21 West Church Street
Jacksonville, Florida 32202-3139

JEA

January 7, 2002

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BUREAU OF AIR REGULATION

Mr. Al Linero, P.E.
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road, MS # 5505
Tallahassee, FL 32399-2400

ELECTRIC
WATER
SEWER

Subject: Northside Generating Station
Northside Repowering Project - Air Construction Permit
0310045-003-AC, PSD-FL-265
0310045-009-AC

Dear Mr. Al Linero:

This letter is to inform you of a proposed new alternate operating scenario for the solid fuel handling system at the Northside Generating Station (NGS), and to request the appropriate permit modifications to implement and operate under the new fuel handling scenario. The new solid fuel handling alternate operating scenario will provide JEA with a limited capability to transport, using dump trucks, solid fuel (coal and petroleum coke) between the respective solid fuel handling facilities at NGS and St. Johns River Power Park (SJRPP) in the event of equipment failure, fuel delivery disruption, or disproportionate fuel inventory.

The fugitive particulate matter (PM and PM_{10}) air emissions associated with this alternate solid fuel handling scenario will result in emission increases that will trigger minor source air pollutant permit modifications at NGS and SJRPP. The following sections and appendices of this letter present background information on the NGS and SJRPP facilities, a description of the proposed alternate solid fuel handling scenario, estimated PM/PM_{10} emission calculations, and the applicable air permit application forms to request the aforementioned permit modifications.

Background

JEA is currently repowering NGS Units 1 and 2 with two Circulating Fluidized Bed (CFB) boilers capable of firing either coal or petroleum coke, or a combination of both. This construction and modification activity at NGS is authorized under Florida Department of Environmental Protection (FDEP) Air Construction Permit 0310045-003-AC (PSD-FL-265). The CFB boilers will provide steam to the NGS existing Unit 1 and 2

steam turbines, which are capable of generating approximately 600 MW. The CFB boiler repowering of NGS Units 1 and 2 also includes the addition of material handling facilities for solid fuel (coal and petroleum coke) delivery and storage, limestone preparation and storage, and ash removal and storage. This includes an upgraded fuel loading terminal and covered solid fuel storage domes at the NGS.

Adjacent to NGS is the SJRPP, consisting of two fossil fuel fired steam generators (Units 1 and 2, each having a nominal rating of 680 MW) capable of firing coal and petroleum coke. The SJRPP also includes material handling and storage facilities for fuel, limestone, and ash. From a regulatory standpoint, NGS and the adjoining SJRPP are considered to be contiguous air emission sources. As such, SJRPP and NGS are considered a single facility for air permitting purposes, and share a common Title V Air Operating Permit. However, air permit modifications affecting SJRPP are subject to the Florida Power Plant Siting Act (FPPSA) as a certified facility. Modifications to the NGS are not subject to the FPPSA as long as there is no increase in the steam electrical generating capacity.

Project Description

The solid fuel handling systems at NGS and SJRPP, including the ship unloading terminals, conveyors, and storage facilities, are separate and independent systems, with no cross-connect capabilities to allow for redundant solid fuel delivery capability between the two adjacent facilities. The proposed alternate solid fuel handling scenario described in this application, will allow a limited amount of truck transport of solid fuel between the NGS and the SJRPP in the event of solid fuel delivery equipment failure, solid fuel delivery disruption, or disproportionate solid fuel inventory at either facility.

The proposed alternate solid fuel handling scenario will not require any additional solid fuel transfer or storage equipment, nor will it require any modification to any existing solid fuel transfer or storage systems at either facility. The alternate solid fuel handling project will consist of loading dump trucks with solid fuel using front end loaders at one of the facility's solid fuel storage area, transporting the solid fuel in the dump trucks over existing, on-site, facility owned roads that interconnect the adjacent facilities, and dumping the solid fuel at the recipient facility's solid fuel storage area.

Based on estimated fuel use at either facility, it is determined that about 67,200 tons per year of solid fuel transfer will be required to avoid operational disruption at either facility due to solid fuel delivery equipment failure, solid fuel delivery disruption, or disproportionate solid fuel inventory.

