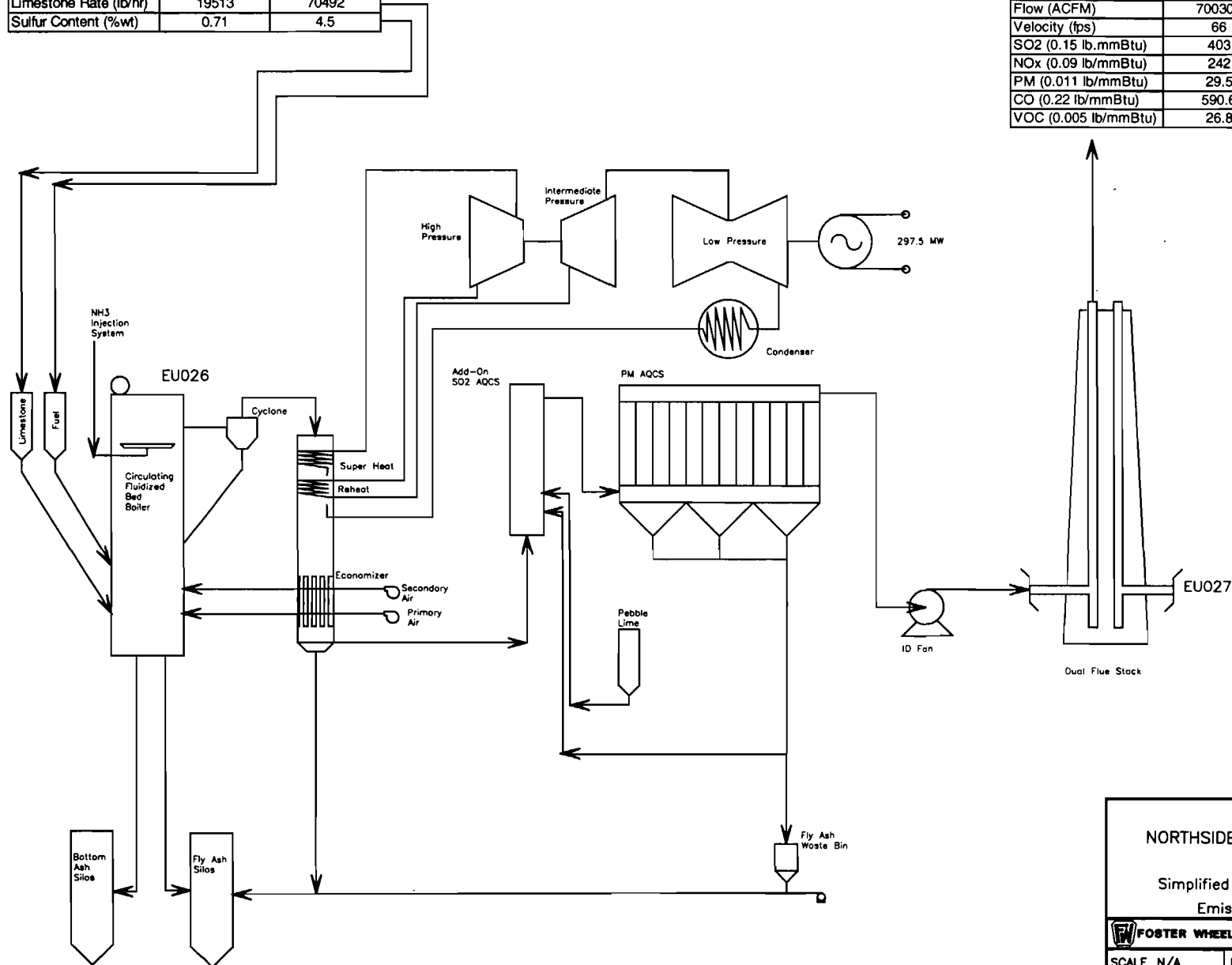
12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)	

Emissions Unit 026

NGS Circulating Fluidized Bed Boiler No. 2

Boiler Operations	Performance Fuels	
	Coal	Petroleum Coke
Parameter		
Boiler Load (%)	100	100
Heat Input (mmBtu/hr)	2684.51	2599.84
Heat Content (Btu/lb)	11600	14360
Fuel Flow (lb/hr)	231423	181047
Limestone Rate (lb/hr)	19513	70492
Sulfur Content (%wt)	0.71	4.5

Stack Parameters	Performance Fuels	
	Coal	Petroleum Coke
Height (ft)	495	495
Diameter (ft)	15	15
Temperature	144	136
Flow (ACFM)	700300	672000
Velocity (fps)	66	63
SO ₂ (0.15 lb/mmBtu)	403	390
NO _x (0.09 lb/mmBtu)	242	234
PM (0.011 lb/mmBtu)	29.5	29.6
CO (0.22 lb/mmBtu)	590.6	571.9
VOC (0.005 lb/mmBtu)	26.8	26



JEA
NORTHSIDE GENERATING STATION
REPOWERING

Simplified Process Flow Diagram
Emissions Unit ID 026

F **FOSTER WHEELER ENVIRONMENTAL CORPORATION**

SCALE N/A	PREPARED DJG	CAD FILE NO. EU026PF.DWG
DATE: 11/16/98	CHECKED MAE	FIGURE NO. F-6, EU026
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 1

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Circulating Fluidized Bed Boiler No. 2		
2. Emissions Unit Identification Number : 026 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Upon completion of construction, NGS Unit 2 will be repowered with the CFB boiler (EU026) and EU002 will no longer operate.		

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Emissions Unit Control Equipment 1

1. Description :

SNCR will be used to control NOx emissions from the circulating fluidized bed boiler.

2. Control Device or Method Code : 107

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Emissions Unit Control Equipment 2

1. Description : Limestone will be injected into the circulating fluidized boiler bed to reduce SO2 and acid gas emissions.
--

2. Control Device or Method Code : 41
--

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Emissions Unit Control Equipment 3

1. Description :

A polishing scrubber will be included to provide additional removal of SO₂ and acid gases as well as to aid in the reduction of volatile metal emissions.

2. Control Device or Method Code : 13

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Emissions Unit Control Equipment 4

1. Description :

High efficiency particulate control will be provided by either an ESP or a fabric filter. The specific control technology is dependent on the polishing scrubber technology selection.

2. Control Device or Method Code : 10

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Emissions Unit Control Equipment 5

1. Description :

High efficiency particulate removal will be provided either by an ESP or a fabric filter. The selection of the control technology is dependent on the polishing scrubber technology selection.

2. Control Device or Method Code : 16

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer : Foster Wheeler	Model Number :	
4. Generator Nameplate Rating :	298	MW
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	2764	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :		
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Rule Applicability Analysis

This project is subject to the Preconstruction Review Requirements as outlined in Chapter 62-212, F.A.C. Specifically this project is subject to the requirements of 62-212.300, F.A.C. for all regulated pollutants and it is subject to the requirements of 62-212.400, F.A.C. for NO_x, TSP, PM₁₀, CO, VOC, total fluorides (as HF), and mercury.

A detailed applicability analysis of the preconstruction review is provided in the attached PSD report.

III. Part 6a - 1

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List of Applicable Regulations

Rule 62-204.800(7)(b)2, F.A.C., 40 CFR 60 Subpart Da, Electric Utility Steam Generating (As Noted)

Rule 62-204.800(7)(c), F.A.C., 40 CFR 60 Subpart A General Provisions (As Noted)

Rule 62-204.800(7)(d), F.A.C., 40 CFR 60 Agencies (As Noted)

Rule 62-210.300(1), F.A.C. Air Construction Permits

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comment

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), (5), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-212.400(1), F.A.C., General Provisions

Rule 62-212.400(2)(d)4, F.A.C., Applicability - Modifications to Major Sources

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

III. Part 6b - 1

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List of Applicable Regulations

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-214.300, F.A.C. Applicability

Rule 62-214.340(5), F.A.C., Exemptions

40 CFR 60.11 - Compliance with Standards and Maintenance Requirements

40 CFR 60.12 - Circumvention

Rule 62-296.405(2), F.A.C., Fossil Fuel Steam Generators, New Units

Rule 62-297.310, F.A.C., General Test Requirements

Rule 297.401(1),(2),(3),(4),(5),(6),(7),(8),(9),(10),(12),(13), & (25), F.A.C., Test Methods

Rule 62-297.520, F.A.C., EPA Continuous Monitoring Performance Specifications

40 CFR 60 Subpart Da Standards of Performance for Electric Utility Steam Generating Units

40 CFR 60.40a - Applicability

III. Part 6b - 2

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List of Applicable Regulations

40 CFR 60.41a - Definitions

40 CFR 60.42a - Standard for Particulate Matter

40 CFR 60.43a(a), (b), (g) & (h), Standard for Sulfur Dioxide

40 CFR 60.44a Standard for Nitrogen Oxides

40 CFR 60.46a - Compliance Provisions

40 CFR 60.47a - Emission Monitoring

40 CFR 60.48a - Compliance Determination Procedures and Methods

40 CFR 60.49a - Reporting Requirements

40 CFR 60.7 - Notification and Recordkeeping

40 CFR 60.8 - Performance Tests

40 CFR 60.11 - Compliance with Standards and Maintenance Requirements

40 CFR 60.12 - Circumvention

40 CFR 60.13 - Monitoring Requirements

40 CFR 60.19 - General Notifications and Reporting Requirements

40 CFR 60 Appendices A, B, & F.

III. Part 6b - 3

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List of Applicable Regulations

Rule 62-204.800(14), F.A.C., 40 CFR Part 72 - Acid Rain Permits (As Noted)

40.CFR Part 72.6 - Applicability

40 CFR 72.9 - Standard Requirements

40 CFR 72 Subpart B - Designated Representative

40 CFR 72 Subpart C - Acid Rain Permit Applications

Jacksonville EPB, Rule 2.105 Maintenance of Air Pollution Control Devices

Jacksonville EPB, Rule 2.1001 Stationary Sources Adoption of 62-296

Jacksonville EPB, Rule 2.1101 Stationary Sources Adoption of 62-297

Jacksonville EPB, Rule 2.301 Adoption of 62-210

40 CFR 72.40 General

40 CFR 73 Subpart E - Acid Rain Permit Contents

40 CFR 72.90 Annual Compliance Certification Report

Rule 62-204.800(15), F.A.C., Sulfur Dioxide Allowance System

40 CFR 73.35 - Compliance

III. Part 6b - 4

DEP Form No. 62-210.900(1) - Form
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List of Applicable Regulations

40 CFR 73.50 - Scope and Submission of Transfers

40 CFR 73.51 - Prohibition

40 CFR 75.2 - Applicability

40 CFR 75.4 - Compliance Dates

40 CFR 75.5 Prohibition

40 CFR Part 75, Subpart B Monitoring Provisions - except 75.15, 75.16, 75.17, & 75.18)

40 CFR Part 75, Subpart C - Operation and Maintenance Procedures

40 CFR Part 75, Subpart D - Missing Data Substitution Procedures

40 CFR Part 75, Subpart F - Recordkeeping Requirements

40 CFR Part 75 Appendix A - Specifications and Test Procedures

40 CFR Part 75, Subpart G - Reporting Requirements

40 CFR Part 75 Appendix B - Quality Assurance and Quality Control Procedures

40 CFR Part 75 Appendix C Missing Data Statistical Estimation Procedures

40 CFR 77.3 Offset Plans

III. Part 6b - 5

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Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

List of Applicable Regulations

40 CFR 77.5(b) Deductions of Allowances

40 CFR 77.6 Excess Emission Penalties for SO₂ and NO_x

Rule 62-204.800(11), F.A.C., 40 CFR Part 70 (As Noted)

Rule 62-204.800(12), F.A.C., 40 CFR Part 72 (As Noted)

Rule 62-204.800(13), F.A.C., 40 CFR Part 73 (As Noted)

Rule 62-204.800(e), F.A.C.

Rule 62-204.800(16), F.A.C., 40 CFR Part 77 (As Noted)

Rule 62-214.350, F.A.C., Certification

Rule 62-214.430(1) & (2), F.A.C., Implementation and Termination of Compliance Options.

III. Part 6b - 6

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E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Stack
2. Emission Point 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 :	V
6. Stack Height :	495 feet
7. Exit Diameter :	15.0 feet
8. Exit Temperature :	144 °F
9. Actual Volumetric Flow Rate :	700300 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates :	
Zone : 17	East (km) : 446.670
	North (km) : 3365.070
14. Emission Point Comment :	

III. Part 7a - 1

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Bituminous Coal	
2. Source Classification Code (SCC) : 10100218	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 138.20	5. Maximum Annual Rate : 1,210,632.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 4.50	8. Maximum Percent Ash : 15.00
9. Million Btu per SCC Unit : 10,000	
10. Segment Comment :	

III. Part 8 - 1

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Petroleum Coke	
2. Source Classification Code (SCC) : 10100299	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 101.90	5. Maximum Annual Rate : 892,644.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 8.00	8. Maximum Percent Ash : 3.00
9. Million Btu per SCC Unit : 13,000	
10. Segment Comment :	

III. Part 8 - 2

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Natural Gas Start-up Only	
2. Source Classification Code (SCC) : 10100299	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment : Natural Gas - Start-up Fuel	

III. Part 8 - 3

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Low Sulfur Distillate Oil (0.05% S) Start-up Only	
2. Source Classification Code (SCC) : 10100299	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 0.05	8. Maximum Percent Ash : 0.10
9. Million Btu per SCC Unit : 140	
10. Segment Comment : Low Sulfur Distillate Oil is for Start-up.	

III. Part 8 - 4

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO			EL
2 - PB	010		EL
3 - NOX	107		EL
4 - PM	010		EL
5 - PM10	010		EL
6 - SO2	041	013	EL
7 - VOC			EL
8 - SAM	041	013	EL
9 - H107	013		EL
10 - H114	013	010	EL
11 - HCL	013		NS
12 - HAPS			NS

III. Part 9a - 1

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

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

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

III. Part 9a - 2

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

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PB		
2. Total Percent Efficiency of Control :	99.00	%
3. Potential Emissions :	0.0720000 lb/hour	0.3000000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: <p align="right">to tons/year</p>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emissions calculations (Attachment F-9).		

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

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control : 67.00 %		
3. Potential Emissions :		
248.8000000 lb/hour		1,090.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor 0 Units lb/mmBtu Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment :		
Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.90	%
3. Potential Emissions :	30.4000000 lb/hour	133.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type. ELSA would not allow entry of last digit of control efficiency in the above field (99.99%).		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.90	%
3. Potential Emissions :	30.4000000 lb/hour	133.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right;">to tons/year</div>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type. Control efficiency required to achieve rate is 99.99%. ELSA would not allow entry of the last digit in control field.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emissions calculation. It is predicted that the particulate emitted from the unit will all be 10 microns or less in size.		

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : SO2		
2. Total Percent Efficiency of Control :	98.00	%
3. Potential Emissions :	414.6000000 lb/hour	1,816.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right;">to tons/year</div>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	27.6000000 lb/hour	121.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 20px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : SAM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
21.6000000	lb/hour	94.0000000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment :		
Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted :	H107	
2. Total Percent Efficiency of Control :	%	
3. Potential Emissions :	0.4300000 lb/hour	1.9000000 tons/year
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor	0	Units lb/mmBtu
Reference	Manufacturer	
7. Emissions Method Code :	0	
8. Calculations of Emissions :	Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.	
9. Pollutant Potential/Estimated Emissions Comment :	Appendix C of the PSD report contains detailed emissions calculations (Attachment F-9).	

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : H114		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	0.0290000 lb/hour	0.1300000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor 0	Units lb/mmBtu	
Reference Manufacturer		
7. Emissions Method Code : 3		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : HCL		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
0.0000000 lb/hour		0.0000000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Potential/Estimated Emissions : Pollutant 12

1. Pollutant Emitted : HAPS	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	52.9000000 lb/hour 12.1000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>	
6. Emissions Factor Reference EPA or other data	Units lb/ton
7. Emissions Method Code : 3	
8. Calculations of Emissions : Emissions were calculated based on fuel consumption and emission factors. Appendix C of the PSD report (Attachment F-9) shows the emission factors used and the source of each factor for coal and pet coke.	
9. Pollutant Potential/Estimated Emissions Comment : Emission calculations for hazardous air pollutants are contained in Appendix C of the PSD report (Attachment F-9).	

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.22	lb/mmbtu	
4. Equivalent Allowable Emissions :	608.08	lb/hour	2,663.00 tons/year
5. Method of Compliance :	Continuous Emissions Monitor		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for CO and applicant is requesting the emission limit as a 24-hour block average.		

III. Part 9c - 1

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.07 lb/hr
4. Equivalent Allowable Emissions :	0.07 lb/hour 0.30 tons/year
5. Method of Compliance :	Initial & Renewal Stack Tests.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated at 2.61E-05 lb/mmbtu (as a 3-hour average) and a mass emission limit of 0.072 lb/hr is requested.

III. Part 9c - 2

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.09 lb/mmBtu
4. Equivalent Allowable Emissions :	248.80 lb/hour 1,090.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Applicant is proposing an emission limit of 0.09 lb/mmBtu based on a 30-day rolling average. Unit is subject to BACT for NOx.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.01 lb/mmBtu
4. Equivalent Allowable Emissions :	30.40 lb/hour 133.00 tons/year
5. Method of Compliance :	Quarterly stack tests for the first two years.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for TSP and applicant proposes emission limit of 0.011 lb/mmBtu during normal conditions.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.01 lb/mmBtu
4. Equivalent Allowable Emissions :	30.40 lb/hour 133.00 tons/year
5. Method of Compliance :	Quarterly stack tests for the first two years.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for PM10. Applicant proposes limit of 0.011 lb/mmBtu to be achieved through use of particulate control (either ESP or fabric filter).

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.15 lb/mmBtu
4. Equivalent Allowable Emissions :	414.60 lb/hour 1,816.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is not subject to BACT for SO ₂ , however, limit requested constitutes BACT as discussed in PSD report attached to application. Emission limit is requested as a 30-day rolling average.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 6

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.20	lb/mmBtu	
4. Equivalent Allowable Emissions :	552.80	lb/hour	tons/year
5. Method of Compliance :	Acid Rain CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is not subject to BACT for SO ₂ , however, proposed limits constitute BACT as discussed in the PSD report attached to the application and emission limit is requested as a 24-hour block average.		

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.01 lb/mmBtu
4. Equivalent Allowable Emissions :	27.60 lb/hour 121.00 tons/year
5. Method of Compliance :	Annual Stack Test.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for VOC and the proposed emission limit is requested as a 3-hour average. Use of the CO CEMS as a surrogate is proposed following initial performance testing.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.01 lb/mmBtu
4. Equivalent Allowable Emissions :	21.60 lb/hour 94.00 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for SAM and proposes limit of 0.0078 lb/mmBtu as a 3-hour average. Requesting compliance be annual test with use of SO2 CEMS as surrogate for periodic indications of emissions.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.00	lb/mmBtu	
4. Equivalent Allowable Emissions :	0.43	lb/hour	1.90 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for fluorides (as HF) and proposes limit of 1.57E-05 lb/mmBtu as a 3-hour average. Periodic compliance can be determined by monitoring scrubber operating parameters.		

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 10

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.00 lb/mmBtu
4. Equivalent Allowable Emissions :	0.03 lb/hour 0.13 tons/year
5. Method of Compliance :	Initial and Renewal Stack Test.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for mercury and limit of 1.05E-05 lb/mmbtu is proposed as a 6-hour average. ELSA would not allow entry of all decimals in the above limit field.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 3

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	3,600.00 tons per year
4. Equivalent Allowable Emissions :	lb/hour 3,600.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Cap for Repowered Units 1 & 2, and existing Unit 3 is effective upon repowering of Unit 2, and successful completion of initial performance testing for repowered Unit 2.

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 4

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	881.00	tons per year	
4. Equivalent Allowable Emissions :	lb/hour	881.00	tons/year
5. Method of Compliance :	EPA Method 5		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Cap for Repowered Units 1 & 2, and existing Unit 3 is effective upon repowering of Unit 2, and successful completion of initial performance testing for repowered Unit 2.		

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Pollutant Information Section 6

Allowable Emissions 3

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	12,284.00 tons/year
4. Equivalent Allowable Emissions :	lb/hour 12,284.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Cap for Repowered Units 1 & 2, and existing Unit 3 is effective upon repowering of Unit 2, and successful completion of initial performance testing for repowered Unit 2.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 10 %
	Exceptional Conditions : 100 %
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
	Opacity Monitor
5. Visible Emissions Comment :	
	As part of the BACT determination a 10% opacity limit is proposed. Excess emissions are discussed in detail in Attachment E-4 along with exceptional conditions limits required by the boilers.

III. Part 10 - 1

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Continuous Monitoring System Continuous Monitor 1

1. Parameter Code : VE	2. Pollutant(s):
3. CMS Requirement	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor information not yet available.	

Continuous Monitoring System Continuous Monitor 2

1. Parameter Code : EM	2. Pollutant(s): NOX
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected for monitors.	

III. Part 11 - 1

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
 NGS - Circulating Fluidized Bed Boiler No. 2

Continuous Monitoring System Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant(s): SO2
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected. 40 CFR Part 75	

Continuous Monitoring System Continuous Monitor 4

1. Parameter Code : EM	2. Pollutant(s): CO
3. CMS Requirement OTHER	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected.	

III. Part 11 - 2

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
NGS - Circulating Fluidized Bed Boiler No. 2

Continuous Monitoring System Continuous Monitor 5

1. Parameter Code : FLOW	2. Pollutant(s):
3. CMS Requirement	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected.	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

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

Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 5

NGS - Circulating Fluidized Bed Boiler No. 2

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU026
2. Fuel Analysis or Specification :	E-1
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	E-4
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	F-10

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

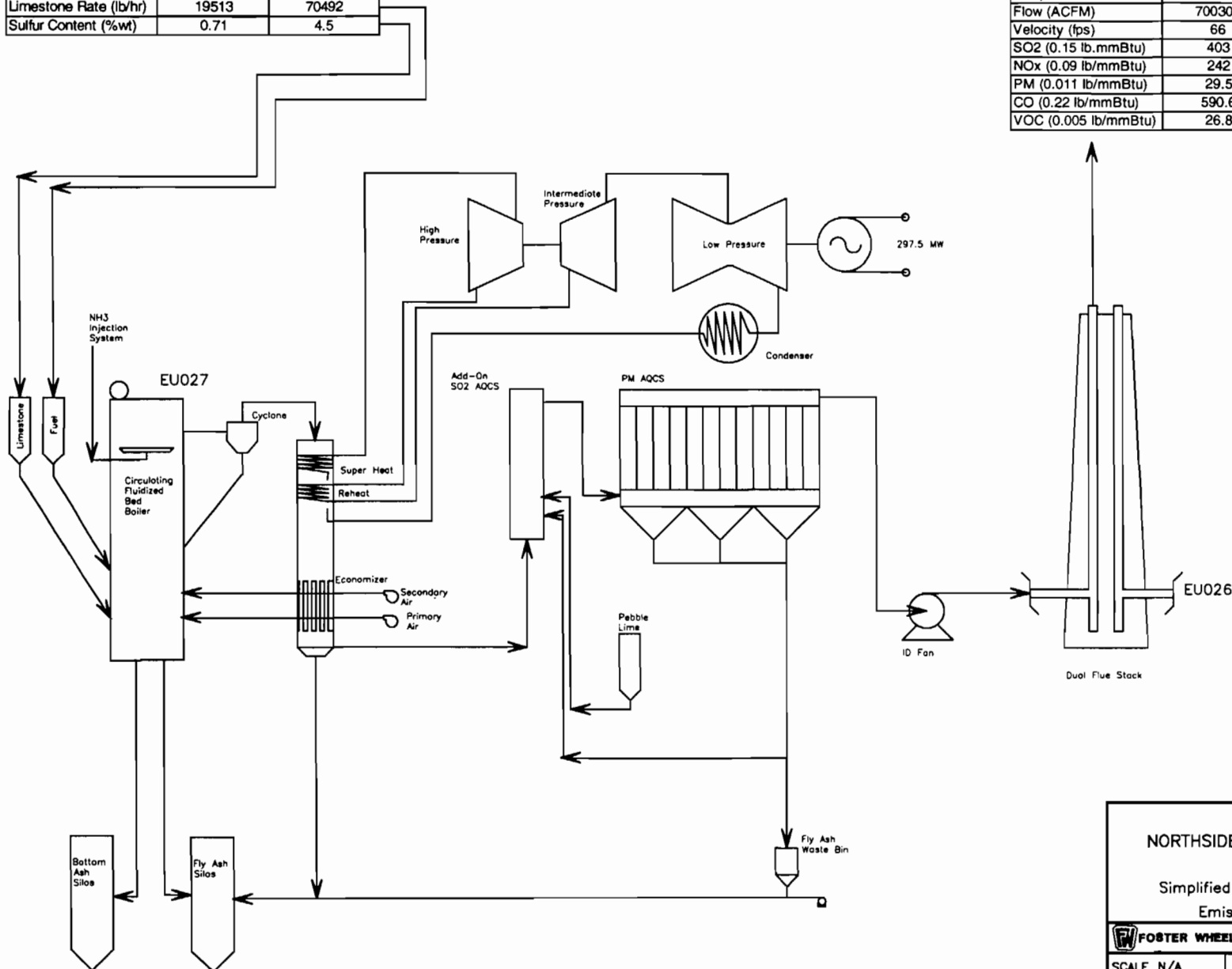
DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Emissions Unit 027

NGS Circulating Fluidized Bed Boiler No. 1

Boiler Operations	Performance Fuels	
Parameter	Coal	Petroleum Coke
Boiler Load (%)	100	100
Heat Input (mmBtu/hr)	2684.51	2599.84
Heat Content (Btu/lb)	11600	14360
Fuel Flow (lb/hr)	231423	181047
Limestone Rate (lb/hr)	19513	70492
Sulfur Content (%wt)	0.71	4.5

Stack Parameters	Performance Fuels	
	Coal	Petroleum Coke
Height (ft)	495	495
Diameter (ft)	15	15
Temperature	144	136
Flow (ACFM)	700300	672000
Velocity (fps)	66	63
SO ₂ (0.15 lb/mmBtu)	403	390
NO _x (0.09 lb/mmBtu)	242	234
PM (0.011 lb/mmBtu)	29.5	29.6
CO (0.22 lb/mmBtu)	590.6	571.9
VOC (0.005 lb/mmBtu)	26.8	26



JEA
NORTHSIDE GENERATING STATION
REPOWERING

Simplified Process Flow Diagram
Emissions Unit ID 027

F **FOSTER WHEELER ENVIRONMENTAL CORPORATION**

SCALE N/A	PREPARED DJG	CAD FILE NO. EU027PF.DWG
DATE: 11/16/98	CHECKED MAE	FIGURE NO. F-6. EU027
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Circulating Fluidized Bed Boiler No. 1		
2. Emissions Unit Identification Number : 027 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [X] Yes [] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Upon completion of construction, NGS Unit 1 will be repowered with the CFB boiler (EU027) and EU001 will no longer operate.		