For emission estimation purposes, as presented in Attachment 1, it is assumed that each dump truck used to transfer solid fuel can transport 20 tons per trip, resulting in a total of 3,360 trips per year. The travel corridor for solid fuel transfer between the two facilities is expected to be along a 1-mile, interconnecting road, within the property and fenced boundaries of the NGS and SJR
PP facilities. Of the 1-mile stretch, approximately 0.8 miles are paved, with the remaining 0.2 miles unpaved, as illustrated by the figure provided in Attachment 2.

Fuel storage areas at both facilities differ in their manner of storage. At the NGS, solid fuel is stored in totally enclosed domes resulting in no fugitive emissions from either solid fuel loading or unloading operations. However, the solid fuel storage at the SJRPP is open storage, thereby resulting in PM/PM_{10} fugitive emissions from solid fuel loading or unloading operations. As mentioned earlier, the alternate solid fuel handling scenario will allow transfer of solid fuel either from NGS to SJRPP or vice versa.

Emission Estimate Calculations

The potential fugitive emissions associated with the proposed alternate solid fuel transfer process are summarized below:

Solid Fuel Transfer from NGS to SJRPP:

- No emissions from loading operations at the NGS as the solid fuel is stored in totally enclosed domes.
- Emissions resulting from unpaved road travel (0.2 miles) with a fully loaded truck (20 tons of solid fuel)
- Emissions resulting from paved road travel (0.8 miles) with a fully loaded truck.
- Solid fuel unloading emissions at the open storage pile at SJRPP.
- Emissions resulting from paved road travel (return trip) with an unloaded truck.
- Emissions resulting from unpaved road travel (return trip) with an unloaded truck.

Solid Transfer from SJRPP to NGS:

- Solid Fuel loading emissions at the open storage pile at SJRPP.
- Emissions resulting from paved road travel (0.8 miles) with a fully loaded truck.
- Emissions resulting from unpaved road travel (0.2 miles) with a fully loaded truck (20 tons of solid fuel).
- No emissions from unloading operations at the NGS as the solid fuel is stored in totally enclosed domes.
- Emissions resulting from unpaved road travel (return trip) with an unloaded truck.
- Emissions resulting from paved road travel (return trip) with an unloaded truck.

As presented above, each trip for solid fuel transfer results in one loading/unloading operation, and one round trip travel for the solid fuel transfer truck. The PM and PM_{10} fugitive emissions estimates for each trip, and for the proposed 3,360 trips requested in this application, are summarized in Table 1. Detailed fugitive emission estimate calculations and associated assumptions are presented in Attachment 1, as well as the air permit application forms contained in Attachment 3.

It should be noted that the fugitive emissions resulting from solid fuel truck loading or unloading at SJRPP (depending on the delivery scenario, i.e., *loading* if transferring solid fuel from SJRPP to NGS, or *unloading,* if transferring solid fuel from NGS to SJRPP) are assumed to be equivalent for emission estimating purposes. Additionally, a 50 percent control factor has been conservatively assumed for all fugitive emission estimate calculations presented in Attachment 1 based on water application for dust control. Water is an effective stabilizing tool that controls fugitive dust by using water (or water combined with a surfactant) as a binder by either maintaining or increasing moisture content and establishing a crust which prevents fugitive emissions. JEA proposes the

following fugitive dust control measures to reduce particulate fugitive emissions associated with the proposed alternate solid fuel transfer scenario described herein:

- Water application to unpaved portions of the proposed solid fuel truck delivery route as necessary to control fugitive dust emissions.
- Road surface cleaning to paved portions of the proposed solid fuel truck delivery route as necessary to control fugitive dust emissions.
- Water application to that portion of the solid fuel storage pile at SJRPP prior to solid fuel truck loading operations with the front-end loader.

Regulatory Applicability

As presented in Table 1, the potential PM and PM10 fugitive emissions from the proposed alternate solid fuel transfer scenario are 17.75 and 6.89 tons per year, respectively.

Table 1

Potential Emissions from the Solid Fuel Transfer Scenario

Activity	PM Emissions per trip	PM Emission for 3,360 trips	PM_{10} Emissions per trip	PM_{10} Emission for 3,360 trips
Solid Fuel Loading/Unloading Operations	7.00 lb	11.76 tons	3.36 lb	5.64 tons
Loaded Truck Travel on paved road	2.17 lb	3.65 tons	0.42 lb	0.71 tons
Loaded Truck Travel on unpaved road	0.54 lb	0.90 tons	0.14 lb	0.23 tons
Unloaded Truck Travel on paved road	0.52 lb	0.88 tons	0.10 lb	0.17 tons
Unloaded Truck Travel on unpaved road	0.33 lb	0.56 tons	0.08 lb	0.14 tons
Total Emissions (tons per year)		**17.75**		**6.89**

Per the PSD regulations, the proposed alternate operating scenario constitutes a minor modification, as the potential emissions are less than the PSD applicability thresholds of 25 and 15 tpy for PM and PM_{10} emissions, respectively. Based on discussions with Mr. Syed Arif of the FDEP on August 29, 2001, the emission estimates for the proposed alternate operating scenario represent a minor air permit modification. In order to facilitate the FDEP's issuance of a minor air permit modification, permit application forms for the alternate operating scenario are provided in Attachment 3.

Summary

Based on the information presented above, the facility requests that a minor air permit modification be approved for the proposed alternate solid fuel transfer scenario. If you have any questions or need any additional information feel free to call me at (904) 665-6247.

Yours truly,

N. Bert Gianazza, P.E.
Environmental Permitting
& Compliance

ATTACHMENT 1

Potential to Emit Calculations

Proposed Alternative Operating Scenario - Potential Emission Calculation

The following sections present the estimation of potential emissions from the proposed alternate operating scenario during fuel disruption emergencies at the Northside Generating Station or the St.Johns River Power Park.

The Solid Fuel Disruption Scenario involves fuel shortage, equipment malfunction, or loss of ship unloader, etc. It is estimated that a maximum of 67,200 tons per year of solid fuel will be transferred from either facility to the other in case of fuel disruption.

Based on the maximum of 67,200 tons per year of solid fuel transfer, for purposes of emission estimation, it is assumed that 4800 tons per day of solid fuel will be transferred for 14 days per year. (No more than 2400 tons per day per unit, 2 units each either to the Northside Generating Station and or to the St.John's River Power Park from the other facility.

Emission Estimation Procedure

Emission generating activities for the fuel disruption scenario are divided into three categories;
A. Truck Loading,
B. Truck travel over Paved Road (0.8 miles),
- Loaded truck travel (transporting coal)
- Unloaded truck travel (return trip)

C. Truck travel over Unpaved Road (0.2 miles).
- Loaded truck travel (transporting coal)
- Unloaded truck travel (return trip)

A. Truck Loading - Emission Estimates

PM/TSP Emission Factor and Emission Calculation References and Assumptions:

1. Reference AP-42, Section 13.2.4 Aggregate Handling and Storage Piles
2. Assume Aerodynamic Particle Size Multiplier (k) of 0.74 (particle size less than 30 microns)
3. Assume material moisture content (M) of 12%
4. Assume mean wind speed (U) of 8 mph
5. Assumed control efficiency - 50 %

Emission Calculation Empirical Expression			
$E = k(0.0032)\ [\ (U/5)^{1.3}/(M/2)^{1.4}]$			
Particulate Matter (PM/TSP) Emission Estimation			
PM/TSP Emission Factor	**0.000355** lb/ton		
PM emissions = 0.00035 lb/ton x 67,200 tons/yr x 50 % control	=	**11.76**	**tons/year**

PM10 Emission Factor and Emission Calculation References and Assumptions:

1. Reference AP-42, Section 13.2.4 Aggregate Handling and Storage Piles
2. Assume Aerodynamic Particle Size Multiplier (k) of 0.35 (particle size less than 10 microns)
3. Assume material moisture content (M) of 12%
4. Assume mean wind speed (U) of 8 mph
5. Assumed control efficiency - 50 %

Particulate Matter (PM10) Emission Estimation			
PM_{10} emission factor =	**0.000168 lb/ton**		
PM_{10} emissions = 0.000168 lb/ton x 67,200 tons/yr x 50 % control	=	**5.64**	**tons/year**

B. Truck Travel over Paved Road - Emission Estimates

PM/TSP Emission Factor and Emission Calculation References and Assumptions:

1. Reference AP-42, Section 13.2.1 Paved Roads
2. Assume particle size multiplier (k) of 0.082 lb/vehicle mile traveled
3. Assume silt loading (sL) value of 5.2 g/m^2
4. Assume loaded weight of truck (W) of 32.5 tons, unloaded weight of 12.5 tons
5. Assume 0.8 miles of paved road
6. Assume loaded truck carries 20 tons per trip (No of trips = 3360 trips= 67,200 tons /20 tons per trip)
7. Assumed control efficiency - 50 %

Emission Calculation Empirical Expression:

$E = k\,(sL/2)^{0.65}\,(W/3)^{1.5}$

Particulate Matter (PM/TSP) Emission Estimation:

For Loaded Trucks:
PM/TSP Emission Factor **5.44 lb/VMT**

PM emissions (loaded truck travel) = 5.44 lb/VMT x 3360 trips/yr x 0.8 miles/trip x 50 %control
= 3.65 tons/year

For Unloaded Trucks (Return Trip)
PM/TSP Emission Factor **1.30 lb/VMT**

PM emissions (unloaded truck travel) = 1.30 lb/VMT x 3360 trips/yr x 0.8 miles/trip x 50 %control
0.88 tons/year

PM10 Emission Factor and Emission Calculation References and Assumptions:

1. Reference AP-42, Section 13.2.1 Paved Roads
2. Assume particle size multiplier (k) of 0.016 lb/vehicle mile traveled
3. Assume silt loading (sL) value of 5.2 g/m^2
4. Assume loaded weight of truck (W) of 32.5 tons, unloaded weight of 12.5 tons
5. Assume 0.8 miles of paved road
6. Assume loaded truck carries 20 tons per trip (No of trips = 3360 trips= 67,200 tons /20 tons per trip)
7. Assumed control efficiency - 50 %

Particulate Matter (PM10) Emission Estimation:

For Loaded Trucks:
PM10 Emission Factor **1.06 lb/VMT**

PM_{10} emissions (loaded truck travel) = 1.06 lb/VMT x 3360 trips/yr x 0.8 miles/trip x 50 % control
0.71 tons/year

For Unloaded Trucks (Return Trip)
PM10 Emission Factor **0.25 lb/VMT**

PM_{10} emissions (unloaded truck travel) = 0.25 lb/VMT x 3360 trips/yr x 0.8 miles/trip x 50 % control
0.17 tons/year

C. Truck Travel over Unpaved Road - Emission Estimates

PM/TSP Emission Factor and Emission Calculation References and Assumptions

1. Reference AP-42, Section 13.2.2, Unpaved Roads
2. Assume particle size multiplier (k) of 10 lb/vehicle mile traveled
3. Assume surface material silt content (s) of 4.8% based on Sand and Gravel Processing Industry
4. Assume loaded weight of truck (W) of 32.5 tons, unloaded weight of 12.5 tons
5. Assume 0.2 miles of unpaved road
6. Assume loaded truck carries 20 tons per trip
7. Assume surface material moisture content (M) of 3%
8. Assumed control efficiency - 50 %

Emission Calculation Equation Expression
$E = k\,(s/12)^{0.8}(W/3)^{0.5}/(M/0.2)^{0.4}$

Particulate Matter (PM/TSP) Emission Estimation
For loaded trucks PM/TSP Emission Factor **5.35** lb/VMT PM emissions (loaded truck travel) = 5.35 lb/VMT x 3360 trips/yr x 0.2 miles/trip x 50 % control **0.90 tons/year**
For Unloaded Trucks (Return Trip) PM/TSP Emission Factor **3.32 lb/VMT** PM emissions (unloaded truck travel) = 3.32 lb/VMT x3360 trips/yr x 0.2 miles/trip x 50 % control **0.56 tons/year**

PM_{10} Emission Factor and Emission Calculation References and Assumptions

1. Reference AP-42, Section 13.2.2, Unpaved Roads
2. Assume particle size multiplier (k) of 2.6 lb/vehicle mile traveled
3. Assume surface material silt content (s) of 4.8% based on Sand and Gravel Processing Industry
4. Assume loaded weight of truck (W) of 32.5 tons, unloaded weight of 12.5 tons
5. Assume 0.2 miles of unpaved road
6. Assume loaded truck carries 20 tons per trip
7. Assume surface material moisture content (M) of 3%
8. Assumed control efficiency - 50 %