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Emissions Unit Control Equipment 1

1. Description :	
SNCR will be used to control NOx emissions from the circulating fluidized bed boiler.	
2. Control Device or Method Code :	107

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Emissions Unit Control Equipment 2

1. Description :	
Limestone will be injected into the circulating fluidized boiler bed to reduce SO ₂ and acid gas emissions.	
2. Control Device or Method Code :	41

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Emissions Unit Control Equipment 3

1. Description :

A polishing scrubber will be included to provide additional removal of SO₂ and acid gases as well as to aid in the reduction of volatile metal emissions.

2. Control Device or Method Code : 13

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Emissions Unit Control Equipment 4

1. Description :

High efficiency particulate control will be provided by either an ESP or a fabric filter. The specific control technology is dependent on the polishing scrubber technology selection.

2. Control Device or Method Code : 10

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Emissions Unit Control Equipment 5

1. Description :

High efficiency particulate removal will be provided either by an ESP or a fabric filter. The selection of the control technology is dependent on the polishing scrubber technology selection.

2. Control Device or Method Code : 16

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Emissions Unit Details

1. Initial Startup Date :	01-Oct-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer : Foster Wheeler	Model Number :	
4. Generator Nameplate Rating :	298	MW
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	2764	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :		
4. Maximum Production Rate :		
5. Operating Capacity Comment :		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Rule Applicability Analysis

This project is subject to the Preconstruction Review Requirements as outlined in Chapter 62-212, F.A.C. Specifically this project is subject to the requirements of 62-212.300, F.A.C. for all regulated pollutants and it is subject to the requirements of 62-212.400, F.A.C. for NO_x, TSP, PM₁₀, CO, VOC, total fluorides (as HF), and mercury.

A detailed applicability analysis of the preconstruction review is provided in the attached PSD report.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-204.800(7)(b)2, F.A.C., 40 CFR 60 Subpart Da, Electric Utility Steam Generating (As Noted)

Rule 62-204.800(7)(c), F.A.C., 40 CFR 60 Subpart A General Provisions (As Noted)

Rule 62-204.800(7)(d), F.A.C., 40 CFR 60 Appencies (As Noted)

Rule 62-210.300(1), F.A.C. Air Construction Permits

Rle 62-210.350(1) & (2), F.A.C., Public Notice and Comment

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), (5), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-212.400(1), F.A.C., General Provisions

Rule 62-212.400(2)(d)4, F.A.C., Applicability - Modifications to Major Sources

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability -Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-214.300, F.A.C. Applicability

Rule 62-214.340(5), F.A.C., Exemptions

40 CFR 60.11 - Compliance with Standards and Maintenance Requirements

40 CFR 60.12 - Circumvention

Rule 62-296.405(2), F.A.C., Fossil Fuel Steam Generators, New Units

Rule 62-297.310, F.A.C., General Test Requirements

Rule 297.401(1),(2),(3),(4),(5),(6),(7),(8),(9),(10),(12),(13), & (25), F.A.C., Test Methods

Rule 62-297.520, F.A.C., EPA Continuous Monitoring Performance Specifications

40 CFR 60 Subpart Da Standards of Performance for Electric Utility Steam Generating Units

40 CFR 60.40a - Applicability

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

40 CFR 60.41a - Definitions

40 CFR 60.42a - Standard for Particulate Matter

40 CFR 60.43a(a), (b), (g) & (h), Standard for Sulfur Dioxide

40 CFR 60.44a Standard for Nitrogen Oxides

40 CFR 60.46a - Compliance Provisions

40 CFR 60.47a - Emission Monitoring

40 CFR 60.48a - Compliance Determination Procedures and Methods

40 CFR 60.49a - Reporting Requirements

40 CFR 60.7 - Notification and Recordkeeping

40 CFR 60.8 - Performance Tests

40 CFR 60.11 - Compliance with Standards and Maintenance Requirements

40 CFR 60.12 - Circumvention

40 CFR 60.13 - Monitoring Requirements

40 CFR 60.19 - General Notifications and Reporting Requirements

40 CFR 60 Appendices A, B, & F.

III. Part 6b - 3

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-204.800(14), F.A.C., 40 CFR Part 72 - Acid Rain Permits (As Noted)

40 CFR Part 72.6 - Applicability

40 CFR 72.9 - Standard Requirements

40 CFR 72 Subpart B - Designated Representative

40 CFR 72 Subpart C - Acid Rain Permit Applications

Jacksonville EPB, Rule 2.105 Maintenance of Air Pollution Control Devices

Jacksonville EPB, Rule 2.1001 Stationary Sources Adoption of 62-296

Jacksonville EPB, Rule 2.1101 Stationary Sources Adoption of 62-297

Jacksonville EPB, Rule 2.301 Adoption of 62-210

40 CFR 72.40 General

40 CFR 73 Subpart E - Acid Rain Permit Contents

40 CFR 72.90 Annual Compliance Certification Report

Rule 62-204.800(15), F.A.C., Sulfur Dioxide Allowance System

40 CFR 73.35 - Compliance

III. Part 6b - 4

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

40 CFR 73.50 - Scope and Submission of Transfers

40 CFR 73.51 - Prohibition

40 CFR 75.2 - Applicability

40 CFR 75.4 - Compliance Dates

40 CFR 75.5 Prohibition

40 CFR Part 75, Subpart B Monitoring Provisions - except 75.15, 75.16, 75.17, & 75.18)

40 CFR Part 75, Subpart C - Operation and Maintenance Procedures

40 CFR Part 75, Subpart D - Missing Data Substitution Procedures

40 CFR Part 75, Subpart F - Recordkeeping Requirements

40 CFR Part 75 Appendix A - Specifications and Test Procedures

40 CFR Part 75, Subpart G - Reporting Requirements

40 CFR Part 75 Appendix B - Quality Assurance and Quality Control Procedures

40 CFR Part 75 Appendix C Missing Data Statistical Estimation Procedures

40 CFR 77.3 Offset Plans

III. Part 6b - 5

List of Applicable Regulations

40 CFR 77.5(b) Deductions of Allowances

40 CFR 77.6 Excess Emission Penalties for SO₂ and NO_x

Rule 62-204.800(11), F.A.C, 40 CFR Part 70 (As Noted)

Rule 62-204.800(12), F.A.C., 40 CFR Part 72 (As Noted)

Rule 62-204.800(13), F.A.C., 40 CFR Part 73 (As Noted)

Rule 62-204.800(e), F.A.C.

Rule 62-204.800(16), F.A.C., 40 CFR Part 77 (As Noted)

Rule 62-214.350, F.A.C., Certification

Rule 62-214.430(1) & (2), F.A.C., Implementation and Termination of Compliance Options.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Stack
2. Emission Point 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 :	V
6. Stack Height :	495 feet
7. Exit Diameter :	15.0 feet
8. Exit Temperature :	144 °F
9. Actual Volumetric Flow Rate :	700300 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates :	
Zone : 17	East (km) : 446.670
	North (km) : 3365.070
14. Emission Point Comment :	

III. Part 7a - 1

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Bituminous Coal	
2. Source Classification Code (SCC) : 10100218	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 138.20	5. Maximum Annual Rate : 1,210,632.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 4.50	8. Maximum Percent Ash : 15.00
9. Million Btu per SCC Unit : 10,000	
10. Segment Comment :	

III. Part 8 - 1

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Petroleum Coke	
2. Source Classification Code (SCC) : 10100299	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 101.90	5. Maximum Annual Rate : 892,644.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 8.00	8. Maximum Percent Ash : 3.00
9. Million Btu per SCC Unit : 13,000	
10. Segment Comment :	

III. Part 8 - 2

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Natural Gas Start-up Only	
2. Source Classification Code (SCC) : 10100299	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment : Natural Gas - Start-up Fuel	

III. Part 8 - 3

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Low Sulfur Distillate Oil (0.05% S) Start-up Only	
2. Source Classification Code (SCC) : 10100299	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 0.05	8. Maximum Percent Ash : 0.10
9. Million Btu per SCC Unit : 140	
10. Segment Comment : Low Sulfur Distillate Oil is for Start-up.	

III. Part 8 - 4

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO			EL
2 - PB	010		EL
3 - NOX	107		EL
4 - PM	010		EL
5 - PM10	010		EL
6 - SO2	041	013	EL
7 - VOC			EL
8 - SAM	041	013	EL
9 - H107	013		EL
10 - H114	013	010	EL
11 - HCL	013		NS
12 - HAPS			NS

III. Part 9a - 1

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

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

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

III. Part 9a - 2

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

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : CO		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		2,663.000000 tons/year
608.000000 lb/hour		
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: to tons/year		
6. Emissions Factor 0		Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix C of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Emission Calculations are contained in Appendix A of the PSD report (Attachment F-9).		

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PB		
2. Total Percent Efficiency of Control :	99.00	%
3. Potential Emissions :	0.0720000 lb/hour	0.3000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right;">to tons/year</div>		
6. Emissions Factor 0	Units lb/mmBtu	
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emissions calculations (Attachment F-9).		

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control :	67.00	%
3. Potential Emissions :	248.8000000 lb/hour	1,090.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: to tons/year		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.90	%
3. Potential Emissions :	30.4000000 lb/hour	133.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right;">to tons/year</div>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type. ELSA would not allow entry of last digit of control efficiency in the above field (99.99%).		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.90	%
3. Potential Emissions :	30.4000000 lb/hour	133.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right; margin-right: 50px;">tons/year</div>		
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type. Control efficiency required to achieve rate is 99.99%. ELSA would not allow entry of the last digit in control field.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emissions calculation. It is predicted that the particulate emitted from the unit will all be 10 microns or less in size.		

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

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : SO ₂		
2. Total Percent Efficiency of Control :	98.00	%
3. Potential Emissions :	414.6000000 lb/hour	1,816.0000000 tons/year
4. Synthetically Limited?	[] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code :	0	
8. Calculations of Emissions :	Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.	
9. Pollutant Potential/Estimated Emissions Comment :	Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).	

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

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
27.6000000	lb/hour	121.0000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor	0	Units lb/mmBtu
Reference Manufacturer		
7. Emissions Method Code : 0		
8. Calculations of Emissions : Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment : Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

III. Part 9b - 7

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

Effective : 3-21-96

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

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : H107		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
0.4300000	lb/hour	1.9000000 tons/year
4. Synthetically Limited?		
[] Yes	[X] No	
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor 0 Units lb/mmBtu		
Reference	Manufacturer	
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment :		
Appendix C of the PSD report contains detailed emissions calculations (Attachment F-9).		

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

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : H114		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	0.0290000 lb/hour	0.1300000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor 0 Reference Manufacturer	Units lb/mmBtu	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Appendix A of the PSD report contains detailed expected emission rates based on load and fuel type.		
9. Pollutant Potential/Estimated Emissions Comment :		
Appendix C of the PSD report contains detailed emission calculations (Attachment F-9).		

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

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : HCL		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
0.0000000 lb/hour		0.0000000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code :		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		

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

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Potential/Estimated Emissions : Pollutant 12

1. Pollutant Emitted : HAPS		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :	52.9000000 lb/hour	12.1000000 tons/year
4. Synthetically Limited? [] Yes [] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor	Units lb/ton	
Reference EPA or other data		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Emissions were calculated based on fuel consumption and emission factors. Appendix C of the PSD report (Attachment F-9) shows the emission factors used and the source of each factor for coal and pet coke.		
9. Pollutant Potential/Estimated Emissions Comment :		
Emission calculations for hazardous air pollutants are contained in Appendix C of the PSD report (Attachment F-9).		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Oct-2002
3. Requested Allowable Emissions and Units :	0.22 lb/mmbtu
4. Equivalent Allowable Emissions :	608.08 lb/hour 2,663.00 tons/year
5. Method of Compliance :	Continuous Emissions Monitor
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for CO and applicant is requesting the emission limit as a 24-hour block average.

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.07	lb/hr	
4. Equivalent Allowable Emissions :	0.07	lb/hour	0.30 tons/year
5. Method of Compliance :	Initial & Renewal Stack Tests.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated at 2.61E-05 lb/mmbtu (as a 3-hour average) and a mass emission limit of 0.072 lb/hr is requested.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.09	lb/mmBtu	
4. Equivalent Allowable Emissions :	248.80	lb/hour	1,090.00 tons/year
5. Method of Compliance :	Acid Rain CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Applicant is proposing an emission limit of 0.09 lb/mmBtu based on a 30-day rolling average. Unit is subject to BACT for NOx.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 3

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	3,600.00 tons per year
4. Equivalent Allowable Emissions :	lb/hour 3,600.00 tons/year
5. Method of Compliance :	Acid Rain CEMS
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Cap for Repowered Units 1 & 2, and existing Unit 3 is effective upon repowering of Unit 2, and successful completion of initial performance testing for repowered Unit 2.

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.01	lb/mmBtu	
4. Equivalent Allowable Emissions :	30.40	lb/hour	133.00 tons/year
5. Method of Compliance :	Quarterly stack tests for the first two years.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for TSP and applicant proposes emission limit of 0.011 lb/mmBtu during normal conditions.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 4

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	881.00	tons per year	
4. Equivalent Allowable Emissions :	lb/hour	881.00	tons/year
5. Method of Compliance :	EPA Method 5		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Cap for Repowered Units 1 & 2, and existing Unit 3 is effective upon repowering of Unit 2, and successful completion of initial performance testing for repowered Unit 2.		

III. Part 9c - 6

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.01	lb/mmBtu	
4. Equivalent Allowable Emissions :	30.40	lb/hour	133.00 tons/year
5. Method of Compliance :	Quarterly stack tests for the first two years.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for PM10. Applicant proposes limit of 0.011 lb/mmBtu to be achieved through use of particulate control (either ESP or fabric filter).		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.15	lb/mmBtu	
4. Equivalent Allowable Emissions :	414.60	lb/hour	1,816.00 tons/year
5. Method of Compliance :	Acid Rain CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is not subject to BACT for SO ₂ , however, limit requested constitutes BACT as discussed in PSD report attached to application. Emission limit is requested as a 30-day rolling average.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 6

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.20	lb/mmBtu	
4. Equivalent Allowable Emissions :	552.80	lb/hour	tons/year
5. Method of Compliance :	Acid Rain CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is not subject to BACT for SO ₂ , however, proposed limits constitute BACT as discussed in the PSD report attached to the application and emission limit is requested as a 24-hour block average.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 6

Allowable Emissions 3

1. Basis for Allowable Emissions Code :	OTHER		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	12,284.00	tons/year	
4. Equivalent Allowable Emissions :	lb/hour	12,284.00	tons/year
5. Method of Compliance :	Acid Rain CEMS		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Cap for Repowered Units 1 & 2, and existing Unit 3 is effective upon repowering of Unit 2, and successful completion of initial performance testing for repowered Unit 2.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Oct-2002
3. Requested Allowable Emissions and Units :	0.01 lb/mmBtu
4. Equivalent Allowable Emissions :	27.60 lb/hour 121.00 tons/year
5. Method of Compliance :	Annual Stack Test.
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for VOC and the proposed emission limit is requested as a 3-hour average. Use of the CO CEMS as a surrogate is proposed following initial performance testing.

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.01	lb/mmBtu	
4. Equivalent Allowable Emissions :	21.60	lb/hour	94.00 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for SAM and proposes limit of 0.0078 lb/mmBtu as a 3-hour average. Requesting compliance be annual test with use of SO2 CEMS as surrogate for periodic indications of emissions.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.00	lb/mmBtu	
4. Equivalent Allowable Emissions :	0.43	lb/hour	1.90 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for fluorides (as HF) and proposes limit of 1.57E-05 lb/mmBtu as a 3-hour average. Periodic compliance can be determined by monitoring scrubber operating parameters.		

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Pollutant Information Section 10

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2002		
3. Requested Allowable Emissions and Units :	0.00	lb/mmBtu	
4. Equivalent Allowable Emissions :	0.03	lb/hour	0.13 tons/year
5. Method of Compliance :	Initial and Renewal Stack Test.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Unit is subject to BACT for mercury and limit of 1.05E-05 lb/mmbtu is proposed as a 6-hour average. ELSA would not allow entry of all decimals in the above limit field.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
NGS - Circulating Fluidized Bed Boiler No. 1

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 10 % Exceptional Conditions : 100 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Opacity Monitor
5. Visible Emissions Comment :	As part of the BACT determination a 10% opacity limit is proposed. Excess emissions are discussed in detail in Attachment E-4 along with exceptional conditions limits required by the boilers.

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Continuous Monitoring System Continuous Monitor 1

1. Parameter Code : VE	2. Pollutant(s):
3. CMS Requirement	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor information not yet available.	

Continuous Monitoring System Continuous Monitor 2

1. Parameter Code : EM	2. Pollutant(s): NOX
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected for monitors.	

III. Part 11 - 1

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
 NGS - Circulating Fluidized Bed Boiler No. 1

Continuous Monitoring System Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant(s): SO2
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected. 40 CFR Part 75	

Continuous Monitoring System Continuous Monitor 4

1. Parameter Code : EM	2. Pollutant(s): CO
3. CMS Requirement OTHER	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Continuous Monitoring System Continuous Monitor 5

1. Parameter Code : FLOW	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Vendor not yet selected.	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM :	C	NO2 : C
SO2 :	C	
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

NGS - Circulating Fluidized Bed Boiler No. 1

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU027
2. Fuel Analysis or Specification :	E-1
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	E-4
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	F-10

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

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

Effective : 3-21-96

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

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

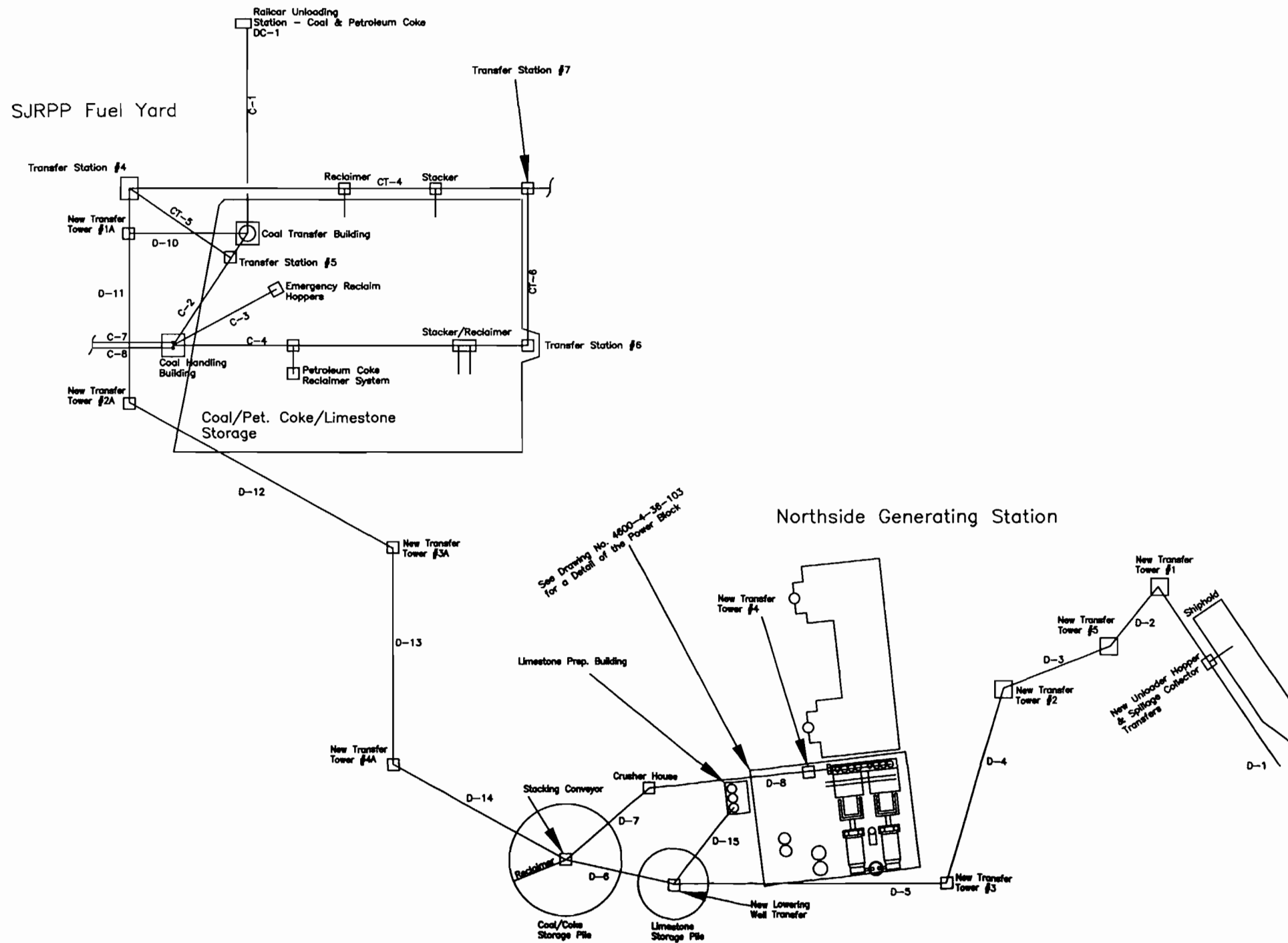
Effective : 3-21-96

Emissions Unit 028

NGS - Materials Handling & Storage Operations

NGS - Base Case Materials Handling & Storage Operations Layout Schematic - Not To Scale

Air Quality Control Systems (AQCS)	
1.	Conditioned Materials
2.	Wet Suppression
3.	Water Sprays
4.	Enclosures (Total, Partial, Covers, & Wind Screens)
5.	Dust Collection Systems
6.	Best Operating Practices
P	Point Source
F	Fugitive Source