Particulate Matter (PM10) Emission Estimation
For Loaded trucks PM10 Emission Factor **1.39** lb/VMT PM_{10} emissions (loaded truck travel) = 1.39 lb/VMT x 3,360 trips/yr x 0.2 miles/trip x 50 % control **0.23 tons/year**
For Unloaded Trucks (Return Trip) PM10 Emission Factor **0.86 lb/VMT** PM_{10} emissions (unloaded truck travel) = 0.86 lb/VMT x 3,360 trips/yr x 0.2 miles/trip x 50 % control **0.14 tons/year**

JEA
NGS/SJRPP Fuel Flexibility
Air Permitting Project

Summary of Emission Estimates

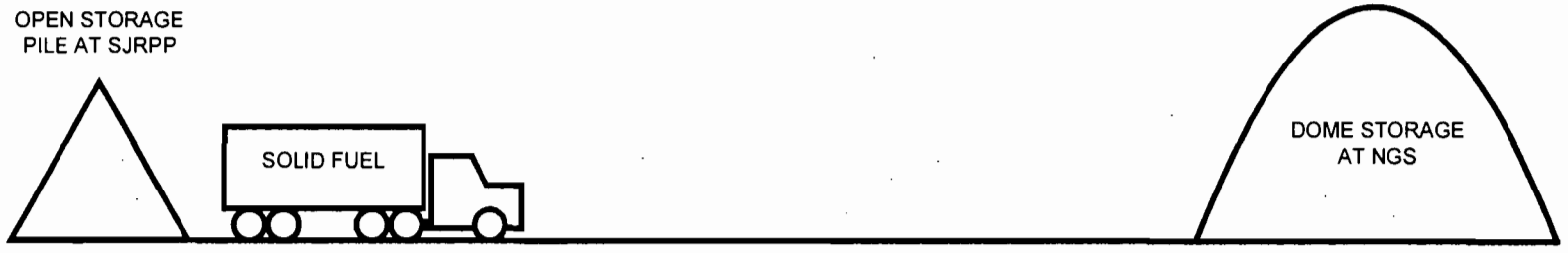
PM/TSP Emission Estimates	
A. Truck Loading	11.76 tons per year
B. Truck travel over Paved Road (0.8 miles)	
Loaded truck travel	3.65 tons per year
Unloaded truck travel	0.88 tons per year
C. Truck travel over Unpaved Road (0.2 miles)	
Loaded truck travel	0.90 tons per year
Unloaded truck travel	0.56 tons per year
Estimated PM/TSP Emissions	**17.75 tons per year**

PM10 Emission Estimates	
A. Truck Loading	5.64 tons per year
B. Truck travel over Paved Road (0.8 miles)	
Loaded truck travel	0.71 tons per year
Unloaded truck travel	0.17 tons per year
C. Truck travel over Unpaved Road (0.2 miles)	
Loaded truck travel	0.23 tons per year
Unloaded truck travel	0.14 tons per year
Estimated PM10 Emissions	**6.89 tons per year**