Point Sources	AQCS	Control Efficiency	PM (lb/hr)	PM (TPY)
Crusher House	1, 4, & 5	99.50%	0.031	0.054
Boiler Silos	1, 4, & 5	99.50%	0.010	0.018
Railcar Rotary Dumper	1, 4, & 5	97.00%	0.145	0.137
Dust Collector DC-1 (Coal Unloading)	1, 4, & 5	99.50%	0.174	0.164
Dust Collector DC-2 (Coal Transfer Building/Emergency Stackout)	1, 4, & 5	99.50%	0.022	0.021
Limestone Reclaim Bins	1, 4, & 5	99.50%	0.010	0.015
Dryer and Crusher No. 1	4, & 5	99.94%	2.641	11.566
Dryer and Crusher No. 2	4, & 5	99.94%	2.641	11.566
Dryer and Crusher No. 3	4, & 5	99.94%	2.641	11.566
Limestone Crusher Conveyor Transfer Trains 1, 2, & 3	4, & 5	99.94%	0.396	1.734
Limestone Pneumatic Transfer System Train 1	4, & 5	99.50%	0.068	0.296
Limestone Pneumatic Transfer System Train 2	4, & 5	99.50%	0.068	0.296
Bed Ash Silo Loading Unit #1	4, & 5	99.50%	0.028	0.124
Bed Ash Silo Loading Unit #2	4, & 5	99.50%	0.028	0.124
Bed Ash Silo Emergency Discharge Unit #1	4, & 5	99.98%	0.110	0.011
Bed Ash Silo Emergency Discharge Unit #2	4, & 5	99.98%	0.110	0.011
Fly Ash Filter/Separator Transfer Point Unit #1	4, & 5	99.50%	0.008	0.035
Fly Ash Filter/Separator Transfer Point Unit #2	4, & 5	99.50%	0.008	0.035
Fly Ash Silo Loading Unit #1	4, & 5	99.50%	0.036	0.160
Fly Ash Silo Loading Unit #2	4, & 5	99.50%	0.036	0.160
Fly Ash Silo Emergency Discharge Unit #1	4, & 5	99.98%	0.110	0.011
Fly Ash Silo Emergency Discharge Unit #2	4, & 5	99.98%	0.110	0.011
Bed Ash Silo Hydrators Unit 1	4, & 5	99.80%	0.519	2.274
Bed Ash Silo Hydrators Unit 2	4, & 5	99.80%	0.519	2.274
Fly Ash Silo Hydrators Unit 1	4, & 5	99.98%	0.440	1.927
Fly Ash Silo Hydrators Unit 2	4, & 5	99.98%	0.440	1.927

Fugitive Dust Sources	AQCS	Control Efficiency	PM (lb/hr)	PM (TPY)
Bed Ash Silo Unit #1 Unloading - Hydrators	1, 3, 4, & 6	0.00%	0.042	0.184
Bed Ash Silo Unit #2 Unloading - Hydrators	1, 3, 4, & 6	0.00%	0.042	0.184
Coal & Coke Transfer and Stacking	1, 3, & 6	98.00%	0.089	0.071
Coal/Coke Reclaimer, Grap, Hopper, Hopper to Belt transfer Points	1, 3, & 6	98.00%	0.062	0.107
Coal/Coke Storage Pile - Vehicle Activities	1, 3, & 6	98.00%	0.006	0.024
Fly Ash Silo Unit #1 Unloading - Hydrators	1, 3, 4, & 6	0.00%	0.036	0.156
Fly Ash Silo Unit #2 Unloading - Hydrators	1, 3, 4, & 6	0.00%	0.036	0.156
Limestone Lowering Well & Coal/Coke Transfer	1, 3, & 6	98.00%	0.177	0.086
Limestone Storage Pile - Wind Erosion Factor	1, 3, & 6	75.00%	0.495	0.046
Limestone Storage Pile - Vehicle Activities	1, 3, & 6	75.00%	0.043	0.186
Limestone Reclaim Hopper	1, 3, & 6	75.00%	0.255	0.369
Shiphoid	1 & 6	70.00%	0.544	0.621
Unloader Hopper & Spillage Collector Transfers	1, 3, 4, & 6	85.00%	0.335	0.382
Transfer Tower No. 1A	1, 2, & 4	98.00%	0.089	0.071
Transfer Tower No. 2A	1, 2, & 4	98.00%	0.089	0.071
Transfer Tower No. 3A	1, 2, & 4	98.00%	0.089	0.071
Transfer Tower No. 4A	1, 2, & 4	98.00%	0.089	0.071
Transfer Tower No. 1	1, 2, & 4	98.00%	0.089	0.101
Transfer Tower No. 2	1, 2, & 4	98.00%	0.089	0.101
Transfer Tower No. 3	1, 2, & 4	98.00%	0.089	0.101
Transfer Tower No. 5	1, 2, & 4	98.00%	0.089	0.101
Transfer Tower No. 4	1, 2, & 4	98.00%	0.062	0.107
Unpaved Road, By-Product Transport	3 & 6	75.00%	0.582	2.548

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Materials Handling and Storage Operations
Equipment Layout - Base Case

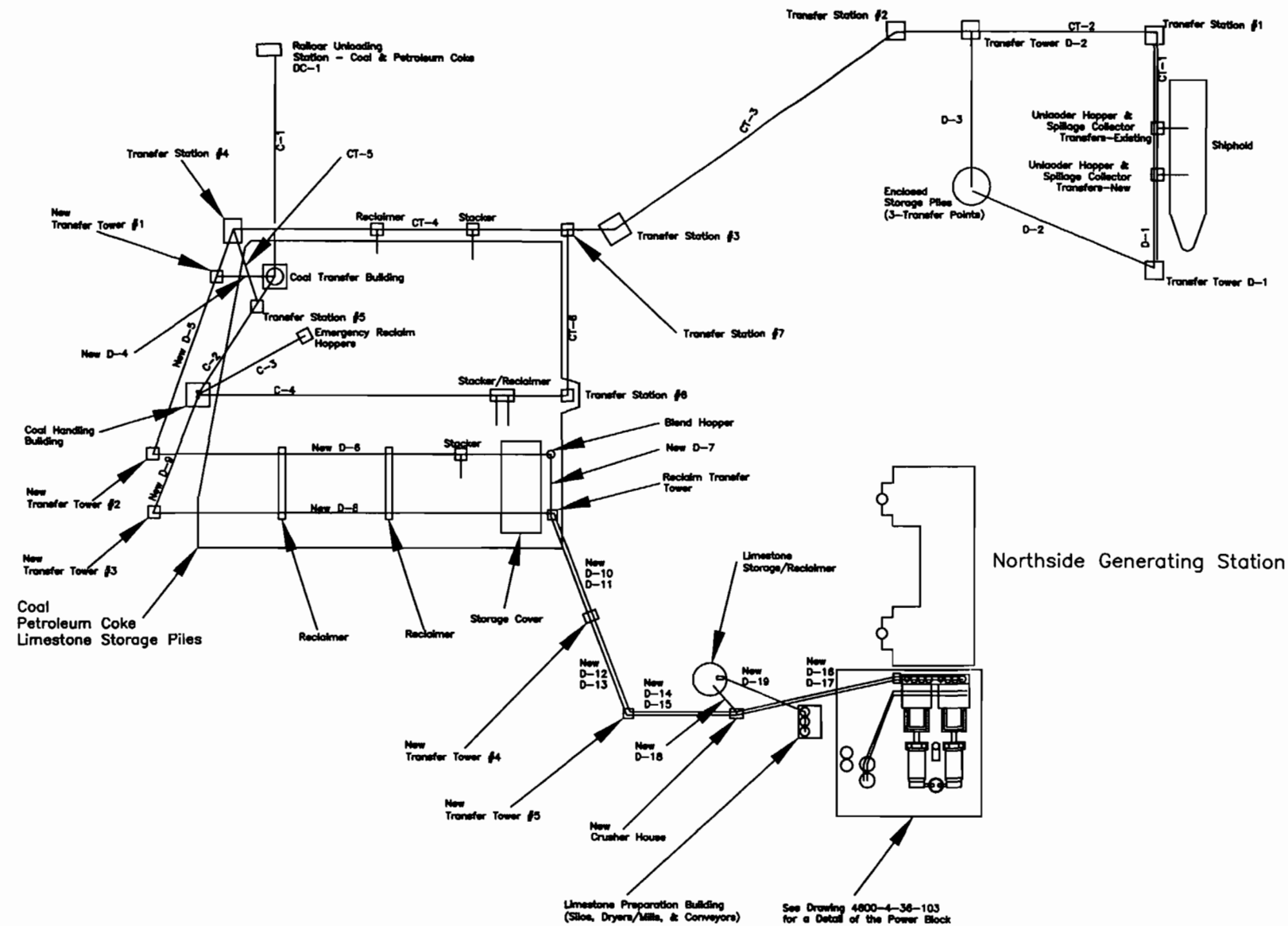
FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED MAE	CAD FILE NO. NGSBCa.DWG
DATE: 11/23/98	CHECKED DJG	FIGURE NO.
	APPROVED DJF	NSG MHS BC

NGS - Alternate #1 Materials Handling & Storage Operations Layout Schematic - Not To Scale

Point Sources	AQCS	Control Efficiency	PM (lb/hr)	PM (TPY)
Hopper Belt, Spillage Conveyors, and CT-1 Transfer Points - Existing Ship Unload	1, 3, 4, 5, & 6	99.50%	0.033	0.050
Railcar Rotary Dumper	1, 3, 4, & 6	97.00%	0.145	0.137
Dust Collector DC-1 (Coal Unloading)	1, 4, & 5	99.50%	0.174	0.164
Dust Collector DC-2 (Coal Transfer Building/Emergency Stackout)	1, 4, & 5	99.50%	0.022	0.021
NGS Crusher House	1, 4, & 5	99.50%	0.046	0.061
Boiler Silos	4, & 5	99.50%	0.010	0.018
Limestone Reclaim Bins	1, 4, & 5	99.50%	0.010	0.015
Dryer and Crusher No. 1	4, & 5	99.94%	2.641	11.566
Dryer and Crusher No. 2	4, & 5	99.94%	2.641	11.566
Dryer and Crusher No. 3	4, & 5	99.94%	2.641	11.566
Limestone Crusher Conveyor Transfer Trains 1, 2, & 3	4, & 5	99.94%	0.396	1.734
Limestone Pneumatic Transfer System Train 1	4, & 5	99.50%	0.068	0.296
Limestone Pneumatic Transfer System Train 2	4, & 5	99.50%	0.068	0.296
Bed Ash Silo Loading Unit #1	4, & 5	99.50%	0.028	0.124
Bed Ash Silo Loading Unit #2	4, & 5	99.50%	0.028	0.124
Bed Ash Silo Emergency Discharge Unit #1	4, & 5	99.98%	0.110	0.0110
Bed Ash Silo Emergency Discharge Unit #2	4, & 5	99.98%	0.110	0.0110
Fly Ash Filter/Separator Transfer Point Unit #1	4, & 5	99.50%	0.008	0.035
Fly Ash Filter/Separator Transfer Point Unit #2	4, & 5	99.50%	0.008	0.035
Fly Ash Silo Loading Unit #1	4, & 5	99.50%	0.036	0.160
Fly Ash Silo Loading Unit #2	4, & 5	99.50%	0.036	0.160
Fly Ash Silo Emergency Discharge Unit #1	4, & 5	99.98%	0.110	0.011
Fly Ash Silo Emergency Discharge Unit #2	4, & 5	99.98%	0.110	0.011
Bed Ash Silo Hydrators Unit 1	4, & 5	99.80%	0.519	2.274
Bed Ash Silo Hydrators Unit 2	4, & 5	99.80%	0.519	2.274
Fly Ash Silo Hydrators Unit 1	4, & 5	99.80%	0.440	1.927
Fly Ash Silo Hydrators Unit 2	4, & 5	99.80%	0.440	1.927

Fugitive Dust Sources	AQCS	Control Efficiency	PM (lb/hr)	PM (TPY)
Shiphoid - New	1, 4, & 6	70.00%	0.544	0.385
Shiphoid - Existing	1, 4, & 6	70.00%	0.544	0.385
Unloader Hopper and Spillage Collector Transfers - New Ship Unloader	1, 3, 4, & 6	85.00%	0.275	0.194
Unloader Hopper and Spillage Collector Transfers - Existing System	1, 3, 4, & 6	85.00%	0.275	0.194
Hopper Belt, Spillage Conveyors, and DC-1 Transfer Points - New Ship Unloader	1, 4, & 6	98.00%	0.133	0.094
Transfer Tower D-1	1, 2, & 4	98.00%	0.044	0.031
Enclosed Storage Pile - 3 Transfer Points	1, 3, 4, & 6	98.00%	0.133	0.094
Enclosed Pile - Vehicle Activities	1, 3, 4, & 6	98.00%	0.036	0.047
Transfer Tower D-2	1, 2, & 4	98.00%	0.044	0.031
Transfer Station No. 1	1, 2, & 4	98.00%	0.044	0.031
Transfer Station No. 2	1, 2, & 4	98.00%	0.044	0.063
Transfer Station No. 3	1, 2, & 4	98.00%	0.046	0.066
Transfer Station No. 4	1 & 4	98.00%	0.044	0.063
Coke Storage Pile - Active Pile Factor	1, 2, & 6	0.00%	0.000	10.000
Limestone Storage Pile - Active Pile Factor	1, 2, & 6	0.00%	0.000	10.000
Coke Storage Pile - Vehicle Activities	1, 2, & 6	75.00%	0.388	0.497
Limestone Storage Pile - Vehicle Activities	1, 2, & 6	75.00%	0.043	0.057
Limestone Reclaim Lowering Well	1, 2, & 6	98.00%	0.031	0.007
Limestone Reclaim Hopper	1, 2, & 6	75.00%	0.255	0.175
New Transfer Tower #1-NGS	1, 2, & 4	98.00%	0.089	0.119
New Transfer Tower #2-NGS	1, 2, & 4	98.00%	0.089	0.119
New Blend Hopper	1 & 4	98.00%	0.123	0.096
New Stack	1 & 4	85.00%	0.664	0.790
SJRPP Reclaimer	1 & 4	75.00%	0.516	1.788
New Transfer Tower #3-NGS	1, 2, & 4	98.00%	0.083	0.143
NGS Reclaimer	1 & 4	75.00%	0.516	0.845
New Reclaim Transfer Tower	1, 2, & 4	98.00%	0.041	0.048
New Transfer Tower #4-NGS	1, 2, & 4	98.00%	0.061	0.048
New Transfer Tower #5-NGS	1, 2, & 4	98.00%	0.061	0.048
New Transfer Tower #6-NGS	1, 2, & 4	98.00%	0.062	0.051
Bed Ash Silo Unit #1 Unloading - Hydrators	1 & 6	0.00%	0.042	0.087
Bed Ash Silo Unit #2 Unloading - Hydrators	1 & 6	0.00%	0.042	0.087
Fly Ash Silo Unit #1 Unloading - Hydrators	1 & 6	0.00%	0.036	0.074
Fly Ash Silo Unit #2 Unloading - Hydrators	1 & 6	0.00%	0.036	0.074
Unpaved Road, By-Product Storage Area	1 & 6	75.00%	0.582	0.681



Air Quality Control Systems (AQCS)
1. Conditioned Materials
2. Wet Suppression
3. Water Sprays
4. Enclosures (Total, Partial, Covers, & Wind Screens)
5. Dust Collection Systems
6. Best Operating Practices
P - Point Source
F - Fugitive Source

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NORTHSIDE GENERATING STATION
REPOWERING

Materials Handling and Storage Operations
Equipment Layout - Alternate No. 1

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED DJG	CAD FILE NO. NGS1g.DWG
DATE: 11/24/98	CHECKED MAE	FIGURE NO. NGS - MHS A1
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [] 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.

III. Part 1 - 1

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Effective : 3-21-96

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

Emissions Unit Description and Status

<p>1. Description of Emissions Unit Addressed in This Section :</p> <p>NGS - Materials Handling & Storage Operations</p>		
<p>2. Emissions Unit Identification Number : 028 <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown</p>		
<p>3. Emissions Unit Status Code : C</p>	<p>4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>5. Emissions Unit Major Group SIC Code : 49</p>
<p>6. Emissions Unit Comment :</p> <p>The emissions unit, as proposed, includes two alternatives (Base Case & Alternate 1). Process Flow Diagrams Attachment F-6, NGS MHS BC & NGS MHS A1) depict the overall systems. Both alternatives involve existing equipment used by the SJRPP including the Rotary Rail Car Unloader (Both Alternatives) and the existing Ship Unloading and Transfer System (Alternate 1).</p>		

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 1

1. Description : Ship Unloading Operations - Base Case, New Conditioned Materials & Water Sprays Figure EU028a

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 2

1. Description :

Ship Unloading Operations - Alternate 1, Existing & New
Conditioned Materials & Water Sprays - New
Conditioned Materials, Water Sprays, & Dust Collection - Existing
Figure EU028b

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 3

1. Description : Rail Car Unloading System - Both Cases, Existing Partial Enclosures, Conditioned Materials, Water Sprays, & Dust Collection - Existing Figure EU028e
2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 4

1. Description : Coal Transfer Building - Both Cases, Existing & New Partial Enclosure, Conditioned Materials, & Dust Collection Figure EU028f

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 5

1. Description :

Transfer Towers - Base Case, New
Partial Enclosures, Conditioned Materials, & Wet Suppression (as depicted)
Figures EU028c & EU028g

2. Control Device or Method Code :

III. Part 3 - 5

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Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 6

1. Description :

Transfer Towers/Stations - Alternate 1, New & Existing
Partial Enclosures, Conditioned Materials & Wet Suppression (as depicted)
Figures EU028k, EU028l, EU028m, & EU028o

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 7

1. Description : Transfer Towers - Both Cases, New Partial Enclosures, Conditioned Materials, & Wet Suppression (as depicted) Figure EU028q
2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 8

1. Description : Coal/Pet. Coke Piles - Base Case, New Partial Enclosure & Conditioned Materials Figure EU028h
2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 9

1. Description : Limestone/Coal/Pet. Coke Surge Piles, Stacker and Reclaimer - Alternate 1, New Enclosure & Conditioned Materials Figure EU028j
2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 10

1. Description : Stacker and Reclaimers - Alternate 1, New Conditioned Materials & Water Sprays Figure EU028n
--

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 11

1. Description :

Limestone Lowering Well & Piles - Both Cases, New
Partial Enclosure, Conditioned Materials, & Water Sprays (as necessary)
Figures EU028d and EU028p

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 12

1. Description : Fly & Bed Ash Silo Hydrator Loadouts - Both Cases, New Conditioned Materials Figure EU028r
--

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 13

1. Description : Ship Unloading Conveyors - Both Cases, New & Existing Conditioned Materials & Wind Screens

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 14

1. Description : Transfer Conveyors - Both Cases, New & Existing Conditioned Materials & Covers

2. Control Device or Method Code :

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emissions Unit Control Equipment 15

1. Description :

Stacker/Reclaimer Conveyors - Alternate 1, New
Conditioned Materials & Wind Screens

2. Control Device or Method Code :

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

Emissions Unit Information Section 6
 NGS - Materials Handling & Storage Operations

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :	Model Number :	
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :	Degrees Fahrenheit	
Dwell Time :	Seconds	
Incinerator Afterburner Temperature :	Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	0	
4. Maximum Production Rate :		
5. Operating Capacity Comment :	See Process Flow Diagrams for individual rates.	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
24 hours/day	7 days/week	
52 weeks/year	8,760 hours/year	

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

Emissions Unit Information Section 6
NGS - Materials Handling & Storage Operations

Rule Applicability Analysis

This process is subject to the Preconstruction Review Requirements as specified in Chapter 62-212, F.A.C. Specifically, this facility is subject to 62-212.300 and to 62-212.400 Prevention of Significant Deterioration for total particulate and for PM10.

In addition to the permitting requirements, the activities are subject to BACT (Visible Emissions Limitations), NSPS for the conveyor transfer points when handling limestone (Visible Emissions Limitation less stringent than BACT), and NSPS for the coal handling Operations (Conveyors & Transfer Points but not the the open storage piles) (Visible Emissions Limitation less stringent than BACT).

III. Part 6a - 1

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List of Applicable Regulations

- 40 CFR 60.7 Notification and Recordkeeping
- 40 CFR 60.8 Performance Tests
- 40 CFR 60.11 Compliance with Standard and Maintenance Requirements
- 40 CFR 60.12 Circumvention
- 40 CFR 60.13 Monitoring Requirements
- 40 CFR 60.19 General Notifications and Reporting Requirements
- 40 CFR 60 Subpart Y- Standards of Performance for Coal Preparation Plants
- Rule 62-204.800(7)(b)30., F.A.C., Adoption of 40 CFR 60 Subpart Y
- Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards
- Rule 62-210.300(1), F.A.C., Air Construction Permits
- Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Report
- Rule 62-210.650 Circumvention, F.A.C.
- Rule 62-210.700(1), (4) & (6), F.A.C. Excess Emissions
- 62-297.310 General Test Requirements

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
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List of Applicable Regulations

Duval County, City of Jacksonville Title X

Part I General Provision 2.105 Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C (As Noted)

Part X Emission Monitoring 2.1001 Adoption of 62-297, F.A.C., (As Noted)

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

62-204.800(7)(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.350(1) & (2), F.A.C. Public Notice and Comment

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-213.410(2), F.A.C., Changes without Permit Revisions

Rule 62-297.401(5) & (9)(c), F.A.C.

40 CFR 60.250(a) Applicability and Designation of Affected Facility

40 CFR 60.252(c) Standards for Particulate Matter (To the Extent Applicable)

III. Part 6b - 2

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Emissions Unit Information Section 6
NGS - Materials Handling & Storage Operations

List of Applicable Regulations

40 CFR 60.254(b)(2) Test Methods and Procedures

Rule 62-204.800(7)(b)63., F.A.C., Adoption of 40 CFR 60 Subpart OOO (As Noted)

40 CFR 60 Subpart OOO - Standards of Performance for Nonmettalic-Mineral Processing Plants

40 CFR 60.670(a)(1) Applicability and Designation of Affected Facilities (Transfer Points)

40 CFR 60.672(b) Standard for Particulate Matter

40 CFR 60.675(a), (b)(2) & (c), (g), & (h) Test Methods & Procedures

40 CFR 60.676 Reporting and Recordkeeping

Rule 62-212.400(1), F.A.C., General Provisions

Rule 62-212.400(2)(d)4. F.A.C., Applicability - Modifications to Major Facilities

Rule 62-212.400(2)(e). F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f). F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4). F.A.C., General Provisions

Rule 62-212.400(5)(e). F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b). F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c). F.A.C., Preconstruction Review Requirements - BACT

III. Part 6b - 3

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

Effective : 3-21-96

List of Applicable Regulations

Rule 62-4.030, F.A.C., General Provisions

Rule 62-4.130, F.A.C., Plant Operations - Problems

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	NGS-MHS-BC & A1
2. Emission Point Type Code :	4
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 :	See Figures NGS-MHS-BC & NGS-MHS-A1 along with other process flow diagrams associated EU028.
5. Discharge Type Code :	F
6. Stack Height :	0 feet
7. Exit Diameter :	0.0 feet
8. Exit Temperature :	0 °F
9. Actual Volumetric Flow Rate :	0 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates :	

III. Part 7a - 1

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Zone : 17

East (km) : 466.820

North (km) : 3364.975

14. Emission Point Comment :

III. Part 7a - 2

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Ship Unloading Operations Limestone, Coal, and Petroleum Coke See Flow Diagrams for individual transfer rates for the Base Case and Alternate 1	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 0.00	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Rail Car Unloading Operation Limestone, Coal, and Petroleum Coke See Flow Diagrams for individual transfer rates for the Base Case and Alternate 1 (Based on Proposed Levels for SJRPP)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 0.00	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Transfer Towers and Stations Limestone, Coal, and Petroleum Coke See Flow Diagrams for individual transfer rates for the Base Case and Alternate 1 (Based on Proposed Levels for SJRPP)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 3

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Lowering Wells, Stackers, Storage Piles & Reclaimers Limestone, Coal, and Petroleum Coke See Flow Diagrams for individual transfer rates for the Base Case and Alternate 1 (Based on Proposed Levels for SJRPP)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 4

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Segment Description and Rate : Segment 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Conveyors Limestone, Coal, and Petroleum Coke See Flow Diagrams for individual transfer rates for the Base Case and Alternate 1 (Based on Proposed Levels for SJRPP)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 5

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Segment Description and Rate : Segment 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Ash Hydrator Loadouts Limestone, Coal, and Petroleum Coke See Flow Diagrams for individual transfer rates for the Base Case and Alternate 1	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate :	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 6

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

Emissions Unit Information Section 6
NGS - Materials Handling & Storage Operations

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM10			WP
2 - PM			WP

III. Part 9a - 1

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

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		tons/year
lb/hour		
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		tons/year
		to
6. Emissions Factor		Units
Reference AP-42		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		
See Appendix C of the PSD Application for detailed calculations and control efficiencies.		

III. Part 9b - 1

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

Emissions Unit Information Section 6
NGS - Materials Handling & Storage Operations

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
lb/hour		tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor Reference		Units
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
9. Pollutant Potential/Estimated Emissions Comment :		
See Appendix C of the PSD Application for detailed calculations and control efficiencies.		

III. Part 9b - 2

Emissions Unit Information Section _____

Pollutant Information Section _____

Allowable Emissions _____

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 :		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
NGS - Materials Handling & Storage Operations

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 10 % Exceptional Conditions : 0 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Annual VE Test using EPA Method 9
5. Visible Emissions Comment :	Ship Unloading Operations - Shiphold & Receiving Hoppers Existing Rail Car Unloading Operation - Building Existing Coal Transfer Building - Building Existing Storage Piles

III. Part 10 - 1

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
NGS - Materials Handling & Storage Operations

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 5 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Annual EPA Method 9
5. Visible Emissions Comment :	As Read at the Property Line Transfer Towers and Stations New Coal Storage Piles New Stacker/Reclaimers New Limestone Piles New Limestone Lowering Wells New Ash Hydrator Loadouts All Conveyors

III. Part 10.- 2

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section

III. Part 11 - 1

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Effective : 3-21-96

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

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2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 :	NO2 :
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

III. Part 12 - 2

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

NGS - Materials Handling & Storage Operations

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU028
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	E-4
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

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12. Identification of Additional Applicable Requirements :

**13. Compliance Assurance Monitoring
Plan :**

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

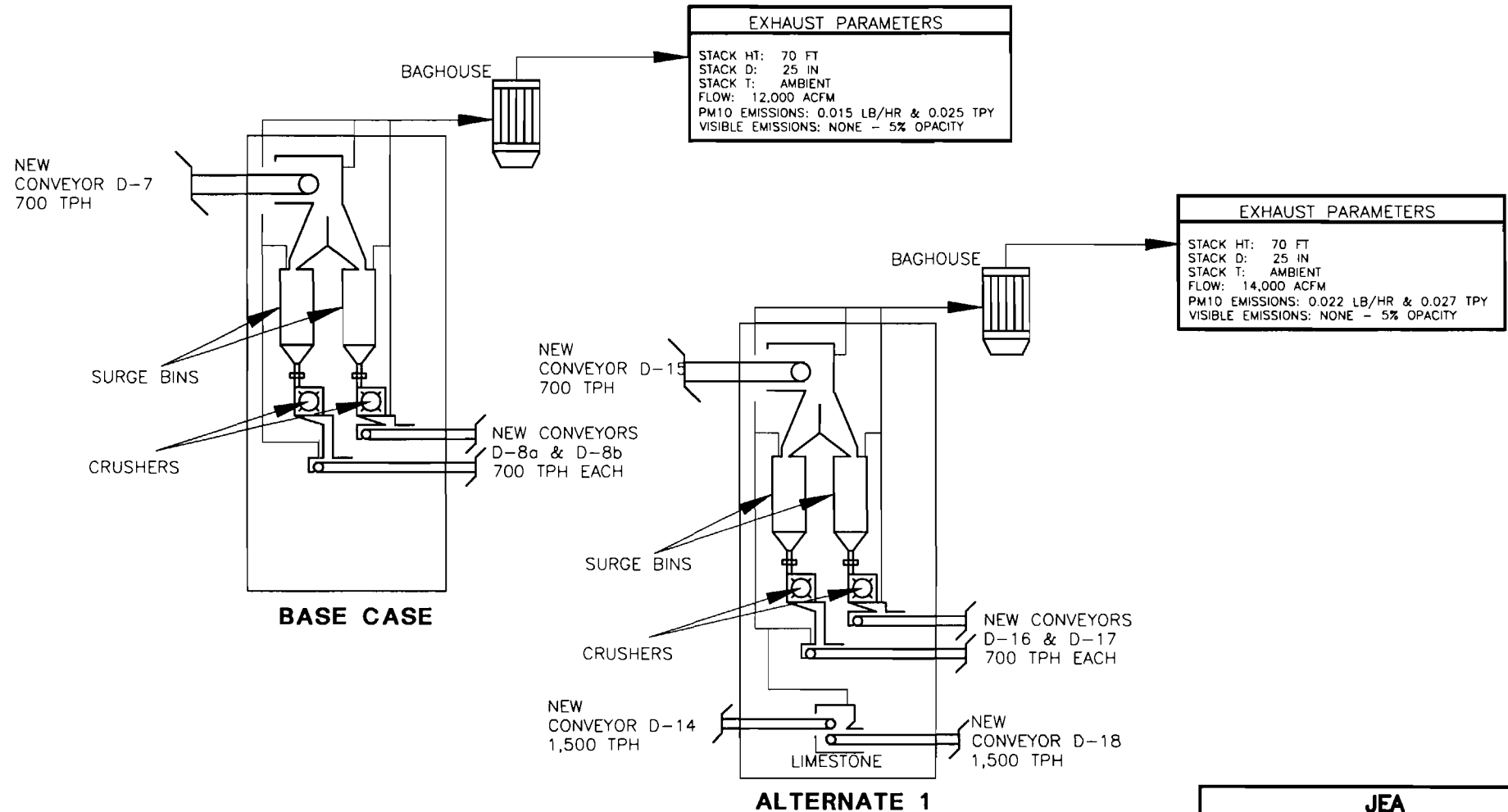
III. Part 13 - 2

**DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96**

Emissions Unit 029

NGS - Crusher House

NORTHSIDE GENERATING STATION COAL/PETROLEUM COKE CRUSHER HOUSE BASE CASE & ALTERNATE 1



JEA
NORTHSIDE GENERATING STATION
REPOWERING

Simplified Process Flow Diagram
Emissions Unit ID 029

F FOSTER WHEELER ENVIRONMENTAL CORPORATION			
SCALE N/A	PREPARED DJG	CAD FILE NO. EU029PF.DWG	
DATE: 12/02/98	CHECKED MAE	FIGURE NO. F-6, EU029	
	APPROVED DJF		

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 7

NGS - Crusher House

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Crusher House		
2. Emissions Unit Identification Number : 029 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : This emissions unit consists of the crushing operations for coal and pet coke. Detailed description of points included are located in Attachment F-9, PSD Report (Appendix C).		

Emissions Unit Information Section 7

NGS - Crusher House

Emissions Unit Control Equipment 1

1. Description :

Application Forms reflect "Worst Case Scenario" for the Crusher House as described under Alternate No. 1. This scenario includes one additional transfer point associated with the Limestone Conveyor.

2. Control Device or Method Code : 18

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

Emissions Unit Information Section 7
NGS - Crusher House

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	1400	tons/hr
4. Maximum Production Rate :		
5. Operating Capacity Comment :	Throughput rate is for both crushers and 6 transfer points. Detailed rate information is in Attachment F-9, PSD Report (Appendix C).	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 7
NGS - Crusher House

Rule Applicability Analysis

Unit is subject to the Preconstruction Review Requirements of Chapters 62-210.300, Permits Required, 62-212.300 General Requirements and 62-212.400 Prevention of Significant Deterioration for PM and PM10. Unit is also subject to 40 CFR Part 60, Subpart Y - Standards of Performance for Coal Preparation Plants while processing coal.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-210.700(1), (4), & (6), F.A.C. Excess Emissions

Rule 62-297.310, F.A.C. General Test Requirements

Rule 62-4.030, F.A.C., General Provisions

Rule 62-130, F.A.C., Plant Operations - Problems

Rule 62-212.400(1), F.A.C., General Provisions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Sources

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Duval County, City of Jасkconville, Title X

Part I General Provisions 2.105 Maintenance of Air Pollution Control Equipment

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Part II General Requirements 2.021, Adoption of 62-210, F.A.C. (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

Part XII Permit 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants

60 CFR 60.250 (a) Applicability and Designation of Affected Facility

40 CFR 60.252 (c) Standards for Particulate Matter

40 CFR 60.254(b)(2), Test Methods and Procedures

Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards

Rule 62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

Rule 62-204.800(7)(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.310(1), F.A.C., Air Construction Permit

Rule 62-210.350(1) & (2), F.A.C., Public Notice & Comment

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-297.401(5), & (9)(c), F.A.C.

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

40 CFR 60.7 Notification and Recordkeeping

40 CFR 60.8 Performance Tests

40 CFR 60.11 Compliance with Standards and Maintenance Requirements

40 CFR 60.12 Circumvention

40 CFR 60.13 Monitoring Requirements

40 CFR 60.19 General Notifications and Reporting Requirements

Rule 62-204.800(7)(b).30, F.A.C., Adoption of 40 CFR 60 Subpart Y

Rule 62-210.370(3)(a) & (c), F.A.C. Annual Operating Reports

Rule 62-210.650, F.A.C. Circumvention

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 7

NGS - Crusher House

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Attachment F-8, List	
2. Emission Point 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 :		
The Crusher House (Base Case & Alternate 1) transfer points are controlled by a fabric filter. Figure F-16, EU029 identifies stack parameters for both cases. (Alternate 1 - Presented)		
5. Discharge Type Code :	V	
6. Stack Height :	70	feet
7. Exit Diameter :	2.1	feet
8. Exit Temperature :	68	°F
9. Actual Volumetric Flow Rate :	14000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	14000	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates :		
Zone :	17	East (km) : 446.900 North (km) : 3366.300
14. Emission Point Comment :		
Attachments F-6, F-8, and F-9 contain additional information related to stack parameters and location.		

III. Part 7a - 1

III. Part 7a - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 7

NGS - Crusher House

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Crushing Operations - Coal (Either/Or Application - Total Maximum 2,421,000 tons per year)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 1,400.00	5. Maximum Annual Rate : 2,421,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 7

NGS - Crusher House

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Crusher Operations - Petroleum Coke (Either/Or Application - Total Maximum 2,421,000 tons per year)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 1,400.00	5. Maximum Annual Rate : 2,421,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

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

Effective : 3-21-96

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

Emissions Unit Information Section 7
NGS - Crusher House

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	018		EL

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

Emissions Unit Information Section 7

NGS - Crusher House

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0310000 lb/hour	0.0540000 tons/year
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor	0	Units lb/ton
Reference	AP-42 (0.00148)	
7. Emissions Method Code :	3	
8. Calculations of Emissions :	Emission calculations are detailed in Appendix C of the PSD Report (Attachment F-9).	
9. Pollutant Potential/Estimated Emissions Comment :	Potential emissions based on tons processed.	

III. Part 9b - 1

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

Emissions Unit Information Section 7

NGS - Crusher House

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control : 99.50 %		
3. Potential Emissions :		
0.0150000	lb/hour	0.0250000 tons/year
4. Synthetically Limited?		
[]	Yes	[X] No
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor 0 Units lb/ton		
Reference AP-42 (0.0007)		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Emission calculations are detailed in Appendix C of the PSD report (Attachment F-9).		
9. Pollutant Potential/Estimated Emissions Comment :		
Potential emissions based on tons processed.		

Emissions Unit Information Section 7
NGS - Crusher House

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2001		
3. Requested Allowable Emissions and Units :	0.03	lb/hr	
4. Equivalent Allowable Emissions :	0.03	lb/hour	0.05 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emission limit (5% opacity).		

III. Part 9c - 1

Emissions Unit Information Section 7
NGS - Crusher House

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Oct-2001		
3. Requested Allowable Emissions and Units :	0.02	lb/hr	
4. Equivalent Allowable Emissions :	0.02	lb/hour	0.03 tons/year
5. Method of Compliance :	Initial and Renewal Stack tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity) Emissions (0.015 lb/hr and 0.025 TPY)		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 7

NGS - Crusher House

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 5 % Exceptional Conditions : 100 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Annual DEP Method 9
5. Visible Emissions Comment :	BACT was evaluated at 5% opacity (i.e., no visible emissions) for this operation. Maximum Period 2 hours in any 24-hour period

III. Part 10 - 1

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

Emissions Unit Information Section

III. Part 11 - 1

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Effective : 3-21-96

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

Emissions Unit Information Section 7

NGS - Crusher House

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

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2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		
Unit emits only particulate matter.		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 7

NGS - Crusher House

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU029
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

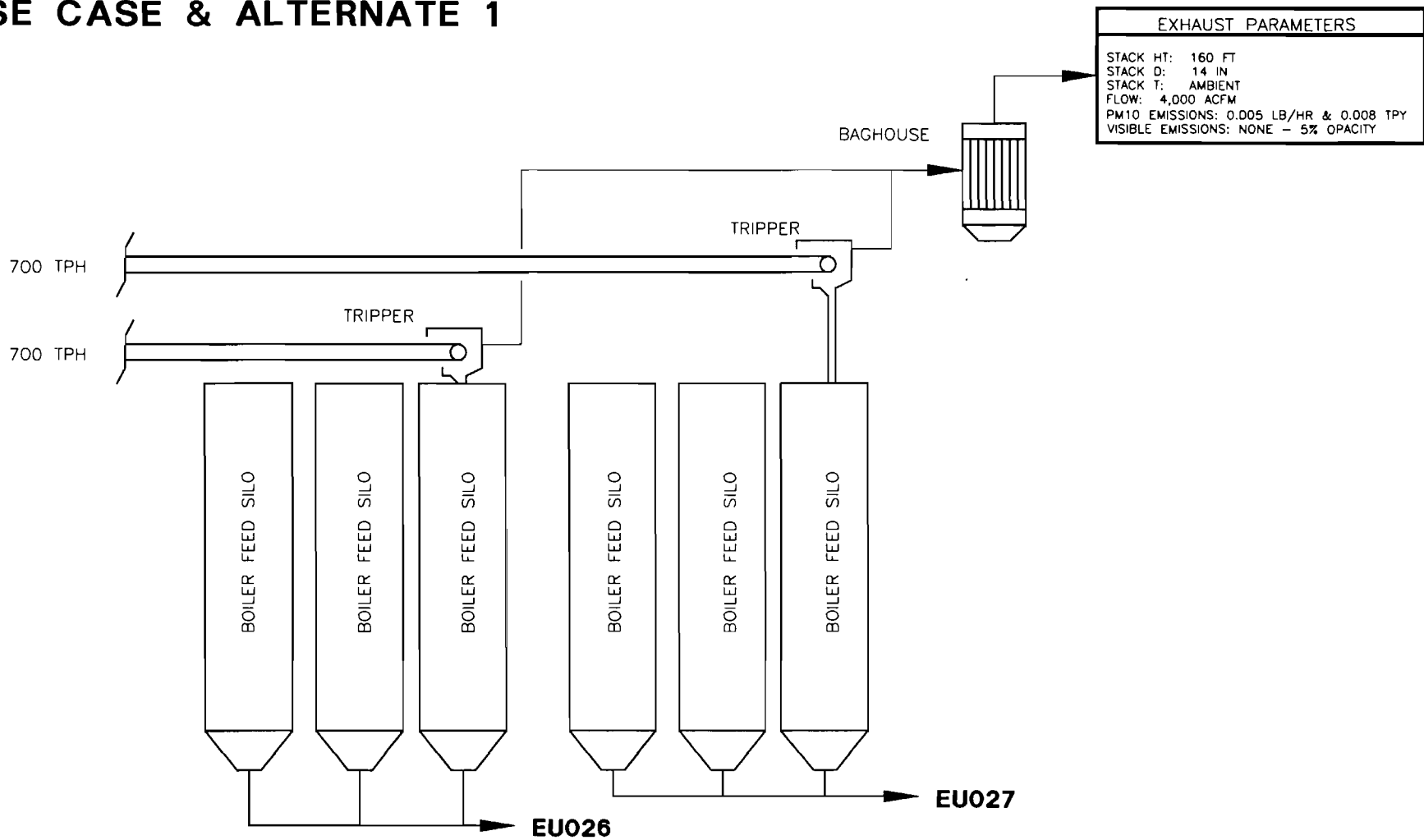
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 031

NGS - Boiler Fuel Silos

NORTHSIDE GENERATING STATION COAL/PETROLEUM COKE BOILER SILOS BASE CASE & ALTERNATE 1



EXHAUST PARAMETERS	
STACK HT:	160 FT
STACK D:	14 IN
STACK T:	AMBIENT
FLOW:	4,000 ACFM
PM10 EMISSIONS:	0.005 LB/HR & 0.008 TPY
VISIBLE EMISSIONS:	NONE - 5% OPACITY

JEA
NORTHSIDE GENERATING STATION
REPOWERING

Simplified Process Flow Diagram
Emissions Unit ID 031

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED DJG	CAD FILE NO. EU031PF.DWG
DATE: 12/02/98	CHECKED MAE	FIGURE NO. F-8, EU031
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [] 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.

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Boiler Fuel Silos		
2. Emissions Unit Identification Number : 031 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Emissions Unit consists of the six (6) Boiler Feed Silos and two tripper transfer points.		

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

Emissions Unit Control Equipment 1

1. Description :

Boiler Feed Silos are identical for the Base Case and Alternate 1 Materials Handling and Storage Operations.

2. Control Device or Method Code : 18

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

Emissions Unit Information Section 8
NGS - Boiler Fuel Silos

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	1400	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :	Maximum rate corresponds to Emissions Unit 029, Crusher House.	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
24 hours/day		7 days/week
52 weeks/year		8,760 hours/year

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

Emissions Unit Information Section 8
NGS - Boiler Fuel Silos

Rule Applicability Analysis

Unit is subject to the Preconstruction Review Requirements of Chapters 62-210.300, Permits Required, 62-212.300 General Requirements and 62-212.400 Prevention of Significant Deterioration for PM and PM10. Unit is also subject to 40 CFR Part 60, Subpart Y - Standards of Performance for Coal Preparation Plants while processing coal.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-4.030, F.A.C General Provisions

Rule 62-4.130, F.A.C., Plant Operations - Problems

Duval County, City of Jacksonville, Title X

Part I General Provisions 2.105 Maintenance of Air Pollution Control Equipment

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emissions Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

Part XII Permits 2.1202, Adoption of 42-4 & 62-213, F.A.C. (As Noted)

Rule 62-212.400(1), F.A.C., General Provisions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities

Rule 62-212.400(4)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(4)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-204.800(7)(b).30, F.A.C., Adoption of 40 CFR 60 Subpart Y

Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards

Rule 62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

Rule 62-204.800(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.300(1), F.A.C., Air Construction Permit

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comment

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Reports

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-297.401 (5) & (9)(c), F.A.C.

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

40 CFR 60.7, Notification and Recordkeeping

40 CFR 60.8, Performance tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements

40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notifications and Reporting Requirements

40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants

40 CFR 60.250(a), Applicability and Designation of Affected Facility

40 CFR 60.252(c), Standards for Particulate Matter

40 CFR 60.254(b)(2), Test Methods and Procedures

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Boiler Feed Silos		
2. Emission Point Type Code :	2		
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 : Six Boiler Feed Silos & Two Tripper Transfer Points			
5. Discharge Type Code :	V		
6. Stack Height :	160	feet	
7. Exit Diameter :	1.2	feet	
8. Exit Temperature :	68	°F	
9. Actual Volumetric Flow Rate :	4000	acfm	
10. Percent Water Vapor :	2.00	%	
11. Maximum Dry Standard Flow Rate :	4000	dscfm	
12. Nonstack Emission Point Height :	0	feet	
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	446.900
		North (km) :	3366.300
14. Emission Point Comment : Attachments F-6, F-8, and F-9, contain additional information related to stack parameters and location.			

III. Part 7a - 1

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

Effective : 3-21-96

III. Part 7a - 2

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Coal (Either/Or Application - Total Maximum of 2,421,000 tons per year)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 1,400.00	5. Maximum Annual Rate : 2,421,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Petroleum Coke (Either/Or Application - Total Maximum 2,421,000 tons per year)	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 1,400.00	5. Maximum Annual Rate : 2,421,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

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

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	018		EL

III. Part 9a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Emissions Unit Information Section 8
NGS - Boiler Fuel Silos

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0100000 lb/hour	0.0180000 tons/year
4. Synthetically Limited?	[] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor	0	Units lb/ton
Reference	AP-42 (0.00148)	
7. Emissions Method Code :	3	
8. Calculations of Emissions :	Emission calculations are detailed in Appendix C of the PSD Report (Attachment F-9)	
9. Pollutant Potential/Estimated Emissions Comment :	Potential emissions based on tons processed.	

III. Part 9b - 1

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

Emissions Unit Information Section 8
NGS - Boiler Fuel Silos

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0050000 lb/hour	0.0080000 tons/year
4. Synthetically Limited?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor	0	Units lb/ton
Reference	AP-42 (0.0007)	
7. Emissions Method Code :	3	
8. Calculations of Emissions :	Emission Calculations are detailed in Appendix C of the PSD Report (Attachment (F-9)).	
9. Pollutant Potential/Estimated Emissions Comment :	Potential Emissions are based on tons processed.	