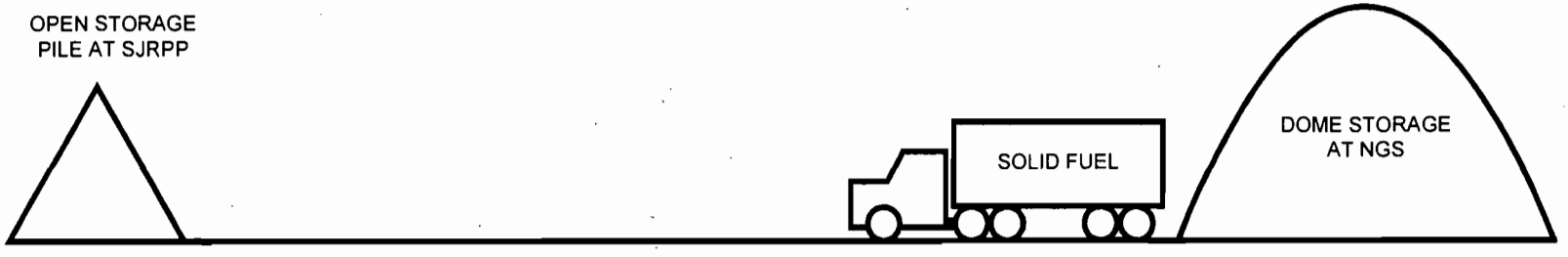
ATTACHMENT 2

Process Flow Diagram and Aerial Photograph


Paved Road - 0.8 miles
Unpaved Road- 0.2 miles
SJRPP Solid Fuel Storage
NGS Solid Fuel Storage Domes
Proposed NGS/SJRPP Solid Fuel Transport Route



REPRESENTATION OF SOLID FUEL TRANSFER BETWEEN SJRPP AND NGS



REPRESENTATION OF SOLID FUEL TRANSFER BETWEEN NGS AND SJRPP

PROCESS FLOW DIAGRAM FOR ALTERNATE SOLID FUEL TRANSFER SCENARIO

ATTACHMENT 3

Permit Modification Application Forms

Rec'd: 1-8-2002

0310045-009-AC

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: JEA	
2. Site Name: Northside Generating Station/St. Johns River Power Park	
3. Facility Identification Number: 0310045	[ ] Unknown
4. Facility Location: JEA Northside Generating Station/St. Johns River Power Park Located Street Address or Other Locator: 4377 Heckshire Drive City: Jacksonville County: Duval	Zip Code: 32226
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: Name: N. Bert Gianazza, P.E. Title : Environmental Health and Safety Group
2. Application Contact Mailing Address: Organization/Firm: JEA Street Address: 21 West Church Street, Tower 8 City: Jacksonville State: FL Zip Code: 32202-3139
3. Application Contact Telephone Numbers: Telephone: (904) 665 - 6247 Fax: (904) 665 – 7376

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

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

Current construction permit number:_____

[ ] Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number:_____

Operation permit number to be revised:_____

[ ] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected:_____

[ ] Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised:_____

Reason for revision:_____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[X] Air construction permit to construct or modify one or more emissions units.

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

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Walter P. Bussells,
   Managing Director and CEO

2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: JEA
   Street Address: 21 West Church Street
   City: Jacksonville State: FL Zip Code: 32202-3139

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

for [signature] 1/3/02

Signature Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Registration Number:
2. Professional Engineer Mailing Address: Organization/Firm: Street Address City: State:Zip Code:
3. Professional Engineer Telephone Numbers: Telephone: Fax:

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ], 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 unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

Date 1/7/02

(seal)

GILBERT GIANAZZA CERTIFICATE No. 38640 STATE OF FLORIDA PROFESSIONAL ENGINEER

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
EU54	Truck Loading and Hauling	AC1E	

Application Processing Fee

Check one: [ ] Attached - Amount: $_____ [X] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

JEA intends to modify the solid fuel handling facilities at NGS and SJRPP to accommodate truck transport of fuel between the respective solid fuel storage facilities in the event of equipment failure, fuel delivery disruption, or disproportionate fuel inventory. Truck loading/unloading equipment will interface with the existing solid fuel storage facilities and use fuel transport trucks and paved and unpaved internal roadway to transport solid fuel between NGS and SJRPP.

The project is expected to transfer no more than 67,200 tons per year. PM and PM_{10} emissions will be generated as a result of the project.

2. Projected or Actual Date of Commencement of Construction: January 2002

3. Projected Date of Completion of Construction: January 2002

Application Comment

PM and PM_{10} emissions will be less than the PSD significant emission rate thresholds.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 446.90 North (km): 3359.150			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 30 21 52 Longitude (DD/MM/SS): 81 37 25			
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 (limit to 500 characters): The NGS/SJRPP are currently permitted, permit number 0310045-002-AV.			