III. Part 9b - 2

Emissions Unit Information Section
NGS - Boiler Fuel Silos

8

Pollutant Information Section

1

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.01	lb/hr	
4. Equivalent Allowable Emissions :	0.01	lb/hour	0.01 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity). (Emissions 0.01 lb/hr & 0.008 TPY)		

III. Part 9c - 1

Emissions Unit Information Section
NGS - Boiler Fuel Silos

8

Pollutant Information Section

2

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.01 lb/hr
4. Equivalent Allowable Emissions :	0.01 lb/hour 0.01 tons/year
5. Method of Compliance :	DEP Method 9
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limit (%5 Opacity) (Emissions 0.005 lb/hr & 0.008 TPY)

III. Part 9c - 2

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
NGS - Boiler Fuel Silos

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05									
2. Basis for Allowable Opacity :	RULE									
3. Requested Allowable Opacity :	<table style="margin-left: auto; margin-right: auto;"><tr><td style="padding: 0 20px;">Normal Conditions :</td><td style="padding: 0 10px;">5</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Exceptional Conditions :</td><td style="padding: 0 10px;">100</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Maximum Period of Excess Opacity Allowed :</td><td></td><td style="padding: 0 10px;">min/hour</td></tr></table>	Normal Conditions :	5	%	Exceptional Conditions :	100	%	Maximum Period of Excess Opacity Allowed :		min/hour
Normal Conditions :	5	%								
Exceptional Conditions :	100	%								
Maximum Period of Excess Opacity Allowed :		min/hour								
4. Method of Compliance :	Annual DEP Method 9									
5. Visible Emissions Comment :	<p>BACT was evaluated at 5% Opacity (i.e., no visible emissions) for this operation.</p> <p>Excess Opacity - 2 hours in any 24-hour period</p>									

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

Emissions Unit Information Section

III. Part 11 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 :	NO2 :
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		
Unit emits only particulate matter.		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 8

NGS - Boiler Fuel Silos

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU031
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

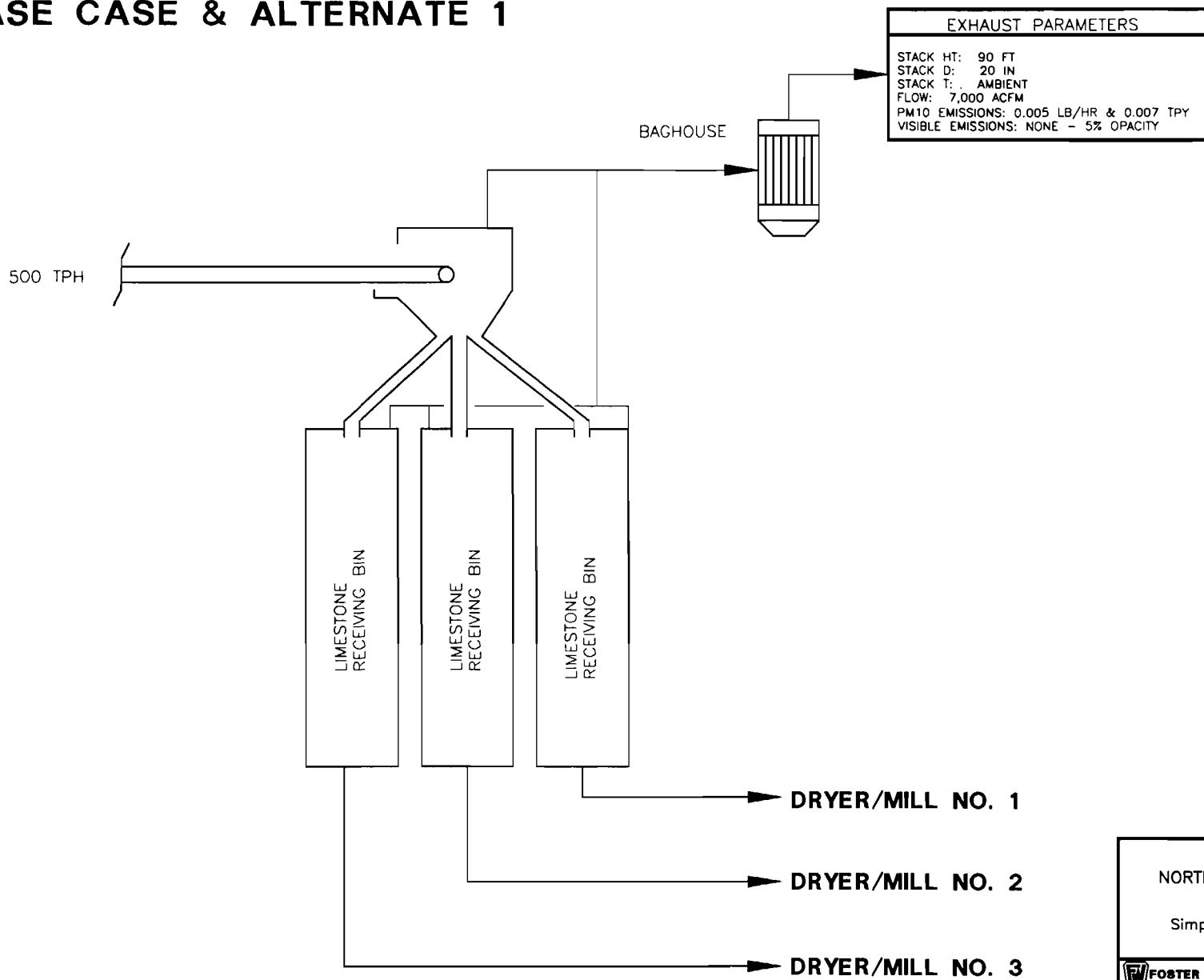
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 032

NGS - Limestone Receiving Bins

NORTHSIDE GENERATING STATION LIMESTONE RECEIVING BINS BASE CASE & ALTERNATE 1



EXHAUST PARAMETERS	
STACK HT:	90 FT
STACK D:	20 IN
STACK T:	AMBIENT
FLOW:	7,000 ACFM
PM10 EMISSIONS:	0.005 LB/HR & 0.007 TPY
VISIBLE EMISSIONS:	NONE - 5% OPACITY

JEA		
NORTHSIDE GENERATING STATION REPOWERING		
Simplified Process Flow Diagram Emissions Unit ID 032		
FOSTER WHEELER ENVIRONMENTAL CORPORATION		
SCALE N/A	PREPARED DJG	CAD FILE NO. EU032PF.DWG
DATE: 12/02/98	CHECKED MAE	FIGURE NO. F-6, EU032
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [] 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.

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Limestone Receiving Bins		
2. Emissions Unit Identification Number : 032 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : The emissions unit consists of three limestone receiving bins and a transfer point. A detailed description of the points is included in Attachment F-9, PSD Report (Appendix C).		

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

Emissions Unit Control Equipment 1

1. Description :

Limestone Receiving Bins are identical for the Base Case and Alternate 1 Materials Handling and Storage Operations

2. Control Device or Method Code : 18

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

Emissions Unit Information Section
NGS - Limestone Receiving Bins

9

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	500	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :	Maximum rate set by initial design criteria.	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 9
NGS - Limestone Receiving Bins

Rule Applicability Analysis

Unit is subject to the Preconstruction Review Requirements of Chapters 62-210.300 Permits Required, 62-212.300 General Requirements and 62-212.400 Prevention of Significant Deterioration for PM and PM10. Unit is also subject to 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-297.401(5) & (9)(c), F.A.C.

40 CFR 60.7, Notification and Recordkeeping Requirements

40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements (VE reduced to 1 hour)

40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting Requirements

40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants

40 CFR 60.670(a)(1), (e), & (f), Applicability and Designation of Affected Facility

40 CFR 60.672(e), Standards for Particulate Matter

40 CFR 60.675, Test Methods and Procedures

40 CFR 60.676, Reporting and Recordkeeping

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-4.030, F.A.C., General Provisions

Rule 62-4.130, F.A.C., Plant Operations - Problems

Duval County, City of Jacksonville, Title X

Part I General Provision 2.105, Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Note)

Part Xii Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

Rule 62-204.800(7)(b).63, F.A.C., Adoption of 40 CFR 60 Subpart OOO (As Noted)

Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards

Rule 62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

Rule 62-204.800(7)(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.300(1), F.A.C., Air Construction Permit

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comment

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Reports

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

III. Part 6b - 3

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU032
2. Emission Point Type Code :	2
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 : Conveyor Belt, Transfer Point, and Three Receiving Bins within a Building.	
5. Discharge Type Code :	V
6. Stack Height :	90 feet
7. Exit Diameter :	1.7 feet
8. Exit Temperature :	68 °F
9. Actual Volumetric Flow Rate :	7000 acfm
10. Percent Water Vapor :	2.00 %
11. Maximum Dry Standard Flow Rate :	7000 dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates :	
Zone : 17	East (km) : 446.900
	North (km) : 3366.300
14. Emission Point Comment : Attachments F-6, F-8, and F-9, contain additional information related to stack parameters and location.	

III. Part 7a - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Limestone	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 500.00	5. Maximum Annual Rate : 1,445,400.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

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

Effective : 3-21-96

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

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM10	018		EL
2 - PM	018		EL

III. Part 9a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Emissions Unit Information Section 9
NGS - Limestone Receiving Bins

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0050000 lb/hour	0.0070000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor	0	Units lb/ton
Reference	AP-42 (0.00048)	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Emissions calculations are detailed in Appendic C of the PSD Report (Attachment F-9)		
9. Pollutant Potential/Estimated Emissions Comment :		
Potential emissions based on tons processed.		

Emissions Unit Information Section
NGS - Limestone Receiving Bins

9

Pollutant Information Section

1

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.01	lb/hr	
4. Equivalent Allowable Emissions :	0.01	lb/hour	0.01 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity)		

III. Part 9c - 1

Emissions Unit Information Section
NGS - Limestone Receiving Bins

9

Pollutant Information Section

1

Allowable Emissions

2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Oct-2001
3. Requested Allowable Emissions and Units :	5.00 % opacity
4. Equivalent Allowable Emissions :	lb/hour tons/year
5. Method of Compliance :	DEP Method 9
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 5% opacity from the fabric filter. NSPS Subpart OOO places a No visible emissions limitation

III. Part 9c - 2

Emissions Unit Information Section 9
NGS - Limestone Receiving Bins

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.01	lb/hr	
4. Equivalent Allowable Emissions :	0.01	lb/hour	0.02 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity).		

Emissions Unit Information Section 9
NGS - Limestone Receiving Bins

Pollutant Information Section 2

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Oct-1901
3. Requested Allowable Emissions and Units :	5.00 % opacity
4. Equivalent Allowable Emissions :	lb/hour tons/year
5. Method of Compliance :	DEP Method 9
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 5% opacity from the fabric filter. NSPS Subpart OOO places a No visible emissions limitation (0% Opacity) on the Building.

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

Emissions Unit Information Section 9
NGS - Limestone Receiving Bins

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 5 %
	Exceptional Conditions : 100 %
	Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	
	Annual DEP Method 9
5. Visible Emissions Comment :	
	BACT was evaluated as 5% opacity from the fabric filter. NSPS Subpart OOO places a No visible emissions limitation (0% Opacity) on the Building.
	Excess Opacity - 2 hours in any 24-hour period

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

Emissions Unit Information Section

III. Part 11 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		
Unit emits only particulate matter		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 9

NGS - Limestone Receiving Bins

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU032
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternitive Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

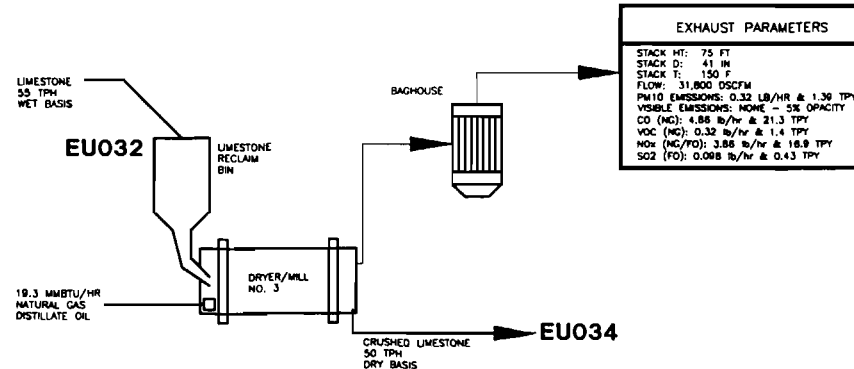
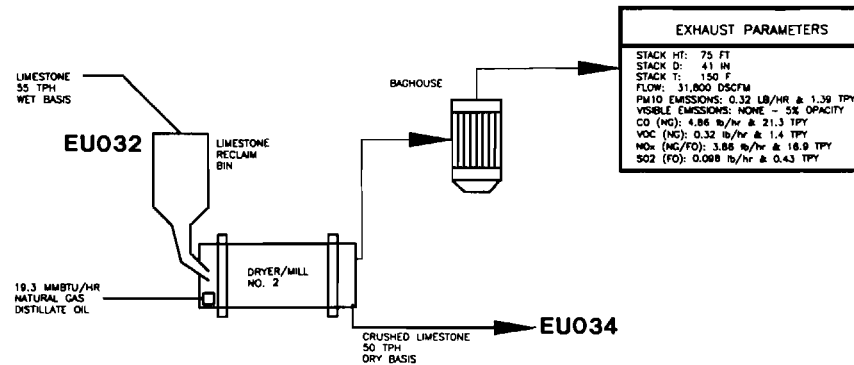
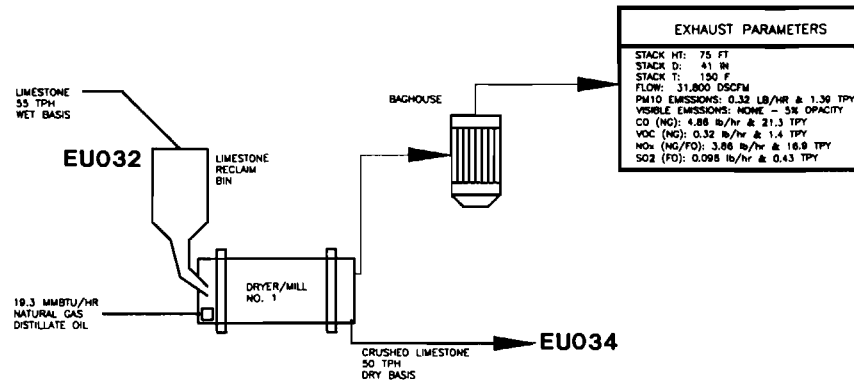
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 033

NGS - Limestone Dryers/Mills

NORTHSIDE GENERATING STATION LIMESTONE DRYER/MILL NOS. 1, 2, & 3 BASE CASE & ALTERNATE 1



JEA
NORTHSIDE GENERATING STATION
REPOWERING

Simplified Process Flow Diagram
Emissions Unit ID 033

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE: N/A	PREPARED: DJG	CAD FILE NO.: EU033PF.DWG
DATE: 12/02/98	CHECKED: MAE	FIGURE NO.: F-6, EU033
	APPROVED: DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

III. Part 1 - 1

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Limestone Dryers/Mills		
2. Emissions Unit Identification Number : 033 <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : The emissions unit consists of three limestone dryers/mills. A detailed description of the points is included in Attachment F-9, PSD Report (Appendix C).		

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Emissions Unit Control Equipment 1

1. Description : Limestone Dryers/Mills are identical for the Base Case and Alternate 1. Controls include a fabric filter (PM & PM10) and good combustion practices.

2. Control Device or Method Code : 18
--

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Emissions Unit Control Equipment 2

1. Description :	
Good Combustion Practices for CO, VOC, and NOx	
2. Control Device or Method Code :	99

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Emissions Unit Control Equipment 3

- | | |
|--|----|
| 1. Description : | |
| Natural Gas and Low Sulfur Distillate Oil (0.05% S by wt) as BACT for SO ₂ controls. Also SO ₂ control within the dryers/mills associated with contact with the crushed limestone. | |
| 2. Control Device or Method Code : | 99 |

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

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :	Model Number :	
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :	Degrees Fahrenheit	
Dwell Time :	Seconds	
Incinerator Afterburner Temperature :	Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	60	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	165	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		
Maximum Rate (Wet Basis) for all three dryers/mills. Each Dryer/Mill has a maximum heat input rate of 19.3 mmBtu/hr.		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
24 hours/day	7 days/week	
52 weeks/year	8,760 hours/year	

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

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Rule Applicability Analysis

Unit is subject to the Preconstruction Review Requirements of Chapters 62-210.300 Permits Required, 62-212.300 General Requirements and 62-212.400 Prevention of Significant Deterioration for PM and PM10. Unit is also subject to 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants.

III. Part 6a - 1

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List of Applicable Regulations

Rule 62-204.800(7)(b).63, F.A.C., Adoption of 40 CFR 60 Subpart OOO (As Noted)

Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards

Rule 62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

Rule 62-204.800(7)(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.300(1), F.A.C., Air Construction Permit

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-4.030, F.A.C., General Provisions

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-4.130, F.A.C., Plant Operations - Problems

Duval County, City of Jacksonville, Title X

Part I General Provision 2.105, Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C., (As Noted)

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comment

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Reports

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-297.310, F.A.C., General Test Requirements

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-297.401(5) & (9)(c), F.A.C.

40 CFR 60.7, Notification and Recordkeeping Requirements

40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements (VE reduced to 1 hour)

40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting Requirements

40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants

40 CFR 60.670(a)(1), (e), & (f), Applicability and Designation of Affected Facility

40 CFR 60.672(e), Standards for Particulate Matter

40 CFR 60.675, Test Methods and Procedures

40 CFR 60.676, Reporting and Recordkeeping

III. Part 6b - 3

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU033		
2. Emission Point 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 : Three Dryers/Mills within a Building, each with a separate exhaust stack.			
5. Discharge Type Code :	V		
6. Stack Height :	75	feet	
7. Exit Diameter :	3.4	feet	
8. Exit Temperature :	165	°F	
9. Actual Volumetric Flow Rate :	49300	acfm	
10. Percent Water Vapor :	15.00	%	
11. Maximum Dry Standard Flow Rate :	31800	dscfm	
12. Nonstack Emission Point Height :	0	feet	
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	446.900
		North (km) :	3366.300
14. Emission Point Comment : Attachments F-6, F-8, and F-9, contain additional information related to stack parameters and location.			

III. Part 7a - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Limestone - Wet Basis	
2. Source Classification Code (SCC) : 30501099	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 165.00	5. Maximum Annual Rate : 1,445,400.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Natural Gas	
2. Source Classification Code (SCC) : 10201401	
3. SCC Units : Million Cubic Feet Processed	
4. Maximum Hourly Rate : 57.90	5. Maximum Annual Rate : 507,204.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,050	
10. Segment Comment : Emission estimates based on firing Distillate Oil.	

III. Part 8 - 2

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Low Sulfur Distillate Oil	
2. Source Classification Code (SCC) : 10201403	
3. SCC Units : Thousand Gallons Processed	
4. Maximum Hourly Rate : 0.41	5. Maximum Annual Rate : 3,623.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur : 0.05	8. Maximum Percent Ash : 0.00
9. Million Btu per SCC Unit : 19	
10. Segment Comment : Worst Case SO2 emissions are generated during fuel oil firing. Natural Gas sulfur content was assumed at 10 gr/100scf.	

III. Part 8 - 3

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

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM10	018		EL
2 - PM	018		EL
3 - CO	099		EL
4 - VOC	099		EL
5 - NOX	099		EL
6 - SO2	099		EL

III. Part 9a - 1

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

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.90	%
3. Potential Emissions :	0.9600000 lb/hour	4.1700000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor 10 Units lb/ton Reference AP-42 (9.609)		
7. Emissions Method Code :	3	
8. Calculations of Emissions :	Emissions calculations are detailed in Appendic C of the PSD Report (Attachment F-9).	
9. Pollutant Potential/Estimated Emissions Comment :	Potential emissions for all the three dryers/mills. Emission factor is for uncontrolled emissions. Each dryer/mill has a separate fabric filter, with 99.94% removal.	

III. Part 9b - 1

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

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control : 99.90 %		
3. Potential Emissions :		
7.9200000 lb/hour		34.7100000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor 80 Units lb/ton Reference AP-42 (80.017)		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Detailed emission calculations are in Appendix C of the PSD report (Attachment F-9).		
9. Pollutant Potential/Estimated Emissions Comment :		
Potential emissions for all three dryers/mills. Emission factor is for uncontrolled emissions. Each dryer/mill has a separate fabric filter, with 99.94% removal.		

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

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : CO		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
4.9000000 lb/hour		21.3000000 tons/year
4. Synthetically Limited?		
[] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor 84 Units lb/mmCF		
Reference AP-42		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
$\text{lb/hr} = (3 \text{ units}) \times (19.3 \text{ mmBtu/unit}) \times (\text{mmCF}/1000 \text{ mmBtu}) \times (84 \text{ lb/mmCF}) = 4.86 \text{ lb/hr}$ $\text{TPY} = (4.86 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 21.3 \text{ Tons}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Worst case Emissions are based on the firing of natural gas.		

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

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : VOC		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
0.3200000 lb/hour		1.4000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor	6	Units lb/mmCF
Reference AP-42		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
$\text{lb/hr} = (3 \text{ Units}) \times (19.3 \text{ mmBtu/hr}) \times (\text{mmCF}/1000 \text{ mmBtu}) \times (5.5 \text{ lb/mmCF}) = 0.32 \text{ lb/hr}$ $\text{TPY} = (0.32 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 1.4 \text{ tons}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Worst case Emissions are based on the firing of natural gas.		

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

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : NOX		
2. Total Percent Efficiency of Control :		%
3. Potential Emissions :		
11.6000000 lb/hour		50.7000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
		to tons/year
6. Emissions Factor 0		Units lb/mmBtu
Reference Vendor Data		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
$\text{lb/hr} = (3 \text{ units}) \times (19.3 \text{ mmBtu/hr}) \times (0.2 \text{ lb/mmBtu}) = 11.6 \text{ lb/hr}$ $\text{TPY} = (11.6 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 50.7 \text{ tons}$		
9. Pollutant Potential/Estimated Emissions Comment :		
<p align="center">Worst case Emissions are based on the firing either natural gas or fuel oil at allowable level.</p>		

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

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : SO ₂		
2. Total Percent Efficiency of Control :	90.00	%
3. Potential Emissions :	0.1700000 lb/hour	0.7300000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	7	Units lb/1000 gal
Reference AP-42		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
$\text{lb/hr} = (3 \text{ units}) \times (19.3 \text{ mmBtu/hr}) \times (\text{gal}/0.14 \text{ mmBtu}) \times (\text{kGal}/1000 \text{ gal}) \times (7.1 \text{ lb/kGal}) = 0.294 \text{ lb/hr}$		
$\text{TPY} = (0.29 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 1.29 \text{ tons}$		
9. Pollutant Potential/Estimated Emissions Comment :		
<p>Emission level is based on BACT which includes firing Natural Gas (10gr/100 scf) or Fuel Oil (0.05% S) and 90% removal of the SO₂ within the process (Limestone dryer/mill).</p>		

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :	01-Apr-2002			
3. Requested Allowable Emissions and Units :	0.96		lb/hr	
4. Equivalent Allowable Emissions :	0.96	lb/hour	4.17	tons/year
5. Method of Compliance :	Initial and Renewal Stack Testing			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf (per Fabric Filter) or less in addition to a no visible emissions limitation (5% Opacity).			

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :	01-Apr-2002			
3. Requested Allowable Emissions and Units :	7.92	lb/hr		
4. Equivalent Allowable Emissions :	7.92	lb/hour	34.71	tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity).			

III. Part 9c - 2

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	84.00	lb/mmCF	
4. Equivalent Allowable Emissions :	4.86	lb/hour	21.30 tons/year
5. Method of Compliance :	Initial and Renewal Stack Testing		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission level is based on BACT and set at AP-42 Emission Factor while firing Natural Gas.		

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.32 lb/hr
4. Equivalent Allowable Emissions :	0.32 lb/hour 1.40 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission level is based on BACT and set at AP-42 Emission Factor while firing Natural Gas.

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	11.60	lb/hr	
4. Equivalent Allowable Emissions :	11.60	lb/hour	50.70 tons/year
5. Method of Compliance :	Initial and Renwal Stack Testing		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission level is based on BACT and set at Vendor's reported level while firing Fuel Oil. Emission rate reflects total of all three dryers.		

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.29	lb/hr	
4. Equivalent Allowable Emissions :	0.29	lb/hour	1.29 tons/year
5. Method of Compliance :	Initial Stack Testing and Fuel Oil Analyses		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Emission level is based on BACT while firing Fuel Oil. Initial testing to determine overall sulfur removal within the dryers/mills. Annual compliance to be determined based on fuel quality.		

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

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 5 %
	Exceptional Conditions : 100 %
	Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	
	Annual DEP Method 9
5. Visible Emissions Comment :	
	BACT was evaluated as 5% opacity from the fabric filter.
	Excess Emissions 2 hours in any 24-hour period

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 10
NGS - Limestone Dryers/Mills

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype : 0
2. Basis for Allowable Opacity : RULE
3. Requested Allowable Opacity : Normal Conditions : 0 % Exceptional Conditions : 100 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : Annual EPA Method 22
5. Visible Emissions Comment : NSPS Subpart OOO places a No visible emissions limitation (0% Opacity) on the Building. Excess Emissions 2 hours in ant 24-hour period.

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

Emissions Unit Information Section

III. Part 11 - 1

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**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 10

NGS - Limestone Dryers/Mills

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU033
2. Fuel Analysis or Specification :	E-1
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statute :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

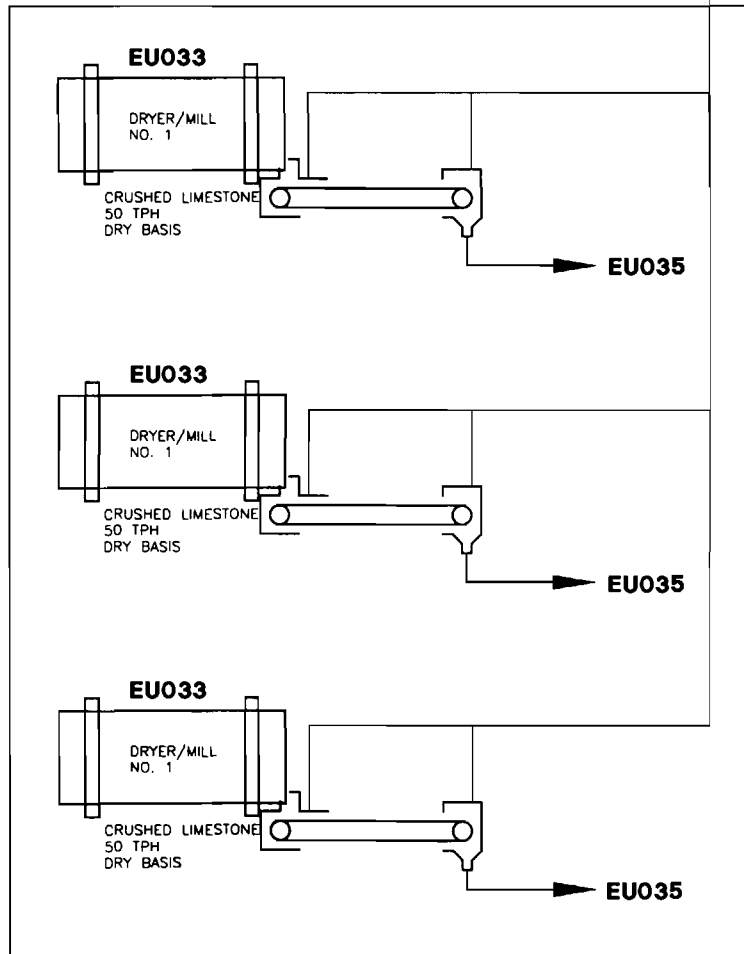
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

Emissions Unit 034

NGS - Limestone Crusher Conveyor Transfers

NORTHSIDE GENERATING STATION DRY/CRUSHED LIMESTONE TRANSFER CONVEYORS BASE CASE & ALTERNATE 1

LIMESTONE PREP. BUILDING



EXHAUST PARAMETERS	
STACK HT:	30 FT
STACK D:	18 IN
STACK T:	AMBIENT
FLOW:	5,000 ACFM
PM10 EMISSIONS:	0.05 LB/HR & 0.21 TPY
VISIBLE EMISSIONS:	NONE - 5% OPACITY

JEA			
NORTHSIDE GENERATING STATION REPOWERING			
Simplified Process Flow Diagram			
Emissions Unit ID 034			
FOSTER WHEELER ENVIRONMENTAL CORPORATION			
SCALE	N/A	PREPARED	DJG
DATE:	12/02/98	CHECKED	MAE
		APPROVED	DJF
			CAD FILE NO. EU034PF.DWG
			FIGURE NO. F-6, EU034

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 11

NGS - Limestone Crusher Conveyor Transfers

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [] 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.

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Limestone Crusher Conveyor Transfers		
2. Emissions Unit Identification Number : 034 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : The emissions unit consists of three transfer conveyors (6-Transfer Points) moving dry crushed limestone from the dryers/mills to the pneumatic transfer system. A detailed description of the points is included in Attachment F-9, PSD Report (Appendix C).		

Emissions Unit Information Section 11

NGS - Limestone Crusher Conveyor Transfers

Emissions Unit Control Equipment 1

1. Description :	
Emissions from the limestone transfer conveyors are will be controlled by use of a fabric filter.	
2. Control Device or Method Code :	18

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

Emissions Unit Information Section 11
 NGS - Limestone Crusher Conveyor Transfers

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	150	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		
Maximum rate reflects the total of the three units and is set by initial design criteria for the dryers/mills.		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 11
NGS - Limestone Crusher Conveyor Transfers

Rule Applicability Analysis

Unit is subject to the Preconstruction Review Requirements of Chapters 62-210.300 Permits Required, 62-212.300 General Requirements and 62-212.400 Prevention of Significant Deterioration for PM and PM10. Unit is also subject to 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-4.030, F.A.C., General Provisions

Rule 62-4.130, F.A.C., Plant Operations - Problems

Duval County, City of Jacksonville, Title X

Part I General Provisions 2.105, Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

III. Part 6b - 1

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

Effective : 3-21-96

List of Applicable Regulations

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting Requirements

40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants

40 CFR 60.670(a)(1), (e), & (f), Applicability and Designation of Affected Facility

40 CFR 60.672(e), Standards for Particulate Matter

40 CFR 60.675, Test Methods and Procedures

40 CFR 60.676, Reporting and Recordkeeping

Rule 62-204.800(7)(b).63, F.A.C., Adoption of 40 CFR 60 Subpart OOO (As Noted)

Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards

Rule 62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

Rule 62-204.800(7)(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.300(1), F.A.C., Air Construction Permit

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comment

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Reports

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), &(6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-297.401(5) & (9)(c), F.A.C.

40 CFR 60.7, Notification and Recordkeeping Requirements

40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements (VE reduced to 1 hour)

40 CFR 60.12, Circumvention

III. Part 6b - 3

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 11

NGS - Limestone Crusher Conveyor Transfers

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU034	
2. Emission Point Type Code :	2	
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 : Three Conveyor Belts and six Transfer Points within a Building.		
5. Discharge Type Code :	V	
6. Stack Height :	30	feet
7. Exit Diameter :	1.3	feet
8. Exit Temperature :	68	°F
9. Actual Volumetric Flow Rate :	5000	acfm
10. Percent Water Vapor :	2.00	%
11. Maximum Dry Standard Flow Rate :	5000	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates :		
Zone :	17	East (km) : 446.900 North (km) : 3366.300
14. Emission Point Comment : Attachments F-6, F-8, and F-9, contain additional information related to stack parameters and location.		

III. Part 7a - 1

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 11

NGS - Limestone Crusher Conveyor Transfers

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Limestone	
2. Source Classification Code (SCC) : 30510105	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 150.00	5. Maximum Annual Rate : 1,314,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Emissions Unit Information Section 11
NGS - Limestone Crusher Conveyor Transfers

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM10	018		EL
2 - PM	018		EL

III. Part 9a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Emissions Unit Information Section 11
 NGS - Limestone Crusher Conveyor Transfers

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.90	%
3. Potential Emissions :	0.4000000 lb/hour	1.7000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	2	Units lb/ton
Reference	AP-42 (2.2)	
7. Emissions Method Code : 3		
8. Calculations of Emissions : $\text{lb/hr} = (3 \text{ units}) \times (2 \text{ Transfer Points/unit}) \times (50 \text{ TPH/unit}) \times (2.2 \text{ lb/ton}) \times (1-99.94/100) = 0.4 \text{ lb/hr}$ $\text{TPY} = (0.4 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 1.7 \text{ tons}$		
9. Pollutant Potential/Estimated Emissions Comment : Potential emissions based on tons processed and 99.94% Control		

Emissions Unit Information Section 11
NGS - Limestone Crusher Conveyor Transfers

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.05 lb/hr
4. Equivalent Allowable Emissions :	0.05 lb/hour 0.21 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity)

Emissions Unit Information Section 11
NGS - Limestone Crusher Conveyor Transfers

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.40 lb/hr
4. Equivalent Allowable Emissions :	0.40 lb/hour 1.70 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity).

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

Emissions Unit Information Section 11
 NGS - Limestone Crusher Conveyor Transfers

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05									
2. Basis for Allowable Opacity :	RULE									
3. Requested Allowable Opacity :										
	<table> <tr> <td>Normal Conditions :</td> <td>5</td> <td>%</td> </tr> <tr> <td>Exceptional Conditions :</td> <td>100</td> <td>%</td> </tr> <tr> <td>Maximum Period of Excess Opacity Allowed :</td> <td></td> <td>min/hour</td> </tr> </table>	Normal Conditions :	5	%	Exceptional Conditions :	100	%	Maximum Period of Excess Opacity Allowed :		min/hour
Normal Conditions :	5	%								
Exceptional Conditions :	100	%								
Maximum Period of Excess Opacity Allowed :		min/hour								
4. Method of Compliance :										
	Annual DEP Method 9									
5. Visible Emissions Comment :										
	<p>BACT was evaluated as 5% opacity from the fabric filter. Excess Emissions allowed for 2 hours in any 24-hour period</p>									

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

Emissions Unit Information Section

III. Part 11 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 11

NGS - Limestone Crusher Conveyor Transfers

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		
Unit emits only particulate matter		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 11

NGS - Limestone Crusher Conveyor Transfers

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU034
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

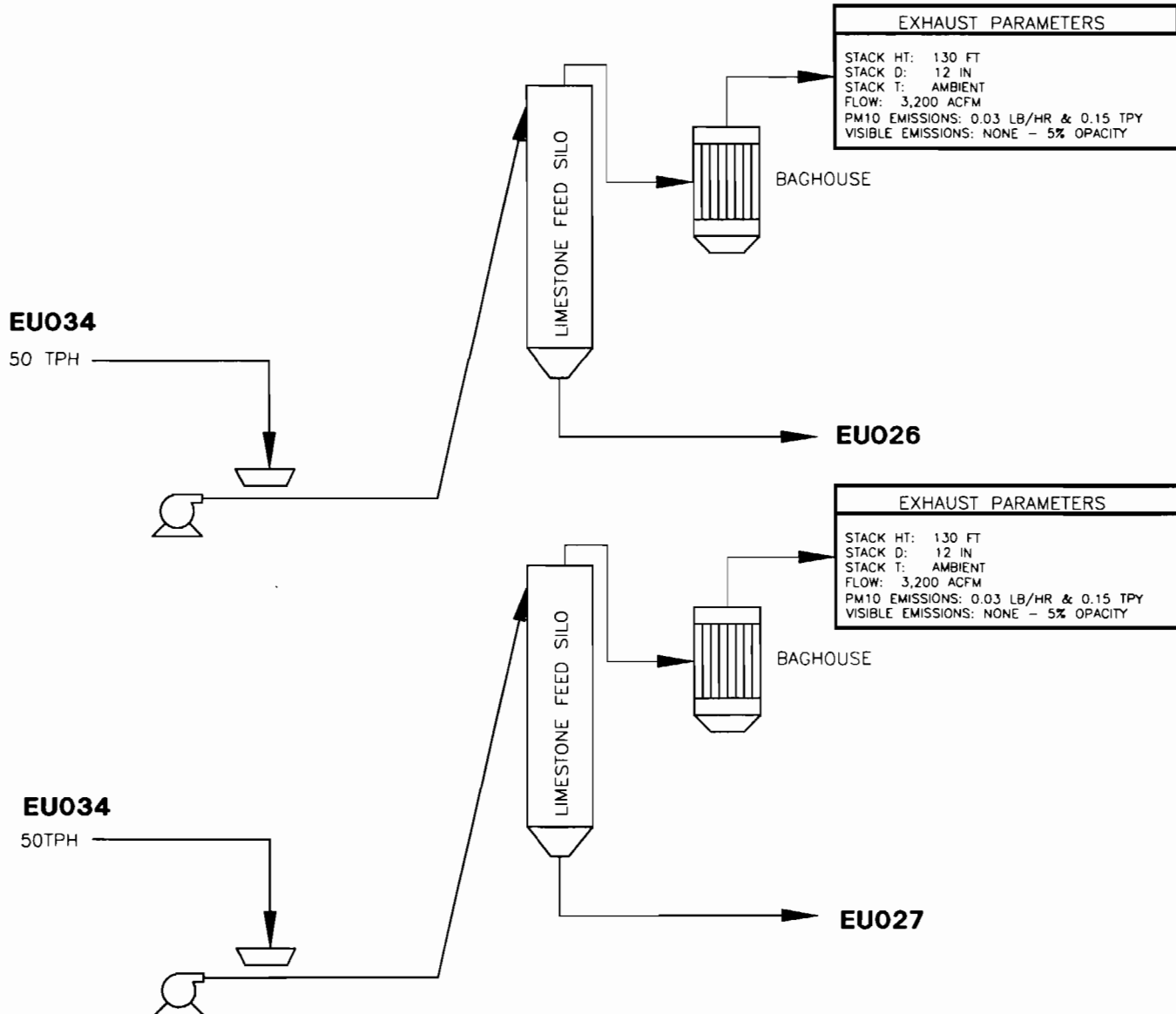
New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

Emissions Unit 035

NGS - Limestone Feed Silos

NORTHSIDE GENERATING STATION LIMESTONE FEED SILOS BASE CASE & ALTERNATE 1



EXHAUST PARAMETERS	
STACK HT:	130 FT
STACK D:	12 IN
STACK T:	AMBIENT
FLOW:	3,200 ACFM
PM10 EMISSIONS:	0.03 LB/HR & 0.15 TPY
VISIBLE EMISSIONS:	NONE - 5% OPACITY

EXHAUST PARAMETERS	
STACK HT:	130 FT
STACK D:	12 IN
STACK T:	AMBIENT
FLOW:	3,200 ACFM
PM10 EMISSIONS:	0.03 LB/HR & 0.15 TPY
VISIBLE EMISSIONS:	NONE - 5% OPACITY

JEA		
NORTHSIDE GENERATING STATION REPOWERING		
Simplified Process Flow Diagram Emissions Unit ID 035		
F FOSTER WHEELER ENVIRONMENTAL CORPORATION		
SCALE N/A	PREPARED DJG	CAD FILE NO. EU035PF.DWG
DATE: 12/02/98	CHECKED MAE	FIGURE NO. F-8, EU035
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Limestone Feed Silos		
2. Emissions Unit Identification Number : 035 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : The emissions unit consists of two limestone feed silos and the associated pneumatic transfer systems. A detailed description of the points is included in Attachment F-9, PSD Report (Appendix C).		

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Emissions Unit Control Equipment 1

1. Description :

Emissions from each Limestone Feed Silo will be controlled by a fabric filter.

2. Control Device or Method Code : 18

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

Emissions Unit Information Section
NGS - Limestone Feed Silos

12

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002
2. Long-term Reserve Shutdown Date :	
3. Package Unit :	
Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information :	
Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	100	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :	Maximum rate reflects both trains which has beed set by initial design criteria.	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Rule Applicability Analysis

Unit is subject to the Preconstruction Review Requirements of Chapters 62-210.300 Permits Required, 62-212.300 General Requirements and 62-212.400 Prevention of Significant Deterioration for PM and PM10. Unit is also subject to 40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-212.400(1), F.A.C., General Provisions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-4.030, F.A.C., General Provisions

Rule 62-4.130, F.A.C., Plant Operations - Problems

Duval County, City of Jacksonville, Title X

Part I General Provision 2.105 Maintenance of Air Pollution Control Equipment

Part II General Requirements 2.201, Adoption of 62-210, F.A.C., (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C., (As Noted)

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

Rule 62-204.800(7)(b).63, F.A.C., Adoption of 40 CFR 60 Subpart OOO (As Noted)

Rule 62-204.800(7)(c), F.A.C., NSPS Controlling Standards

Rule 62-204.800(7)(d), F.A.C., Adoption of the General Provisions (As Noted)

Rule 62-204.800(7)(e), F.A.C., Adoption of the NSPS Appendices (As Noted)

Rule 62-210.300(1), F.A.C., Air Construction Permit

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comment

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Reports

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-297.310, F.A.C., General Test Requirements

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-297.401(5) & (9)(c), F.A.C.

40 CFR 60.7, Notification and Recordkeeping Requirements

40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements (VE reduced to 1 hour)

40 CFR 60.12, Circumvention

40 CFR 60.13, Monitoring Requirements

40 CFR 60.19, General Notification and Reporting Requirements

40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic-Mineral Processing Plants

40 CFR 60.670(a)(1), (e), & (f), Applicability and Designation of Affected Facility

40 CFR 60.672(e), Standards for Particulate Matter

40 CFR 60.675, Test Methods and Procedures

40 CFR 60.676, Reporting and Recordkeeping

III. Part 6b - 3

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section

12

NGS - Limestone Feed Silos

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU035
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	Two Feed Silos, identical in size and design, each controlled by a similar baghouse.
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	Identical Stacks
5. Discharge Type Code :	V
6. Stack Height :	130 feet
7. Exit Diameter :	1.00 feet
8. Exit Temperature :	68 °F
9. Actual Volumetric Flow Rate :	3,200 acfm
10. Percent Water Vapor :	1.00 %
11. Maximum Dry Standard Flow Rate :	3,200 dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone : 17	East (km) : 446.900
	North (km) : 3,366.300
14. Emission Point Comment :	Attachments F-6, F-8, and F-9, contain additional information related to stack paramters and location.

III. Part 7b - 1

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

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Limestone - EU026 Feed Silo	
2. Source Classification Code (SCC) : 30510105	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 50.00	5. Maximum Annual Rate : 438,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Limestone - EU027 Feed Silo	
2. Source Classification Code (SCC) : 30510105	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 50.00	5. Maximum Annual Rate : 438,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

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

Emissions Unit Information Section 12
NGS - Limestone Feed Silos

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM10	018		EL
2 - PM	018		EL

III. Part 9a - 1

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

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0350000 lb/hour	0.1500000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42 (0.14)	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
$\text{lb/hr} = ((50 \text{ ton/hr}) \times (0.14 \text{ lb/ton}) \times (1-99.5/100)) = 0.035 \text{ lb/hr}$ $\text{TPY} = (0.035 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 0.15 \text{ tons}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Potential emissions based on tons transferred.		

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

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0700000 lb/hour	0.3000000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: to tons/year		
6. Emissions Factor 0	Units lb/ton	
Reference AP-42 (0.27)		
7. Emissions Method Code : 3		
8. Calculations of Emissions : $lb/hr = ((50 \text{ ton/hr}) \times (0.27 \text{ lb/ton}) \times (1-99.5/100)) = 0.068 \text{ lb/hr}$ $TPY = (0.067 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 0.3 \text{ tons}$		
9. Pollutant Potential/Estimated Emissions Comment : Potential emissions based on tons transferred.		

Emissions Unit Information Section 12
NGS - Limestone Feed Silos

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.04 lb/hr
4. Equivalent Allowable Emissions :	0.04 lb/hour 0.15 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity)

Emissions Unit Information Section 12
NGS - Limestone Feed Silos

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE		
2. Future Effective Date of Allowable Emissions :	01-Apr-2002		
3. Requested Allowable Emissions and Units :	0.07	lb/hr	
4. Equivalent Allowable Emissions :	0.07	lb/hour	0.30 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	BACT was evaluated as 0.01 gr/dscf or less in addition to a no visible emissions limitation (5% Opacity).		

III. Part 9c - 2

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

Emissions Unit Information Section 12
NGS - Limestone Feed Silos

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 5 %
	Exceptional Conditions : 100 %
	Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	
	Annual DEP Method 9
5. Visible Emissions Comment :	
	BACT was evaluated as 5% opacity from the fabric filter. Excess Emissions - 2 hours in any 24-hour period.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 12
NGS - Limestone Feed Silos

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :	0
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : 0 %
	Exceptional Conditions : 100 %
	Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	
	EPA Method 22
5. Visible Emissions Comment :	
	NSPS Subpart OOO places a No visible emissions limitation (0% Opacity) on the Building. Excess Emissions - 2 hours in any 24-hour period.

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

Emissions Unit Information Section

III. Part 11 - 1

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K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		
Unit emits only particulate matter		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 12

NGS - Limestone Feed Silos

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU035
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

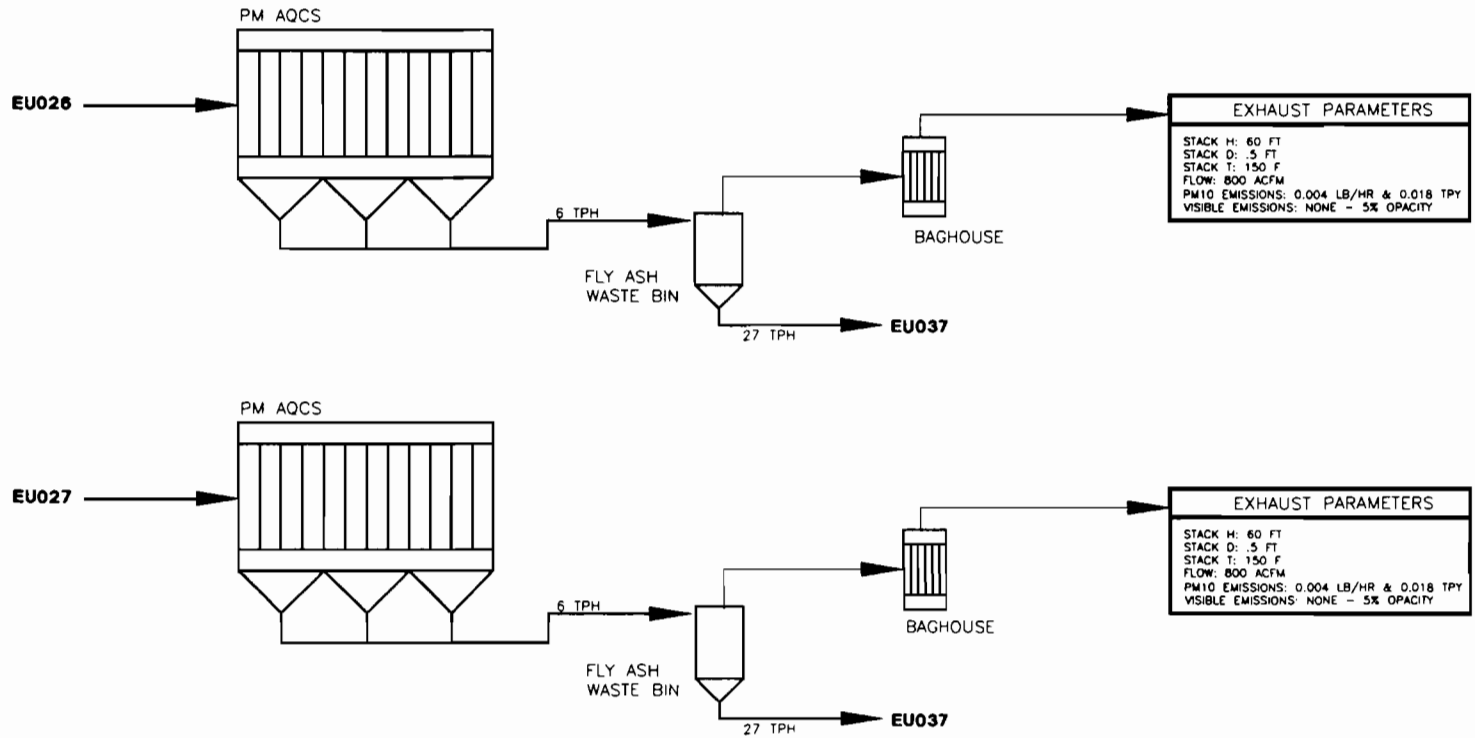
New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

Emissions Unit 036

NGS - Fly Ash Waste Bins

NORTHSIDE GENERATING STATION FLY ASH WASTE BIN BASE CASE & ALTERNATE 1



JEA
**NORTHSIDE GENERATING STATION
 REPOWERING**

Simplified Process Flow Diagram
 Emissions Unit ID 036

FW FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED DJG	CAD FILE NO. EU036PF.DWG
DATE: 12/02/98	CHECKED MAE	FIGURE NO. F-6, EU036
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [] 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.

III. Part 1 - 1

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Fly Ash Waste Bins		
2. Emissions Unit Identification Number : 036 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Emissions Unit consists of the Fly Ash Waste Bins associated with the PM AQCS for each CFB Boiler.		

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Emissions Unit Control Equipment 1

1. Description :	
Fly Ash Waste Bins - Baghouse	
2. Control Device or Method Code :	17

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

Emissions Unit Information Section 13
NGS - Fly Ash Waste Bins

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	6	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :	Each waste bin is designed to receive a maximum of 6 tons per hour of fly ash from the PM AQCS.	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 13
NGS - Fly Ash Waste Bins

Rule Applicability Analysis

The Fly Ash Waste Bins are subject to the Preconstruction Review Requirements of Chapters 62-210 and 62-212, F.A.C. Specifically, the operation is subject to 62-212.300 and 62-212.400 Prevention of Significant Deterioration for PM and PM10.

III. Part 6a - 1

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List of Applicable Regulations

Rule 62-212.400(7), F.A.C., Preconstruction Review Requirements - Construction/Operation Permits

Rule 62-213.400, F.A.C., Permits and Permit Revisions Required

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

Rule 62-210.300(1), F.A.C., Air Construction Permits

Rule 62-210.350(1) & (2), F.A.C., Public Notice and Comments

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Report

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-297.401(5) & (9), F.A.C., Compliance Test Methods

Duval County, City of Jacksonville Title X

Part I General Provision 2.105 Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C., (As Noted)

III. Part 6b - 1

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List of Applicable Regulations

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C., (As Noted)

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities.

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-212.400(5)(d), F.A.C., Preconstruction Review Requirements - Ambient Impact Analysis

Rule 62-212.400(5)(a), F.A.C., Preconstruction Review Requirements - General

Rule 62-212.400(5)(h), F.A.C., Preconstruction Review Requirements - Permit Application Information

III. Part 6b - 2

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List of Applicable Regulations

Rule 62-4.030, F.A.C., General Prohibitions

Rule 62-4.130, F.A.C., Plant Operations - Problems

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU036 - Figure F-6		
2. Emission Point 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 : See detailed information is also in Attachment F-9, PSD Report (Appendix C).			
5. Discharge Type Code :	V		
6. Stack Height :	60	feet	
7. Exit Diameter :	0.5	feet	
8. Exit Temperature :	150	°F	
9. Actual Volumetric Flow Rate :	800	acfm	
10. Percent Water Vapor :	0.50	%	
11. Maximum Dry Standard Flow Rate :	800	dscfm	
12. Nonstack Emission Point Height :	0	feet	
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	446.900
		North (km) :	3366.300
14. Emission Point Comment : Location of points and specific discharge information is detailed in Attachment F-8.			

III. Part 7a - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Fly Ash Waste Bin serving EU026	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 6.00	5. Maximum Annual Rate : 52,560.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Fly Ash Waste Bin Serving EU027	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 6.00	5. Maximum Annual Rate : 52,560.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

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

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	017		EL

III. Part 9a - 1

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

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0080000 lb/hour	0.0350000 tons/year
4. Synthetically Limited? [] Yes [X] No		
5. Range of Estimated Fugitive/Other Emissions: to tons/year		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions : Short Term Emissions lb/hr = (6 tons/hr) X (0.27 lb/ton) X (1-.995) = 0.008 lb/hr Long Term Emissions TPY = (0.008 lb/hr) X (8760 hr/yr) X (ton/2000 lb) = 0.035 tons/yr		
9. Pollutant Potential/Estimated Emissions Comment : Baghouse removal efficiency is based on PM10. Emissions per Fly Ash Waste Bin.		

III. Part 9b - 1

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

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

III. Part 9b - 2

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

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0040000 lb/hour	0.0180000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Short Term Emissions		
$lb/hr = (6 \text{ tons/hr}) \times (0.14 \text{ lb/ton}) \times (1-.995) = 0.004 \text{ lb/hr}$		
Long Term Emissions		
$TPY = (0.004 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 0.018 \text{ tons/yr}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Baghouse removal efficiency is based on PM10.		

III. Part 9b - 3

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

Emissions Unit Information Section 13
NGS - Fly Ash Waste Bins

III. Part 9b - 4

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Emissions Unit Information Section
NGS - Fly Ash Waste Bins

13

Pollutant Information Section

1

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	<p style="text-align: right;">lb/hour tons/year</p>
5. Method of Compliance :	<p>Initial and Renewal Stack Tests</p>
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	<p>Requested Allowables - 0.008 lb/hr & 0.035 TPY</p>

Emissions Unit Information Section 13
NGS - Fly Ash Waste Bins

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	lb/hour tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	PM10 emissions to be estimated based on PM emissions and ratio of AP-42 PM10 to PM emission factor (0.14/0.27). Requested Allowables 0.004 lb/hr & 0.018 TPY

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 13
NGS - Fly Ash Waste Bins

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05									
2. Basis for Allowable Opacity :	RULE									
3. Requested Allowable Opacity :	<table style="margin-left: auto; margin-right: auto;"><tr><td style="padding: 0 20px;">Normal Conditions :</td><td style="padding: 0 10px;">5</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Exceptional Conditions :</td><td style="padding: 0 10px;">100</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Maximum Period of Excess Opacity Allowed :</td><td></td><td style="padding: 0 10px;">min/hour</td></tr></table>	Normal Conditions :	5	%	Exceptional Conditions :	100	%	Maximum Period of Excess Opacity Allowed :		min/hour
Normal Conditions :	5	%								
Exceptional Conditions :	100	%								
Maximum Period of Excess Opacity Allowed :		min/hour								
4. Method of Compliance :	Initial & Annual EPA Method 9									
5. Visible Emissions Comment :	<p>No visible emissions limit (5% opacity) has been evaluated as BACT.</p> <p>Excess Emissions based on 2 hours per 24-hour period</p>									

III. Part 10 - 1

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

Emissions Unit Information Section

III. Part 11 - 1

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K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 13

NGS - Fly Ash Waste Bins

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU036
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

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12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

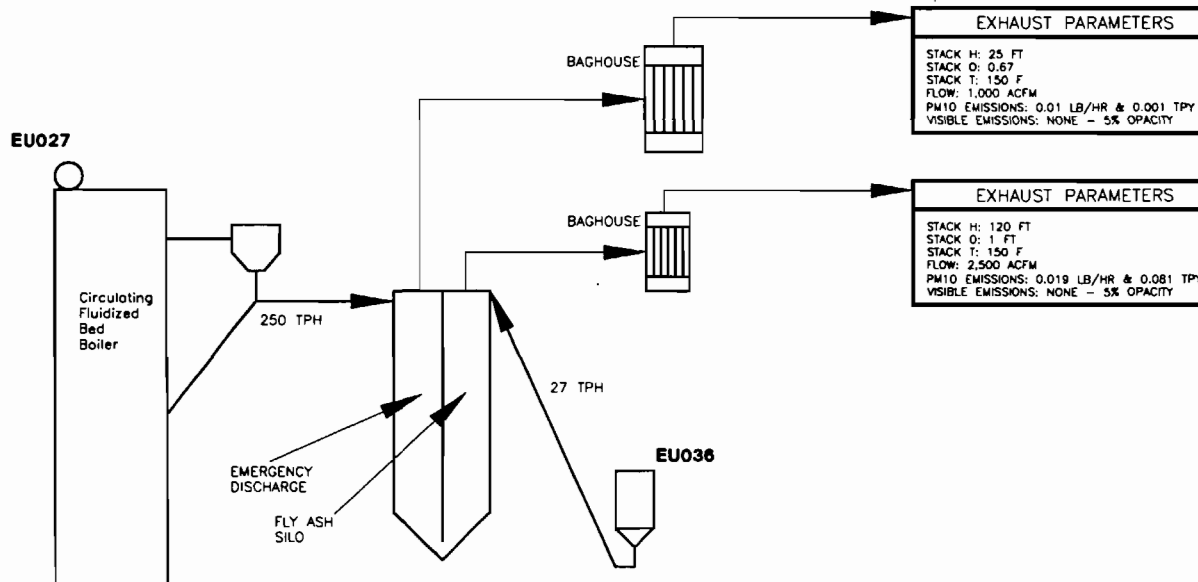
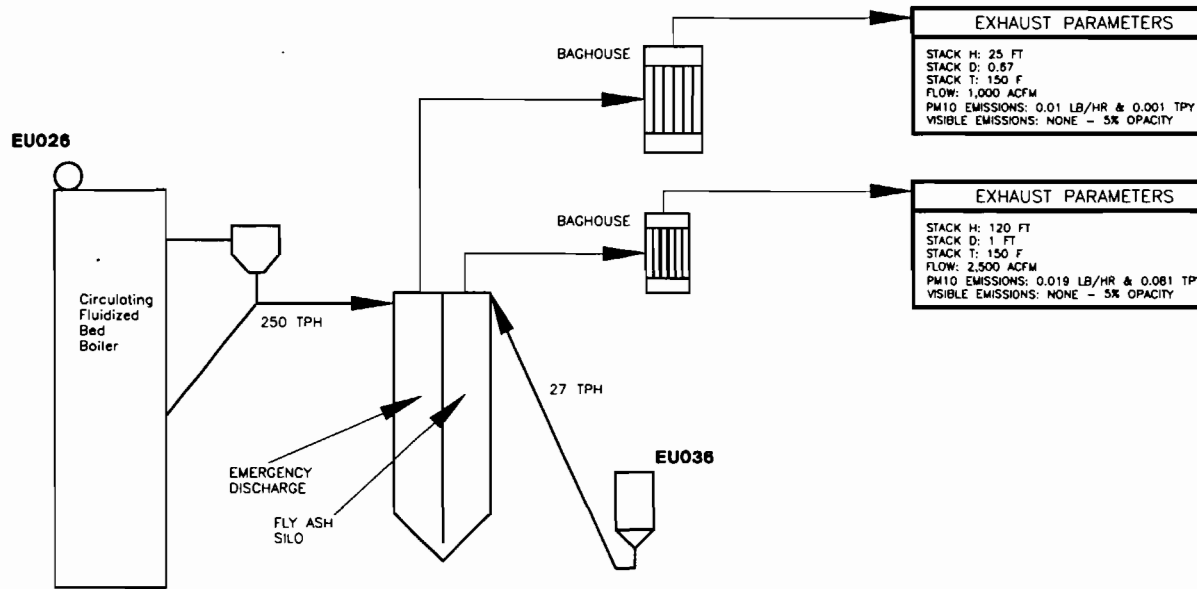
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 037

NGS - Fly Ash Transfer & Storage Systems

NORTHSIDE GENERATING STATION FLY ASH TRANSFER AND STORAGE SYSTEMS BASE CASE & ALTERNATE 1



JEA			
NORTHSIDE GENERATING STATION REPOWERING			
Simplified Process Flow Diagram			
Emissions Unit ID 037			
F FOSTER WHEELER ENVIRONMENTAL CORPORATION			
SCALE N/A	PREPARED DJG	CAD FILE NO. EU037PF.DWG	
DATE: 11/16/98	CHECKED MAE	FIGURE NO. F-6_EU037	
	APPROVED DJF		

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

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

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

- [] 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.

III. Part 1 - 1

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

Emissions Unit Description and Status

<p>1. Description of Emissions Unit Addressed in This Section :</p> <p>NGS - Fly Ash Transfer & Storage Systems</p>		
<p>2. Emissions Unit Identification Number : 037 <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown</p>		
<p>3. Emissions Unit Status Code : C</p>	<p>4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>5. Emissions Unit Major Group SIC Code : 49</p>
<p>6. Emissions Unit Comment :</p> <p>Emissions Unit consists of two dual compartment silos. Each silo services a CFB Boiler. One compartment of each silo is for receiving fly ash from the Fly Ash Waste Bin. The other compartment is for receiving fly ash directly from the CFB Boiler in the event of an emergency.</p> <p>The emissions unit includes four emission points.</p>		

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Emissions Unit Control Equipment 1

1. Description :	
Fly Ash Silo for EU026	
2. Control Device or Method Code :	17

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Emissions Unit Control Equipment 2

1. Description :	
Emergency Fly Ash Silo for EU026	
2. Control Device or Method Code :	17

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Emissions Unit Control Equipment 3

1. Description :

Fly Ash Silo for EU027

2. Control Device or Method Code : 17

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Emissions Unit Control Equipment 4

1. Description :	
Emergency Fly Ash Silo for EU027	
2. Control Device or Method Code :	17

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

Emissions Unit Information Section
NGS - Fly Ash Transfer & Storage Systems

14

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr tons/day
3. Maximum Process or Throughput Rate :	0 tons per hour
4. Maximum Production Rate :	
5. Operating Capacity Comment :	
	Fly Ash Silos receive at 27 TPH & 236520 TPY (Limited to less by EU037)
	Emergency Silos receive at 250 TPH & 50000 TPY (Based on 8 hr/yr)

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

Rule Applicability Analysis

The Fly Ash Silos are subject to the Preconstruction Review Requirements of Chapters 62-210 and 62-212, F.A.C. Specifically, the operation is subject to 62-212.300 and 62-212.400 Prevention of Significant Deterioration for PM and PM10.

III. Part 6a - 1

List of Applicable Regulations

Rule 62-210.300(1), F.A.C., Air Construction Permits

Rule 62-210.350(1) & (2), F.A.C, Public Notice and Comments

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Report

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-297.401(5) & (9), F.A.C., Compliance Test Methods

Duval County, City of Jacksonville Title X

Part I General Provision 2.105 Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emission Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

III. Part 6b - 1

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List of Applicable Regulations

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities.

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-212.400(5)(d), F.A.C., Preconstruction Review Requirements - Ambient Impact Analysis

Rule 62-212.400(5)(a), F.A.C., Preconstruction Review Requirements - General

Rule 62-212.400(5)(h), F.A.C., Preconstruction Review Requirements - Permit Application Information

Rule 62-212.400(7), F.A.C., Preconstruction Review Requirements - Construction/Operation Permits

Rule 62-213.400, F.A.C., Permits and Permit Revisions Required

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

III. Part 6b - 2

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

List of Applicable Regulations

Rule 62-4.030, F.A.C. General Prohibition

Rule 62-4.130, F.A.C., Plant Operations - Problems

III. Part 6b - 3

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E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU037 - Figure F-6
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	Four Discharge Points
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	See detailed information in Attachment F-9, PSD Report (Appendix C). Discharge Parameters reflect the Fly Ash Silos.
5. Discharge Type Code :	V
6. Stack Height :	120 feet
7. Exit Diameter :	1.00 feet
8. Exit Temperature :	150 °F
9. Actual Volumetric Flow Rate :	2,500 acfm
10. Percent Water Vapor :	0.50 %
11. Maximum Dry Standard Flow Rate :	2,500 dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone : 17 East (km) : 446.900 North (km) : 3,366.300	
14. Emission Point Comment :	

III. Part 7b - 1

Location of points is detailed in Attachment F-8. See Process Flow Diagram F-6, EU037 for additional information.

III. Part 7b - 2

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E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU037 - Figure F-6
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	Four Discharge Points
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	See detailed information in Attachment F-9, PSD Report (Appendix C). Discharge Parameters reflect the Fly Ash Silos.
5. Discharge Type Code :	V
6. Stack Height :	120 feet
7. Exit Diameter :	1.00 feet
8. Exit Temperature :	150 °F
9. Actual Volumetric Flow Rate :	2,500 acfm
10. Percent Water Vapor :	0.50 %
11. Maximum Dry Standard Flow Rate :	2,500 dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone : 17 East (km) : 446.900 North (km) : 3,366.300	
14. Emission Point Comment :	

III. Part 7b - 3

Location of points is detailed in Attachment F-8. See Process Flow Diagram F-6, EU037 for additional information.

III. Part 7b - 4

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Fly Ash Silo - EU026	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 27.00	5. Maximum Annual Rate : 236,520.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Emergency Fly Ash Silo - EU026	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 250.00	5. Maximum Annual Rate : 50,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Fly Ash Silo - EU027	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 27.00	5. Maximum Annual Rate : 236,520.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 3

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Emergency Fly Ash Silo - EU027	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 250.00	5. Maximum Annual Rate : 50,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

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

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL
2 - PM10	017		EL

III. Part 9a - 1

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

Emissions Unit Information Section 14
 NGS - Fly Ash Transfer & Storage Systems

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0360000 lb/hour	0.1600000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Short Term Emissions		
lb/hr = (27 tons/hr) X (0.27 lb/ton) X (1-.995) = 0.036 lb/hr		
Long Term Emissions		
TPY = (0.036 lb/hr) X (8760 hr/yr) X (ton/2000 lb) = 0.16 tons/yr		
9. Pollutant Potential/Estimated Emissions Comment :		
Baghouse removal efficiency is based on PM10. Emissions per Fly Ash Silo.		

III. Part 9b - 1

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

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

III. Part 9b - 2

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

Emissions Unit Information Section 14
 NGS - Fly Ash Transfer & Storage Systems

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0190000 lb/hour	0.0810000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions : Short Term Emissions $lb/hr = (27 \text{ tons/hr}) \times (0.14 \text{ lb/ton}) \times (1-.995) = 0.019 \text{ lb/hr}$ Long Term Emissions $TPY = (0.019 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 0.081 \text{ tons/yr}$		
9. Pollutant Potential/Estimated Emissions Comment : Baghouse removal efficiency is based on PM10. Emission rates reflect each Fly Ash Silo.		

III. Part 9b - 3

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

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

III. Part 9b - 4

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Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

Pollutant Information Section 1

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	
	lb/hour tons/year
5. Method of Compliance :	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	
	Requested Allowables - 0.11 lb/hr & 0.011 TPY per Emergency Fly Ash Silo No Compliance Demonstration Required - Equipment is operated only in event of a malfunction or major upset.

III. Part 9c - 1

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Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

Pollutant Information Section 2

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	OTHER
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	
	lb/hour tons/year
5. Method of Compliance :	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	
	Requested Allowables - 0.01 lb/hr & 0.001 TPY per Emergency Fly Ash Silo No Compliance Demonstration Required - Equipment is operated only in event of a malfunction or major upset.

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	
	lb/hour tons/year
5. Method of Compliance :	
	Initial and Annual Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	
	Requested Allowables - 0.036 lb/hr & 0.16 TPY per Fly Ash Silo

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	
	lb/hour tons/year
5. Method of Compliance :	
	Initial and Annual Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	
	PM10 emissions to be estimated based on PM emissions and ratio of AP-42 PM10 to PM emission factor (0.14/0.27).
	Requested Allowables 0.019 lb/hr & 0.081 TPY per Fly Ash Silo.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 14
NGS - Fly Ash Transfer & Storage Systems

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05									
2. Basis for Allowable Opacity :	RULE									
3. Requested Allowable Opacity :	<table style="margin-left: auto; margin-right: auto;"><tr><td style="padding: 0 20px;">Normal Conditions :</td><td style="padding: 0 10px;">5</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Exceptional Conditions :</td><td style="padding: 0 10px;">100</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Maximum Period of Excess Opacity Allowed :</td><td></td><td style="padding: 0 10px;">min/hour</td></tr></table>	Normal Conditions :	5	%	Exceptional Conditions :	100	%	Maximum Period of Excess Opacity Allowed :		min/hour
Normal Conditions :	5	%								
Exceptional Conditions :	100	%								
Maximum Period of Excess Opacity Allowed :		min/hour								
4. Method of Compliance :	Initial & Annual EPA Method 9									
5. Visible Emissions Comment :	<p>No visible emissions limit (5% opacity) has been evaluated as BACT for the Fly Ash Silos. No Testing Required for the Emergency Fly Ash Silos.</p> <p>Excess Emissions allows 2 hours in any 24-hour period</p>									

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

Emissions Unit Information Section

III. Part 11 - 1

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K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

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2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :

PM : C SO2 : U NO2 : U

4. Baseline Emissions :

PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year

5. PSD Comment :

III. Part 12 - 2

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 14

NGS - Fly Ash Transfer & Storage Systems

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU037
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

DEP Form No. 62-210.900(1) - Form
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12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

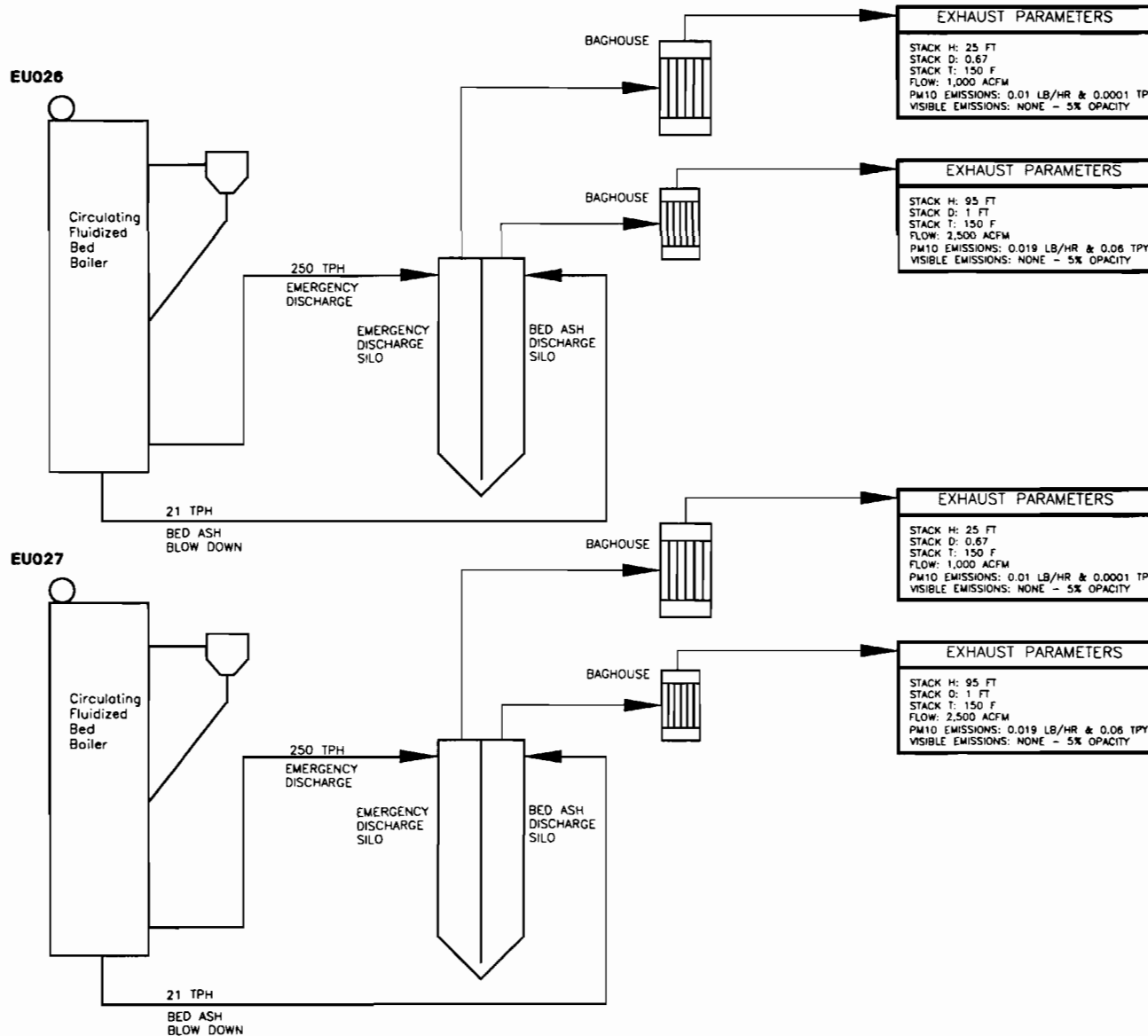
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

Emissions Unit 038

NGS - Bed Ash Transfer & Storage Systems

NORTHSIDE GENERATING STATION BED ASH TRANSFER AND STORAGE SYSTEMS BASE CASE & ALTERNATE 1



JEA			
NORTHSIDE GENERATING STATION REPOWERING			
Simplified Process Flow Diagram			
Emissions Unit ID 038			
FOSTER WHEELER ENVIRONMENTAL CORPORATION			
SCALE N/A	PREPARED DJG	CAD FILE NO. EU038PF.DWG	
DATE: 11/16/98	CHECKED MAE	FIGURE NO. F-6, EU038	
	APPROVED DJF		

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Bed Ash Transfer & Storage Systems		
2. Emissions Unit Identification Number : 038 <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Emissions Unit consists of two dual compartment silos. Each silo services a CFB Boiler. One compartment of each silo is for receiving bed ash from the CFB Boiler. The other compartment is for receiving bed ash from the CFB Boiler in the event of an emergency. The emissions unit includes four emission points.		

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Emissions Unit Control Equipment 1

1. Description :	
Bed Ash Silo for EU026	
2. Control Device or Method Code :	17

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Emissions Unit Control Equipment 2

1. Description :	
Emergency Bed Ash Silo for EU026	
2. Control Device or Method Code :	17

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Emissions Unit Control Equipment 3

1. Description : Bed Ash Silo for EU027	
2. Control Device or Method Code :	17

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Emissions Unit Control Equipment 4

1. Description :	
Emergency Bed Ash Silo for EU027	
2. Control Device or Method Code :	17

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

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002	
2. Long-term Reserve Shutdown Date :		
3. Package Unit :		
Manufacturer :		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information :		
Dwell Temperature :		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	0	tons per hour
4. Maximum Production Rate :		
5. Operating Capacity Comment :		
Bed Ash Silos receive at 21TPH & 183960 TPY		
Emergency Silos receive at 250 TPH & 50000 TPY		

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :		
24 hours/day		7 days/week
52 weeks/year		8,760 hours/year

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

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

Rule Applicability Analysis

The Bed Ash Silos are subject to the Preconstruction Review Requirements of Chapters 62-210 and 62-212, F.A.C. Specifically, the operation is subject to 62-212.300 and 62-212.400 Prevention of Significant Deterioration for PM and PM10.

III. Part 6a - 1

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List of Applicable Regulations

Rule 62-210.300(1), F.A.C., Air Construction Permits

Rule 62-210.350(1) & (2), F.A.C, Public Notice and Comments

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Report

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-297.401(5) & (9), F.A.C., Compliance Test Methods

Duval County, City of Jacksonville Title X

Part I General Provision 2.105 Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emissions Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
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List of Applicable Regulations

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities.

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-212.400(5)(d), F.A.C., Preconstruction Review Requirements - Ambient Impact Analysis

Rule 62-212.400(5)(a), F.A.C., Preconstruction Review Requirements - General

Rule 62-212.400(5)(h), F.A.C., Preconstruction Review Requirements - Permit Application Information

Rule 62-212.400(7), F.A.C., Preconstruction Review Requirements - Construction/Operation Permits

Rule 62-213.400, F.A.C., Permits and Permit Revisions Required

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

III. Part 6b - 2

List of Applicable Regulations

Rule 62-4.030, F.A.C., General Prohibition

62-4.130, F.A.C., Plant Operations - Problems

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU038 - Figure F-6
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	Four Discharge Points
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	See detailed information in Attachment F-9, PSD Report (Appendix C). Discharge Parameters reflect the Bed Ash Silos.
5. Discharge Type Code :	V
6. Stack Height :	95 feet
7. Exit Diameter :	1.00 feet
8. Exit Temperature :	150 °F
9. Actual Volumetric Flow Rate :	2,500 acfm
10. Percent Water Vapor :	0.50 %
11. Maximum Dry Standard Flow Rate :	2,500 dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	Zone : 17 East (km) : 446.670 North (km) : 3,365.070
14. Emission Point Comment :	

III. Part 7b - 1

Location of points is detailed in Attachment F-8. See Process Flow Diagram F-6, EU038 for additional information.

III. Part 7b - 2

DEP Form No. 62-210.900(1) - Form
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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Bed Ash Silo - EU026	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 21.00	5. Maximum Annual Rate : 183,960.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Emergency Bed Ash Silo - EU026	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 250.00	5. Maximum Annual Rate : 50,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Bed Ash Silo - EU027	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 21.00	5. Maximum Annual Rate : 183,960.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 3

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F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Emergency Bed Ash Silo - EU027	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 250.00	5. Maximum Annual Rate : 50,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 4

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

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	017		EL
2 - PM10	017		EL

III. Part 9a - 1

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

Emissions Unit Information Section 15
 NGS - Bed Ash Transfer & Storage Systems

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0300000 lb/hour	0.1200000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 50px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Short Term Emissions		
lb/hr = (21 tons/hr) X (0.27 lb/ton) X (1-.995) = 0.03 lb/hr		
Long Term Emissions		
TPY = (0.03 lb/hr) X (8760 hr/yr) X (ton/2000 lb) = 0.12 tons/yr		
9. Pollutant Potential/Estimated Emissions Comment :		
Baghouse removal efficiency is based on PM10. Emissions per Bed Ash Silo.		

III. Part 9b - 1

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

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

III. Part 9b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.50	%
3. Potential Emissions :	0.0100000 lb/hour	0.0600000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Short Term Emissions		
lb/hr = (21 tons/hr) X (0.14 lb/ton) X (1-.995) = 0.01 lb/hr		
Long Term Emissions		
TPY = (0.01 lb/hr) X (8760 hr/yr) X (ton/2000 lb) = 0.06 tons/yr		
9. Pollutant Potential/Estimated Emissions Comment :		
Baghouse removal efficiency is based on PM10.		
Emission rates reflect each Bed Ash Silo.		

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

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

III. Part 9b - 4

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Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	lb/hour tons/year
5. Method of Compliance :	Initial and Annual Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Requested Allowables - 0.03 lb/hr & 0.12 TPY per Bed Ash Silo

Emissions Unit Information Section 15
 NGS - Bed Ash Transfer & Storage Systems

Pollutant Information Section 1

Allowable Emissions 2

1. Basis for Allowable Emissions Code :			OTHER
2. Future Effective Date of Allowable Emissions :			01-Apr-2002
3. Requested Allowable Emissions and Units :			
4. Equivalent Allowable Emissions :			
		lb/hour	tons/year
5. Method of Compliance :			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :			
<p>Requested Allowables - 0.11 lb/hr & 0.011 TPY per Emergency Bed Ash Silo No Compliance Demonstration Required - Equipment is operated only in event of a malfunction or major upset.</p>			

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	
	lb/hour tons/year
5. Method of Compliance :	Initial and Annual Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	PM10 emissions to be estimated based on PM emissions and ratio of AP-42 PM10 to PM emission factor (0.14/0.27). Requested Allowables 0.01 lb/hr & 0.06 TPY per Bed Ash Silo.

Emissions Unit Information Section 15
 NGS - Bed Ash Transfer & Storage Systems

Pollutant Information Section 2

Allowable Emissions 2

1. Basis for Allowable Emissions Code :			OTHER
2. Future Effective Date of Allowable Emissions :			01-Apr-2002
3. Requested Allowable Emissions and Units :			
4. Equivalent Allowable Emissions :			
	lb/hour		tons/year
5. Method of Compliance :			
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :			
Requested Allowables - 0.01 lb/hr & 0.001 TPY per Emergency Bed Ash Silo No Compliance Demonstration Required - Equipment is operated only in event of a malfunction or major upset.			

III. Part 9c - 4

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 15
NGS - Bed Ash Transfer & Storage Systems

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 5 % Exceptional Conditions : 100 % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Initial & Annual EPA Method 9
5. Visible Emissions Comment :	No visible emissions limit (5% opacity) has been evaluated as BACT for the Bed Ash Silos. No Testing Required for the Emergency Bed Ash Silos. Excess Emissions - 2 hours in any 24-hour period

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

Emissions Unit Information Section

III. Part 11 - 1

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**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 15

NGS - Bed Ash Transfer & Storage Systems

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU038
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statute :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

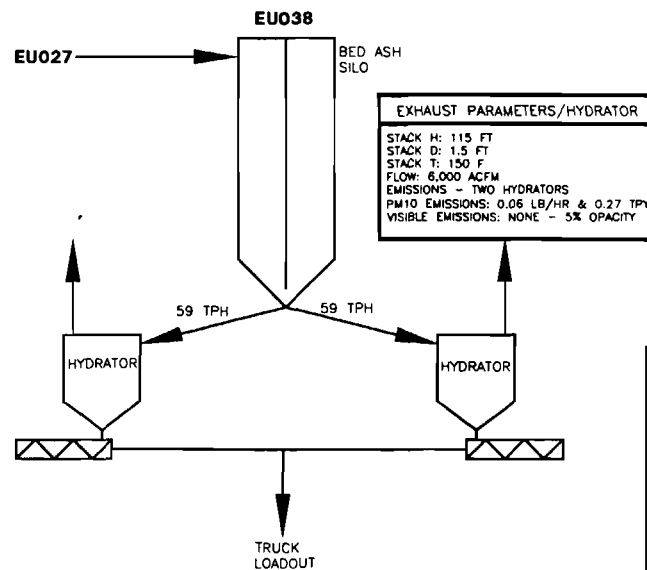
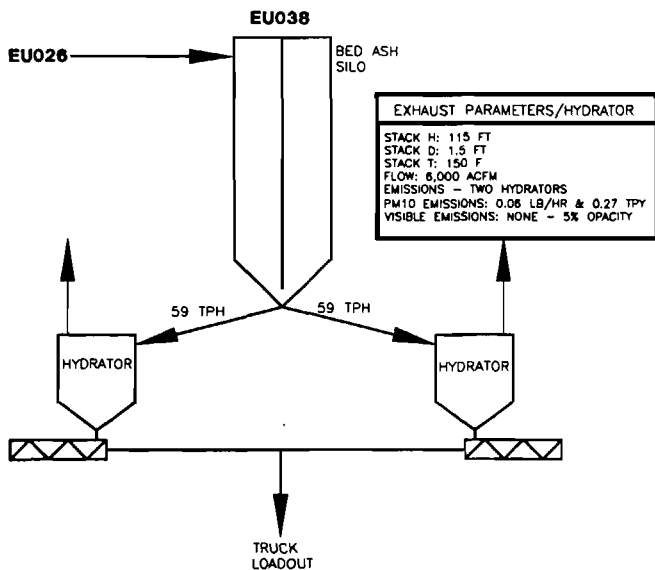
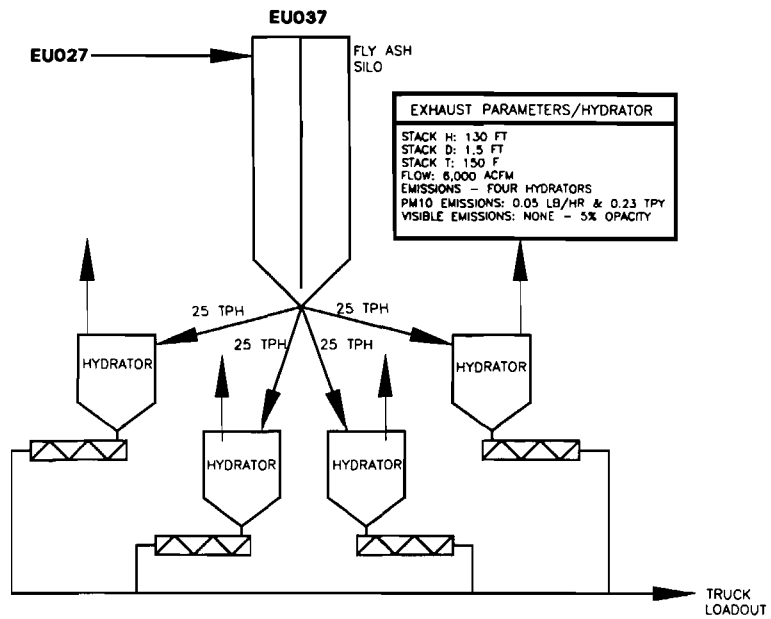
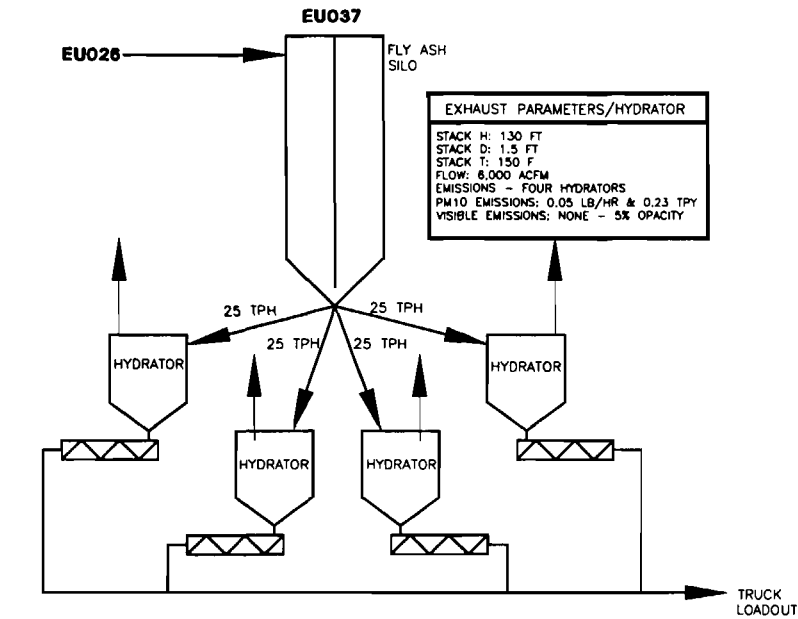
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Emissions Unit 039

NGS - Fly and Bed Ash Hydrators

NORTHSIDE GENERATING STATION FLY & BED ASH SILO HYDRATORS BASE CASE & ALTERNATE 1



JEA
NORTHSIDE GENERATING STATION
REPOWERING

Simplified Process Flow Diagram
Emissions Unit ID 039

F FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED DJG	CAD FILE NO. EU039PF.DWG
DATE: 11/16/98	CHECKED MAE	FIGURE NO. F-6, EU039
	APPROVED DJF	

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

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

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

III. Part 1 - 1

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

Effective : 3-21-96

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : NGS - Fly & Bed Ash Silo Hydrators		
2. Emissions Unit Identification Number : 039 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Emissions Unit consists of 12 hydrators. The hydrators service the Fly Ash and Bed Ash Silos. Each Fly Ash Silo is serviced by four hydrators (25 tons/hr). Each Bed Ash Silo is serviced by two hydrators (59 tons/hr). The hydrators mix the ash by-products with water for conditioning prior to handling and storage. The emissions unit includes twelve emission points in two groups of four and two groups of two.		

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Emissions Unit Control Equipment 1

1. Description :	
Four Hydrators for EU026 Fly Ash Silo	
2. Control Device or Method Code :	53

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Emissions Unit Control Equipment 2

1. Description :	
Four Hydrators for EU027 Fly Ash Silo	
2. Control Device or Method Code :	53

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Emissions Unit Control Equipment 3

1. Description :	
Two Hydrators for EU026 Bed Ash Silo	
2. Control Device or Method Code :	53

III. Part 3 - 3

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Emissions Unit Control Equipment 4

1. Description : Two Hydrators for EU027 Bed Ash Silo
--

2. Control Device or Method Code : 53
--

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

Emissions Unit Information Section

16

NGS - Fly & Bed Ash Silo Hydrators

Emissions Unit Details

1. Initial Startup Date :	01-Apr-2002
2. Long-term Reserve Shutdown Date :	
3. Package Unit :	
Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information :	
Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr
2. Maximum Incinerator Rate :	lb/hr tons/day
3. Maximum Process or Throughput Rate :	0 tons per hour
4. Maximum Production Rate :	
5. Operating Capacity Comment :	
Fly Ash Hydrators receive materials at 25 TPH & 219000 TPY (Dry Basis)	
Bed Ash Hydrators receive materials at 59 TPH & 516840 TPY (Dry Basis)	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

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

Emissions Unit Information Section 16
NGS - Fly & Bed Ash Silo Hydrators

Rule Applicability Analysis

The Hydrators are subject to the Preconstruction Review Requirements of Chapters 62-210 and 62-212, F.A.C. Specifically, the operation is subject to 62-212.300 and 62-212.400 Prevention of Significant Deterioration for PM and PM10.

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-210.370(3)(a) & (c), F.A.C., Annual Operating Report

Rule 62-210.550, F.A.C., Stack Height Policy

Rule 62-210.650, F.A.C., Circumvention

Rule 62-297.310, F.A.C., General Test Requirements

Rule 62-297.401(5) & (9), F.A.C., Compliance Test Methods

Duval County, City of Jacksonville Title X

Part I General Provision 2.105 Maintenance of Air Pollution Control Devices

Part II General Requirements 2.201, Adoption of 62-210, F.A.C. (As Noted)

Part X Emissions Monitoring 2.1001, Adoption of 62-297, F.A.C. (As Noted)

Part XII Permits 2.1201, Adoption of 62-4 & 62-213, F.A.C. (As Noted)

Rule 62-210.700(1), (4), & (6), F.A.C., Excess Emissions

Rule 62-212.300, F.A.C., General Preconstruction Review Requirements

Rule 62-212.400(1), F.A.C., General Prohibitions

Rule 62-212.400(2)(d)4., F.A.C., Applicability - Modifications to Major Facilities.

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-212.400(2)(e), F.A.C., Applicability - Emission Increases

Rule 62-212.400(2)(f), F.A.C., Applicability - Pollutants Subject to PSD Preconstruction Review

Rule 62-212.400(4), F.A.C., General Provisions

Rule 62-212.400(5)(e), F.A.C., Preconstruction Review Requirements - Additional Impact Analyses

Rule 62-212.400(5)(b), F.A.C., Preconstruction Review Requirements - Technology Review

Rule 62-212.400(5)(c), F.A.C., Preconstruction Review Requirements - BACT

Rule 62-212.400(5)(d), F.A.C., Preconstruction Review Requirements - Ambient Impact Analysis

Rule 62-210.300(1), F.A.C., Air Construction Permits

Rule 62-210.350(1) & (2), F.A.C, Public Notice and Comments

Rule 62-212.400(5)(a), F.A.C., Preconstruction Review Requirements - General

Rule 62-212.400(5)(h), F.A.C., Preconstruction Review Requirements - Permit Application Information

Rule 62-212.400(7), F.A.C., Preconstruction Review Requirements - Construction/Operation Permits

Rule 62-213.400, F.A.C., Permits and Permit Revisions Required

Rule 62-213.410(2), F.A.C., Changes without Permit Revision

III. Part 6b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

List of Applicable Regulations

Rule 62-4.030, F.A.C., General Prohibition

Ruel 62-4.130, F.A.C., Plant Operations - Problems

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU039 - Figure F-6
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	Fly Ash Silo Hydrators - Four Units per Silo
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	<p>Fly Ash Silo Hydrators - Stack Parameters: Code: V, Height: 130 FT, Diameter: 1.5 FT, Exit Temperature: 150 F, Flow: 6,000 ACFM</p> <p>Bed Ash Silo Hydrators - Stack Parameters Code: V, Height: 115 FT, Diameter: 1.5 FT, Exit Temperature: 150 F, Flow: 6,000 ACFM</p>
5. Discharge Type Code :	V
6. Stack Height :	130 feet
7. Exit Diameter :	1.50 feet
8. Exit Temperature :	150 °F
9. Actual Volumetric Flow Rate :	6,000 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	<p>Zone : 17 East (km) : 446.670 North (km) : 3,365.070</p>

III. Part 7b - 1

14. Emission Point Comment :
Location of points is detailed in Attachment F-8.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	EU039 - Figure F-6
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit :	Bed Ash Silo Hydrators - Two Units per Silo
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	<p>Fly Ash Silo Hydrators - Stack Parameters: Code: V, Height: 130 FT, Diameter: 1.5 FT, Exit Temperature: 150 F, Flow: 6,000 ACFM</p> <p>Bed Ash Silo Hydrators - Stack Parameters Code: V, Height: 115 FT, Diameter: 1.5 FT, Exit Temperature: 150 F, Flow: 6,000 ACFM</p>
5. Discharge Type Code :	V
6. Stack Height :	130 feet
7. Exit Diameter :	1.50 feet
8. Exit Temperature :	150 °F
9. Actual Volumetric Flow Rate :	6,000 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	<p>Zone : 17 East (km) : 446.670 North (km) : 3,365.070</p>

III. Part 7b - 3

14. Emission Point Comment :

Location of points is detailed in Attachment F-8.

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Fly Ash Hydrators for EU026 Fly Ash Silo Four, each rated for 25 TPH	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 100.00	5. Maximum Annual Rate : 876,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 1

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Fly Ash Hydrators for EU027 Fly Ash Silo Four, each rated for 25 TPH	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 100.00	5. Maximum Annual Rate : 876,000.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 2

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Bed Ash Hydrators for EU026 Bed Ash Silo Two, each rated for 59 TPH	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 118.00	5. Maximum Annual Rate : 1,033,680.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 3

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Bed Ash Hydrators for EU027 Bed Ash Silo Two, each rated for 59 TPH	
2. Source Classification Code (SCC) : 30501222	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 118.00	5. Maximum Annual Rate : 1,033,680.00
6. Estimated Annual Activity Factor : 100.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

III. Part 8 - 4

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

Emissions Unit Information Section 16
NGS - Fly & Bed Ash Silo Hydrators

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	053		EL
2 - PM10	053		EL

III. Part 9a - 1

DEP Form No. 62-210.900(1) - Form
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H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM		
2. Total Percent Efficiency of Control :	99.80	%
3. Potential Emissions :	1.9200000 lb/hour	8.4100000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	2	Units lb/ton
Reference AP-42		
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Short Term Emissions		
$lb/hr = (2*4*25 \text{ tons/hr} + 2*2*59 \text{ tons/hr}) \times (2.2 \text{ lb/ton}) \times (1-.998) = 1.92 \text{ lb/hr}$		
Long Term Emissions		
$TPY = (1.92 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 8.41 \text{ tons/yr}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Emission totals for all transfer points.		

III. Part 9b - 1

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

Emissions Unit Information Section 16
NGS - Fly & Bed Ash Silo Hydrators

III. Part 9b - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

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

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : PM10		
2. Total Percent Efficiency of Control :	99.80	%
3. Potential Emissions :	0.2200000 lb/hour	0.9600000 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <div style="text-align: right; margin-right: 100px;">to</div> <div style="text-align: right;">tons/year</div>		
6. Emissions Factor	0	Units lb/ton
Reference	AP-42	
7. Emissions Method Code : 3		
8. Calculations of Emissions :		
Short Term Emissions		
$lb/hr = (2*4*25 \text{ tons/hr} + 2*2*59 \text{ tons/hr}) \times (0.26 \text{ lb/ton}) \times (1-.998) = 0.22 \text{ lb/hr}$		
Long Term Emissions		
$TPY = (0.22 \text{ lb/hr}) \times (8760 \text{ hr/yr}) \times (\text{ton}/2000 \text{ lb}) = 0.96 \text{ tons/yr}$		
9. Pollutant Potential/Estimated Emissions Comment :		
Baghouse removal efficiency is based on PM10.		
Emission rates reflect each Bed Ash Silo.		

III. Part 9b - 3

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

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

III. Part 9b - 4

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Emissions Unit Information Section
NGS - Fly & Bed Ash Silo Hydrators

16

Pollutant Information Section

1

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.52 lb/hr
4. Equivalent Allowable Emissions :	0.52 lb/hour 1.14 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Allowable Emissions per Bed Ash Hydrator.

III. Part 9c - 1

Emissions Unit Information Section
NGS - Fly & Bed Ash Silo Hydrators

16

Pollutant Information Section

1

Allowable Emissions

2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.44 lb/hr
4. Equivalent Allowable Emissions :	0.44 lb/hour 1.93 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Allowable Emissions per Fly Ash Hydrator.

III. Part 9c - 2

Emissions Unit Information Section
NGS - Fly & Bed Ash Silo Hydrators

16

Pollutant Information Section

2

Allowable Emissions

1

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.06 lb/hr
4. Equivalent Allowable Emissions :	0.06 lb/hour 0.27 tons/year
5. Method of Compliance :	Initial and Renewal Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	PM10 emissions to be estimated based on PM emissions and ratio of AP-42 PM10 to PM emission factor (0.14/0.27). Emissions per Bed Ash Requested Allowables 0.01 lb/hr & 0.06 TPY per Bed Ash Silo.

III. Part 9c - 3

Emissions Unit Information Section
NGS - Fly & Bed Ash Silo Hydrators

16

Pollutant Information Section

2

Allowable Emissions

2

1. Basis for Allowable Emissions Code :	RULE
2. Future Effective Date of Allowable Emissions :	01-Apr-2002
3. Requested Allowable Emissions and Units :	0.05 lb/hr
4. Equivalent Allowable Emissions :	0.05 lb/hour 0.23 tons/year
5. Method of Compliance :	Initial and Annual Stack Tests
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	PM10 emissions to be estimated based on PM emissions and ratio of AP-42 PM10 to PM emission factor (0.14/0.27). Emissions per Bed Ash Requested Allowables 0.01 lb/hr & 0.06 TPY per Fly Ash Silo.

III. Part 9c - 4

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 16
NGS - Fly & Bed Ash Silo Hydrators

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05									
2. Basis for Allowable Opacity :	RULE									
3. Requested Allowable Opacity :	<table style="margin-left: auto; margin-right: auto;"><tr><td style="padding: 0 20px;">Normal Conditions :</td><td style="padding: 0 10px;">5</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Exceptional Conditions :</td><td style="padding: 0 10px;">100</td><td style="padding: 0 10px;">%</td></tr><tr><td style="padding: 0 20px;">Maximum Period of Excess Opacity Allowed :</td><td></td><td style="padding: 0 10px;">min/hour</td></tr></table>	Normal Conditions :	5	%	Exceptional Conditions :	100	%	Maximum Period of Excess Opacity Allowed :		min/hour
Normal Conditions :	5	%								
Exceptional Conditions :	100	%								
Maximum Period of Excess Opacity Allowed :		min/hour								
4. Method of Compliance :	Initial & Annual EPA Method 9									
5. Visible Emissions Comment :	<p>No visible emissions limit (5% opacity) has been evaluated as BACT for the Hydrators.</p> <p>Excess Emissions - 2 hours in any 24-hour period.</p>									

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

Emissions Unit Information Section

III. Part 11 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

III. Part 12 - 1

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Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

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

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : U	NO2 : U
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 16

NGS - Fly & Bed Ash Silo Hydrators

Supplemental Requirements for All Applications

1. Process Flow Diagram :	F-6, EU039
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	E-2
4. Description of Stack Sampling Facilities :	E-3
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	F-9
9. Other Information Required by Rule or Statute :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alternative Modes of Operation (Emissions Trading) :

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :

13. Compliance Assurance Monitoring
Plan :

14. Acid Rain Application (Hard-copy Required) :

Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))

Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)

New Unit Exemption (Form No. 62-210.900(1)(a)2.)

Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. Part 13 - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96