Facility Contact

1. Name and Title of Facility Contact: N. Bert Gianazza, P.E. Environmental Health and Safety.
2. Facility Contact Mailing Address: Organization/Firm: JEA Street Address: 21 West Church Street, Tower 8 City : Jacksonville State: FL Zip Code: 32202-3139
3. Facility Contact Telephone Numbers: Telephone: (904) 665-6247 Fax: (904) 665-7376

FACILITY REGULATIONS

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source? [ ] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?
4. [ ] Major Source of Hazardous Air Pollutants (HAPs)?
5. [ ] Synthetic Minor Source of HAPs?
6. [X] One or More Emissions Units Subject to NSPS?
7. [ ] One or More Emission Units Subject to NESHAP?
8. [X] Title V Source by EPA Designation?
9. Facility Regulatory Classifications Comment (limit to 200 characters):

List of Applicable Regulations

62-210.300 Permits Required

62-296.302 General Pollutant Emission Limiting Standards. Objectionable Odor

62-296-320 General Particulate Emission Limiting Standards. General Visible Emissions Standard

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
PM	A				
PM10	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location:
   [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested

2. Facility Plot Plan:
   [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested

3. Process Flow Diagram(s):
   [X] Attached, Document ID: Attachment 2 [ ] Not Applicable [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested

5. Fugitive Emissions Identification:
   [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested

6. Supplemental Information for Construction Permit Application:
   [ ] Attached, Document ID:_____ [X] Not Applicable

7. Supplemental Requirements Comment:
A waiver is requested for Supplemental Requirements 1,2, and 4, as these items are not altered as a result of this application and have previously been submitted within the last 5 years in the following permit applications:

Northside Repowering Project, DEP File No. 0310045-007-AC; PSD-FL-265A and

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [ ] Attached, Document ID:_____ [X] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [X] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____ [X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____ [X] Not Applicable

12. Identification of Additional Applicable Requirements:
    [ ] Attached, Document ID:_____ [X] Not Applicable

13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [X] Not Applicable

14. Compliance Report and Plan:
    [ ] Attached, Document ID: _____ [X] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [ ] Attached, Document ID: _____ [X] Not Applicable

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION

(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

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

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

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

2. Regulated or Unregulated Emissions Unit? (Check one)

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

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

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Truck Loading and Hauling Operation – Transport of Solid Fuel between NGS and SJRPP limited to no more than 67,200 tons per year

4. Emissions Unit Identification Number: ID: EU54 — [X] No ID [ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	January 2002	49	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

PM/PM_{10} emissions are generated form truck loading/unloading and hauling on paved and unpaved roads. The emissions are fugitive emissions. PM and PM_{10} emissions from the operation will be limited to less than the PSD thresholds of 25 and 15 tpy, respectively, by limiting the amount of solid fuel transferred to 67,200 tons per year.

Emissions Unit Control Equipment

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

   Dust Suppression by Water Sprays

2. Control Device or Method Code(s): 061

Emissions Unit Details

1. Package Unit: N/A
   Manufacturer: Model Number:
2. Generator Nameplate Rating:
3. Incinerator Information: N/A
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: N/A
2. Maximum Incineration Rate: N/A lb/hr tons/day
3. Maximum Process or Throughput Rate: N/A
4. Maximum Production Rate: N/A
5. Requested Maximum Operating Schedule:
6. Operating Capacity/Schedule Comment (limit to 200 characters):

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

N/A	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? N/A	2. Emission Point Type Code:	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height:	7. Exit Diameter:
8. Exit Temperature:	9. Actual Volumetric Flow Rate:	10. Water Vapor:
11. Maximum Dry Standard Flow Rate:	12. Nonstack Emission Point Height:	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

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

Segment Description and Rate: Segment _1___ of __4___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Solid Fuel truck loading (emissions related to tons of solid fuel loaded onto trucks) at SJRPP only.		
2. Source Classification Code (SCC): 30501038	3. SCC Units: Tons	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 67,200 tons	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment (limit to 200 characters): PM Emissions = 0.00035 lb/ton x 67,200 tons per year x 0.5 = 11.76 tons per year. PM_{10} Emissions = 0.000168 lb/ton x 67,200 tons per year x 0.5 = 5.64 tons per year. Since the solid fuel storage at NGS is totally enclosed, for transfer to NGS there will be no unloading emissions. In the alternative scenario, for transfer of solid fuel to SJRPP from NGS, loading emissions will be zero. In effect, there will be either loading or unloading emissions for each transfer only at SJRPP.		

Segment Description and Rate: Segment _2___ of ___4__

3. Segment Description (Process/Fuel Type) (limit to 500 characters): Solid fuel truck unloading (emissions related to tons of solid fuel unloaded from trucks) at SJRPP only		
4. Source Classification Code (SCC): 30501040	3. SCC Units: Tons	
4. Maximum Hourly Rate:	6. Maximum Annual Rate: 67,200 tons	6. Estimated Annual Activity Factor:
9. Maximum % Sulfur: N/A	10. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
11. Segment Comment (limit to 200 characters): PM Emissions = 0.00035 lb/ton x 67,200 tons per year x 0.5 = 11.76 tons per year. PM_{10} Emissions = 0.000168 lb/ton x 67,200 tons per year x 0.5 = 5.64 tons per year. Since the solid fuel storage at NGS is totally enclosed, for transfer to NGS there will be no unloading emissions. In the alternative scenario, for transfer of solid fuel to SJRPP from NGS, loading emissions will be zero. In effect, there will be either loading or unloading emissions for each transfer only at SJRPP.		

Segment Description and Rate: Segment _3____ of __4__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Loaded and unloaded truck travel on paved roads (emissions related to vehicle-miles traveled by haul trucks)		
7. Source Classification Code (SCC): 30501039	3. SCC Units: Miles	
8. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: N/A
10. Segment Comment (limit to 200 characters): PM Emissions for loaded truck travel = 5.44 lb/VMT x 3360 trips per year x 0.8 miles per trip x 0.5 = 3.65 tons per year. PM Emissions for unloaded truck travel = 1.30 lb/VMT x 3360 trips per year x 0.8 miles per trip x 0.5 = 0.88 tons per year. PM_{10} Emissions for loaded truck travel = 1.06 lb/VMT x 3360 trips per year x 0.8 miles per trip x 0.5 = 0.71 tons per year. PM_{10} Emissions for unloaded truck travel = 0.25 lb/VMT x 3360 trips per year x 0.8 miles per trip x 0.5 = 0.17 tons per year.		

Segment Description and Rate: Segment _4____ of __4__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Loaded and unloaded truck travel on unpaved roads (emissions related to vehicle-miles traveled by haul trucks)		
9. Source Classification Code (SCC): 30501039	3. SCC Units: Miles	
10. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	10. Maximum % Ash: N/A	11. Million Btu per SCC Unit: N/A
11. Segment Comment (limit to 200 characters): PM Emissions for loaded truck travel = 5.35 lb/VMT x 3360 trips per year x 0.2 miles per trip x 0.5 = 0.90 tons per year. PM Emissions for unloaded truck travel = 3.32 lb/VMT x 3360 trips per year x 0.2 miles per trip x 0.5 = 0.56 tons per year. PM_{10} Emissions for loaded truck travel = 1.39 lb/VMT x 3360 trips per year x 0.2 miles per trip x 0.5 = 0.23 tons per year. PM_{10} Emissions for unloaded truck travel = 0.86 lb/VMT x 3360 trips per year x 0.2 miles per trip x 0.5 = 0.14 tons per year.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	061		NS
PM10	061		NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 50%
3. Potential Emissions: 17.75 tons per year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [X] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: tons/year	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Refer to Attachment 1.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: ESCPSD	2. Future Effective Date of Allowable Emissions:
11. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: 17.75 tons per year
5. Method of Compliance (limit to 60 characters): Amount of solid fuel transferred. Water application for roadways and solid fuel storage pile and road surface cleaning.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: 50%
3. Potential Emissions: 6.89 tons per year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [X] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: tons/year	7. Emissions Method Code: 3
9. Calculation of Emissions (limit to 600 characters): Refer to Attachment 1.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _1____ of __1___

1. Basis for Allowable Emissions Code: ESCPSD	2. Future Effective Date of Allowable Emissions:
12. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: 6.89 tons per year
5. Method of Compliance (limit to 60 characters): Amount of solid fuel transferred. Water application for roadways and solid fuel storage pile and road surface cleaning.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

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

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___1___

1. Visible Emissions Subtype: N/A	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Continuous Monitor ___1__ of ___1_

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

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: Attachment 2 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: [ ] Previously submitted, Date: [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable