

**NOTICE OF FINAL AIR CONSTRUCTION PERMIT**

In the Matter of an  
Application for Permit:

Mr. James M. Chansler, P.E., D.P.A.  
V.P., Operations and Maintenance, R.O. and D.R.  
JEA  
21 West Church Street  
Jacksonville, Florida 32202

DEP File No.: 0310045-012-AC/PSD-FL-010E/PSD-FL-265B  
Northside Generating Station/St. Johns River Power Park  
Duval County

Enclosed is the Final Air Construction Permit, No. 0310045-012-AC/PSD-FL-010E/PSD-FL-265B. The subject of the Air Construction Permit is to: (1) allow coal coated with latex (used as a dust suppressant during the transporting of the coal from the mine) to be burned in the Northside Generating Station's (NGS) new circulating fluidized bed (CFB) Boilers Nos. 1 and 2; (2) modify some language of some federally enforceable specific conditions (SCs) established in some previously issued air construction (AC) permits for clarity purposes; (3) remove two emissions units from the NGS Materials Handling and Storage Operations that were never constructed and rename some of the emissions units that were constructed without changing any of their limits and compliance requirements; and, (4) recognize that an operation at St. Johns River Power Park (SJRPP) identified in two tables, specifically Revised Tables 2 & 6 (PSD-FL-010, amended 10/28/1986), has been removed from service. The facilities are located in Duval County. This permit (letter) is issued pursuant to Chapter 403, Florida Statutes (F.S.). There were no comments received during the Public Notice period.

Any party to this order (permit letter) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Trina L. Vielhauer  
Chief  
Bureau of Air Regulation

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL AIR CONSTRUCTION PERMIT (including the Final permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 11/4/03 to the person(s) listed or as otherwise noted:

- Mr. James M. Chansler, P.E., D.P.A.\*, V.P., Operations and Maintenance, R.O. and D.R., JEA
- Mr. N. Bert Gianazza, P.E., JEA, Application Contact
- Mr. Richard Robinson, P.E., RESD
- Mr. Hamilton Oven, P.E., DEP-SCO
- Mr. Gregg Worley, U.S. EPA, Region 4

11/4/03 cc: Bruce Mitchell  
Reading File

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 11/4/03  
(Date)

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
 Mr. James M. Chansler, P.E., D.P.A.  
 V.P., Operations and Maintenance,  
 R.O. and D.R.  
 JEA  
 21 West Church Street  
 Jacksonville, Florida 32202

2. Article Number  
 (Transfer from service label) 7001 1140 0002 1577 9670

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name) C. Date of Delivery  
 J. M. Chansler 10/16/03

D. Is delivery address different from item 1?  Yes  
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 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service  
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7001 1140 0002 1577 9670

**OFFICIAL USE**  
 Mr. James M. Chansler, P.E., D.P.A.

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Return Receipt Fee (Endorsement Required)	
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Sent To  
 Mr. James M. Chansler, P.E., D.P.A.  
 Street, Apt. No.;  
 or PO Box No. 21 West Church Street  
 City, State, ZIP+4  
 Jacksonville, Florida 32202

**Final Determination**

JEA

Northside Generating Station/St. Johns River Power Park

Air Construction Permit No.: 0310045-012-AC/PSD-FL-010E/PSD-FL-265B

An "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT" to the JEA's Northside Generating Station/St. Johns River Power Park located at 4377 Heckscher Drive, Jacksonville, Duval County, was clerked on September 30, 2003. The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT" was published in the the Florida Times-Union on October 3, 2003. The Draft Permit was available for public inspection at the City of Jacksonville Air & Water Quality Division in Jacksonville and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT" was received on October 10, 2003.

There were no comments received during the Public Notice period. Therefore, it is recommended that the Final Permit be issued as drafted and noticed.



# Department of Environmental Protection

Jeb Bush  
Governor

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

David B. Struhs  
Secretary

October 31, 2003

CERTIFIED MAIL – Return Receipt Requested

Mr. James M. Chansler, P.E., D.P.A.  
V.P., Operations and Maintenance and Responsible Official  
JEA  
21 West Church Street  
Jacksonville, Florida 32202

Re: Final Air Construction Permit No.: 0310045-012-AC/PSD-FL-010E/PSD-FL-265B  
JEA: Northside Generating Station and St. Johns River Power Park

Dear Mr. Chansler:

This letter (permit) will (1) allow coal coated with latex to be burned in the Northside Generating Station (NGS) circulating fluidized bed (CFB) Boilers Nos. 1 and 2; (2) modify some language of some federally enforceable specific conditions (SCs) established in some previously issued air construction (AC) permits for clarity purposes; (3) remove two emissions units from the NGS Materials Handling and Storage Operations that were never constructed and rename some of the emissions units that were constructed without changing any of their limits and compliance requirements; and, (4) recognize that an operation at St. Johns River Power Park (SJRPP) identified in two tables, specifically Revised Table 2 and Revised Table 6 (PSD-FL-010, amended October 28, 1986), has been removed from service. Therefore, the following are changed as follows:

1. SCs III.4., 23. & 24.(b), 0310045-003-AC/PSD-FL-265. With the addition of coal coated with latex being allowed as a fuel for the NGS CFB Boilers Nos. 1 and 2, then the following are changed:

FROM:

a. SC III.4.:

4. Fuels: Only coal, petroleum coke, No. 2 fuel oil (maximum sulfur content of 0.05 percent by weight), and natural gas, shall be fired in Units 1 and 2. Only No. 2 fuel oil (maximum sulfur content of 0.05 percent by weight) and natural gas shall be fired in the three limestone dryers. [Rule 62-210.200(228), F.A.C.]

b. SC III.23.:

23. Throughput rates: The materials handling and usage rates for coal, petroleum coke, and limestone at Northside shall not exceed the following (for Northside Units 1 and 2 combined), assuming a moisture content of 5.5% or less:

<u>Material</u>	<u>Handling/Usage Rate</u> <u>Tons Per Year</u>
Coal/Petroleum Coke	2.42 million
Limestone	1.45 million

“More Protection, Less Process”

Printed on recycled paper.

c. SC III.24.(b):

24. Standards. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the units or activities.

(b) The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- (1) Transfer towers (EU-028c, EU-028g, EU-028i, EU-028o and EU-028q)
- (2) Coal and petroleum coke storage building (EU-028h)
- (3) Stacker/reclaimers (EU-028)
- (4) Limestone lowering well (EU-028d)
- (5) Conveyors (EU-028)

TO:

a. SC III.4.:

4. Fuels: Only coal, coal coated with latex, petroleum coke, No. 2 fuel oil (maximum sulfur content of 0.05 percent by weight), and natural gas, shall be fired in Units 1 and 2. Only No. 2 fuel oil (maximum sulfur content of 0.05 percent by weight) and natural gas shall be fired in the three limestone dryers.

[0310045-003-AC/PSD-FL-265; and, 0310045-012-AC/PSD-FL-265B]

b. SC III.23.:

23. Throughput rates: The materials handling and usage rates for coal, coal coated with latex, petroleum coke, and limestone at Northside shall not exceed the following (for Northside Units 1 and 2 combined), assuming a moisture content of 5.5% or less:

<u>Material</u>	<u>Handling/Usage Rate</u> <u>Tons Per Year</u>
Coal/Coal coated with latex/Petroleum Coke	2.42 million
Limestone	1.45 million

[0310045-003-AC/PSD-FL-265; and, 0310045-012-AC/PSD-FL-265B]

c. SC III.24.(b):

24. Standards. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the units or activities.

(b) The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- (1) Transfer towers (EU-028c, EU-028g, EU-028i, EU-028o and EU-028q)
- (2) Coal, coal coated with latex and petroleum coke storage building (EU-028h)
- (3) Stacker/reclaimers (EU-028)
- (4) Limestone lowering well (EU-028d)
- (5) Conveyors (EU-028)

2. SCs III.24.(b) and 41., 0310045-003-AC/PSD-FL-265. Since the fuel reclaimers/stackers were installed inside the fuel storage buildings, the Fuel Storage Domes A & B (EU-028h), then any fugitive particulate matter emissions should be included as part of the fuel storage buildings and there should not be any visible emissions standards applicable except for the ones applicable to the fuel storage buildings; therefore, the fuel reclaimers/stackers have been included with the emissions unit identified as EU-028h as "Fuel Storage Domes A & B (includes fuel reclaimers/stackers)". In addition, EU-028, identified as "Conveyors", has been changed to "Belt Conveyor No. 1". Therefore, the following are changed:

FROM:

a. SC III.24.(b):

24. Standards. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the units or activities.

(b) The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- (1) Transfer towers (EU-028c, EU-028g, EU-028i, EU-028o, and EU-028q)
- (2) Coal, coal coated with latex and petroleum coke storage building (EU-028h)
- (3) Stacker/reclaimers (EU-028)
- (4) Limestone lowering well (EU-028d)
- (5) Conveyors (EU-028)

b. SC III.41:

41. Materials Handling Operations: Visible emissions shall be conducted on the material handling operations to determine compliance with their applicable limits, as follows:

Emissions Units at NGS	EPA Method(s)	Duration of VE Test	Frequency	Material
Shiphold (EU-028a)	9	30 min	I only	C or PC
Ship Unloader & Spillage Conveyors (EU-028a)	9	3 hr	I only	C & LS
Conveyors (EU-028)	9	3 hr	I only	C & LS
Transfer Towers (EU-028c, -028g, -028i, -028q)	9	3 hr	I only	C & LS
Fuel Storage Building (EU-028h)	9	30 min	I only	C or PC
Fuel Storage Pile - Stacking & Reclaiming (EU-028)	9	30 min	I only	C or PC

TO:

a. SC III.24.(b):

24. Standards. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the units or activities.

(b) The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- (1) Transfer towers (EU-028c, EU-028g, EU-028i, EU-028o, EU-028q and EU-028v)
- (2) Coal, coal coated with latex and petroleum coke storage building (EU-028h)
- (3) Limestone lowering well (EU-028d)
- (4) Belt Conveyor No. 1 (EU-028)

b. SC III.41.:

41. Materials Handling Operations: Visible emissions shall be conducted on the material handling operations to determine compliance with their applicable limits, as follows:

Emissions Units at NGS	EPA Method(s)	Duration of VE Test	Frequency	Material
Shiphold (EU-028a)	9	30 min	I only	C or PC
Ship Unloader & Spillage Conveyors (EU-028a)	9	3 hr	I only	C & LS
Belt Conveyor No.1 (EU-028)	9	3 hr	I only	C & LS
Transfer Towers (EU-028c, -028g, -028i, -028q)	9	3 hr	I only	C & LS
Fuel Storage Building (EU-028h)	9	30 min	I only	C or PC

[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; 0310045-012-AC/PSD-FL-265B; 40 CFR 60.11(b); and, 40 CFR 60, Appendix A]

3. SCs III.24.(a), (c), (d) & (f), and 41., 0310045-003-AC/PSD-FL-265. The permittee has requested that several emissions units identified in the PSD permit be changed to a different name, with no change in limits or compliance requirements (EU-029 thru EU-053); and, the permittee asked that emissions units EU-032 and EU-039 be deleted from the permit's text, for they were never constructed. The requests are acceptable and the following are changed:

FROM:

a. SC III.24.(a), (b), (c), (d) & (f):

24. Standards. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the units or activities.

(a) The following materials handling sources shall be equipped with fabric filter controls and visible emissions shall not exceed 5 percent opacity:

- Crusher house (EU-029)
- Boiler fuel silos (EU-031)
- Limestone receiving bins (EU-032)
- Limestone crusher conveyor transfers (EU-034)
- Limestone feed silos (EU-035)
- Fly ash waste bins (EU-036)
- Fly ash transfer and storage systems (EU-037)
- Bed ash transfer and storage systems (EU-038)
- Pebble lime silo (EU-042)
- Fly ash silo pre-mixers (EU-051)
- Bed ash silo mixers (EU-052)
- Bed ash surge hoppers (EU-053)

(b) The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- Transfer towers (EU28c, EU28g, EU28i, EU28o and EU28q)
- Coal and petroleum coke storage building (EU28h)
- Stacker/reclaimers (EU28)
- Limestone lowering well (EU28d)
- Conveyors (EU28)
- Ash hydrator loadouts (EU28r)

(c) The following materials handling sources shall use wet suppression, water spray, partial enclosures, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 10 percent opacity:

- NGS dock ship unloading operations - ship hold and receiving hoppers (EU-028a)
- NGS dock receiving conveyor (EU-028a)
- Limestone storage pile (EU-028p)
- Limestone reclaim hopper (EU-028p)

(d) The fly ash and bed ash silo hydrators (EU-039) shall use a venturi scrubber and visible emissions shall not exceed 5 percent opacity).

(f) The maximum particulate matter emissions from the following operations shall not exceed 0.01 grains per dry standard cubic foot:

- Limestone receiving bins (EU-032)
- Limestone crusher conveyor transfers (EU-034)
- Limestone feed silos (EU-035)

b. SC III.41.:

41. Materials Handling Operations: Visible emissions shall be conducted on the material handling operations to determine compliance with their applicable limits, as follows:

Emissions Units at NGS	EPA Method(s)	Duration of VE Test	Frequency	Material
Shiphold (EU-028a)	9	30 min	I only	C or PC
Ship Unloader & Spillage Conveyors (EU-028a)	9	3 hr	I only	C & LS
Belt Conveyor No. 1 (EU-028)	9	3 hr	I only	C & LS
Transfer Towers (EU-028c, -028g, -028i, -028q)	9	3 hr	I only	C & LS
Fuel Storage Building (EU-028h)	9	30 min	I only	C or PC
Limestone Storage Pile (EU-028p)	9	30 min	I only	LS
<b><u>NSPS - OOO</u></b>				
Limestone Receiving Bins – Baghouse Exhaust (EU-032)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Crusher Conveyor Transfer - Baghouse Exhaust (EU-034)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Feed Silos - Baghouse Exhaust (EU-035)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Dryer Building (EU-033)	22	IVE - 75 min	I only	LS
<b><u>NSPS - Y</u></b>				
Crusher House - Baghouse Exhaust (EU-029)	9	IVE - 3 hr RVE - 30 min	I & R	C
Boiler Feed Silos - Baghouse Exhaust (EU-031)	9	IVE - 3 hr RVE - 30 min	I & R	C
<b><u>Other</u></b>				
Fly Ash Waste Bin - Baghouse Exhaust (EU-036)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Fly Ash Silos - Baghouse Exhaust (EU-037)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Bed Ash Silos - Baghouse Exhaust (EU-038)	9	IVE - 30 min RVE - 30 min	I & R	Ash



Pebble Lime Silo - Baghouse Exhaust (EU-042)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Fly Ash Silo Pre-mixers - Baghouse Exhaust (EU-051)	9	IVE - 60 min RVE - 60 min	I & R	Ash
Bed Ash Silo Mixers - Baghouse Exhaust (EU-052)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Bed Ash Surge Hoppers - Baghouse Exhaust (EU-053)	9	IVE - 60 min RVE - 60 min	I & R	Ash

C – Coal

I – Initial R - Renewal (once every 5 years)

IVE – Initial Visible Emissions Test, RVE - Renewal Visible Emissions Test

LS – Limestone; PC-Petroleum Coke

Note: No methods other than the ones identified above may be used for compliance testing unless prior DEP or RESD approval is received in writing.

[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; 0310045-012-AC/PSD-FL-265B; 40 CFR 60.11(b); and, 40 CFR 60, Appendix A]

TO:

a. SC III.24.(a), (c), (d) & (f):

24. Standards. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the units or activities.

(a) The following materials handling sources shall be equipped with fabric filter controls and visible emissions shall not exceed 5 percent opacity:

- Crusher house building baghouse exhaust (EU-029)
- Fuel silos dust collectors (EU-031)
- Limestone prep building dust collectors (EU-034)
- Limestone silos bin vent filters (EU-035)
- Fly ash transport blower discharge (EU-036)
- Fly ash silos bin vents (EU-037)
- Bed ash silos bin vents (EU-038)
- AQCS pebble lime silo (EU-042)
- Fly ash slurry mix system vents (EU-051)
- Bed ash slurry mix system vents (EU-052)
- Bed ash surge hopper bin vents (EU-053)

(b) The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:

- Transfer towers (EU28c, EU28g, EU28i, EU28o, EU28q and EU28v)
- Coal and petroleum coke storage building (EU28h)
- Stacker/reclaimers (EU28)
- Transfer Building 5 and limestone loadout chute (EU28d)
- Conveyors (EU28)
- Ash hydrator loadouts (EU28r)

(c) The following materials handling sources shall use wet suppression, water spray, partial enclosures, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 10 percent opacity:

- NGS dock vessel unloading operations - vessel hold (EU-028a)
- NGS dock vessel unloading operations - vessel unloader & spillage conveyors (EU-028a)
- Limestone storage pile (EU-028p)
- Limestone reclaim hopper (EU-028p)

(d) Deleted.

(f) The maximum particulate matter emissions from the following operations shall not exceed 0.01 grains per dry standard cubic foot:

- Limestone prep building dust collectors (EU-034)
- Limestone silo bin vent filters (EU-035)

[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; and, 0310045-012-AC/PSD-FL-265B]]

b. SC III.41.:

41. Materials Handling Operations: Visible emissions shall be conducted on the material handling operations to determine compliance with their applicable limits, as follows:

Emissions Units at NGS	EPA Method(s)	Duration of VE Test	Frequency	Material
Vessel Hold (EU-028a)	9	30 min	I only	C or PC
Vessel Unloader & Spillage Conveyors (EU-028a)	9	3 hr	I only	C & LS
Belt Conveyor No. 1 (EU-028)	9	3 hr	I only	C & LS
Transfer Towers (EU-028c, -028g, -028i, -028o, -028q & -028v)	9	3 hr	I only	C & LS
Fuel Storage Building (EU-028h)	9	30 min	I only	C or PC
Limestone Storage Pile (EU-028p)	9	30 min	I only	LS
<b><u>NSPS - OOO</u></b>				
Limestone Prep Building Dust Collectors - Baghouse Exhaust (EU-034)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Silos Bin Vent Filters - Baghouse Exhaust (EU-035)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Dryer/Mill Building (EU-033)	22	IVE - 75 min	I only	LS
<b><u>NSPS - Y</u></b>				
Crusher House Building Baghouse Exhaust (EU-029)	9	IVE - 3 hr RVE - 30 min	I & R	C
Fuel Silos Dust Collectors - Baghouse Exhaust (EU-031)	9	IVE - 3 hr RVE - 30 min	I & R	C
<b><u>Other</u></b>				
Fly Ash Transport Blower Discharge - Baghouse Exhaust (EU-036)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Fly Ash Silos Bin Vents - Baghouse Exhaust (EU-037)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Bed Ash Silos Bin Vents - Baghouse Exhaust (EU-038)	9	IVE - 30 min RVE - 30 min	I & R	Ash
AQCS Pebble Lime Silo - Baghouse Exhaust (EU-042)	9	IVE - 30 min RVE - 30 min	I & R	Ash

Fly Ash Slurry Mix System Vents - Baghouse Exhaust (EU-051)	9	IVE - 60 min RVE - 60 min	I & R	Ash
Bed Ash Slurry Mix System Vents - Baghouse Exhaust (EU-052)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Bed Ash Surge Hopper Bin Vents - Baghouse Exhaust (EU-053)	9	IVE - 60 min RVE - 60 min	I & R	Ash

C – Coal and/or Coal coated with latex

I – Initial R - Renewal (once every 5 years)

IVE – Initial Visible Emissions Test, RVE - Renewal Visible Emissions Test

LS – Limestone; PC-Petroleum Coke

Note: No methods other than the ones identified above may be used for compliance testing unless prior DEP or RESD approval is received in writing.

[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; 0310045-012-AC/PSD-FL-265B; 40 CFR 60.11(b); and, 40 CFR 60, Appendix A]

4. SCs III.14.(c) and 33.(c), 0310045-003-AC/PSD-FL-265. Since the existing Boiler No. 1 has been retired and removed from service, then any references to this retired boiler and associated text has been deleted because they are obsolete; in addition, references to existing Unit 3 will be changed to existing Boiler No. 3 and references to Units 1 and 2 will be changed to CFB Boilers Nos. 1 and 2 for clarity purposes in these SCs. Therefore, the following has been changed:

FROM:

a. SC III.14.(c):

14.(c). Sulfur Dioxide.

c. Sulfur dioxide emissions from existing Unit 1 shall not exceed 0.14 lb/MMBtu (24-hour block average), effective upon startup of Repowered Unit 2.

b. SC III.33.(c):

33. Particulate Matter:

(c) Compliance with the annual particulate matter (PM) emissions limit in Condition 16(c) shall be determined using the following formula. This formula shall be used for each fuel consumed by each of Units 1, 2 and 3, and the resulting PM emissions summed to obtain a 12-month total for Units 1, 2, and 3.

$$\text{PM Emissions} = (\text{Fuel Usage}^a) \times (\text{Emission Factor}^b) \times \text{unit conversion factors}$$

<sup>a</sup> The “Fuel Usage” shall be measured by calibrated fuel flow meters (±5 percent accuracy) and recorded daily when a unit is operated.

<sup>b</sup> An “Emissions Factor” of [(9.19 x weight percent sulfur content) + 3.22] pounds per thousand gallons (lbs/10<sup>3</sup> gal) shall be used for fuel oil burned in existing Units 1 and 3. The weight percent sulfur content shall be determined based on an analysis of a representative sample of the fuel oil being consumed. The analysis shall be performed using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. An “Emissions Factor” of 5 pounds per million cubic feet (lb/MCF) shall be used for natural gas burned in existing Units 1 and 3. For Repowered Units 1 and 2, the “Emissions Factor” shall be based on particulate matter stack test results using EPA Methods 5, 5B, 8, 17, or 29 for the individual units, and shall apply to the quantities of fuel consumed in the individual units during the period immediately following the stack tests for the respective units until subsequent stack tests are completed.

TO:

a. SC III.14.(c):

14.(c). Sulfur Dioxide.

c. Deleted.

[Applicant Request; and, 0310045-003-AC/PSD-FL-265]

b. SC III.33.(c):

33. Particulate Matter:

- (c) Compliance with the annual particulate matter (PM) emissions limit in Condition 16(c) shall be determined using the following formula. This formula shall be used for each fuel consumed by each of CFB Boilers Nos. 1 and 2 and existing Boiler No. 3, and the resulting PM emissions summed to obtain a 12-month total for CFB Boilers Nos. 1 and 2 and existing Boiler No. 3.

$$\text{PM Emissions} = (\text{Fuel Usage}^a) \times (\text{Emission Factor}^b) \times \text{unit conversion factors}$$

<sup>a</sup> The "Fuel Usage" shall be measured by calibrated fuel flow meters ( $\pm 5$  percent accuracy) and recorded daily when a unit is operated.

<sup>b</sup> An "Emissions Factor" of  $[(9.19 \times \text{weight percent sulfur content}) + 3.22]$  pounds per thousand gallons (lbs/10<sup>3</sup> gal) shall be used for fuel oil burned in existing Boiler No. 3. The weight percent sulfur content shall be determined based on an analysis of a representative sample of the fuel oil being consumed. The analysis shall be performed using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. An "Emissions Factor" of 5 pounds per million cubic feet (lb/MCF) shall be used for natural gas burned in existing Boiler No. 3. For Repowered Units 1 and 2, the "Emissions Factor" shall be based on particulate matter stack test results using EPA Methods 5, 5B, 8, 17, or 29 for the individual units, and shall apply to the quantities of fuel consumed in the individual units during the period immediately following the stack tests for the respective units until subsequent stack tests are completed.

5. SCs in 0310045-003-AC/PSD-FL-265. Where the text refers to Units 1 and 2, the text will be changed to CFB Boilers Nos. 1 and 2 in the Title V Air Operation Permit Renewal, where the air construction permit for these emissions unit is being incorporated; and, where the text refers to Units 1 or 2, the text will be changed to CFB Boiler No. 1 or No. 2 in the Title V Air Operation Permit Renewal, where the air construction permit for these emissions unit is being incorporated.

6. SC 4. AC16-85951. This AC permit was issued for the NGS Auxiliary Boiler No.1 and included a fuel oil usage cap for NGS Boilers Nos. 1, 2 & 3 and Auxiliary Boiler No. 1. Since the existing NGS Boilers Nos. 1 and 2 and Auxiliary Boiler No. 1 have been retired and no longer in service, then the Department agrees that a fuel oil cap related to these emissions units and the remaining existing NGS Boiler No. 3 is not pertinent and, essentially, obsolete. Some of the original SC was split into two SCs in Section III. Subsection A. 0310045-008-AV, specifically in SCs Nos. A.3.b. and A.41. Therefore, the following have been changed:

FROM:

a. SC 4.: AC16-85951.

4. The boiler shall be operational when at least one of the three larger (+ 2000-E6 Btu/hr) steam generating units has been shut down or is in the start-up mode of operation prior to being put on line. Compliance shall be determined by requiring that when any of boilers NS#1, NS#2, and NS#3 are shut down, that it be recorded in the proposed boiler operating log. When electrical power demand requires all three main units to be on line, the total station residual fuel oil consumption will be recorded for each four hour period whenever the auxiliary steam generator is operating. The total station fuel consumption must not exceed 1,440,000 pounds in any consecutive three (3) hour period. The recorded fuel consumption data will be retained for at least two years.

b. SC A.3.b.: 0310045-008-AV.

A.3. Methods of Operation - Fuels.

b. The total station (NGS Boiler No. 3 residual fuel oil consumption must not exceed 1,440,000 pounds in any consecutive three (3) hour period.

[Rule 62-213.410, F.A.C.; 40 CFR 271.20(e)(3); AO16-194743, AO16-178094 and AO16-207528; AC16-85951 and BACT; and, applicant request dated June 14, 1996]

c. SC A.41.: 0310045-008-AV.

A.41. When electrical power demand requires all three main NGS boilers to be on line, the total station residual (No. 6) fuel oil consumption shall be recorded for each four-hour period whenever the NGS auxiliary steam generator (boiler) is operating. The recorded fuel consumption data shall be retained for at least five (5) years. [Rule 62-213.440, F.A.C.; and, AC16-85951]

TO:

a. SC 4.: AC16-85951.

4. Deleted.

b. SC A.3.b.: 0310045-008-AV.

A.3. Methods of Operation - Fuels.

b. Reserved.

[Rule 62-213.410, F.A.C.; 40 CFR 271.20(e)(3); AO16-194743, AO16-178094 and AO16-207528; AC16-85951 and BACT; applicant request dated June 14, 1996; and, 0310045-012-AC/PSD-FL-265B]

c. SC A.41.: 0310045-008-AV.

A.41. Reserved.

7. Revised Tables 2 and 6. PSD-FL-010 (amendment dated October 28, 1986). This AC/PSD permit change is being made to recognize that an operation, which is identified as #17 in Revised Table 2 and #18 in Revised Table 6, has been removed from service. Therefore, any reference to #17 in Revised Table 2 and #18 in Revised Table 6 will be removed from the Title V permit's text and recognized as changed in the amended federal PSD permit, PSD-FL-010, dated October 28, 1986; and, they are located in Section III. Subsection F. Specific Conditions F.1, F.3., F.4., F.5. and F.10., 0310045-008-AV (last revision), and Conditions . Therefore, the following have been changed:

FROM:

a. SC F.1. 0310045-008-AV; and, Conditions .

F.1. Revised Tables 2 and 6, PSD-FL-010, are incorporated by reference (attached) for emissions units 17 thru 18 and 18 thru 19, respectively.

b. SC F.3. 0310045-008-AV.

F.3. Controls. The permittee shall maintain and continue to use the control systems and control techniques established to minimize particulate matter emissions from emissions units 17 and 18 in Revised Table 2, PSD-FL-010.

[Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; and, PSD-FL-010]

c. SC F.4. 0310045-008-AV.

F.4. Visible Emissions. Visible emissions shall not exceed the following:

- a. Limestone and flyash handling systems 10% opacity
- b. Limestone transfer points 10% opacity
- c. Limestone silo 10% opacity
- d. Limestone unloading (rail dumper) 10% opacity
- e. Flyash silos 10% opacity

[PSD-FL-010 and PA 81-13]

d. SC F.5. 0310045-008-AV.

F.5. Particulate Matter. Particulate matter emissions shall not exceed the following:

- |  |            |
|--|------------|
| a. Limestone silo                      | 0.05 lb/hr |
| b. Limestone hopper/transfer conveyors | 0.65 lb/hr |
| c. Limestone transfer points           | 0.4 lb/hr  |
| d. Limestone unloading (rail dumper)   | 0.1 lb/hr  |
| e. Flyash handling system              | 0.2 lb/hr  |

[Rule 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; and, PSD-FL-010 and PA 81-13]

e. SC F.10. 0310045-008-AV.

F.10. Particulate Matter. In accordance with Chapter 62-297, F.A.C., EPA Method 5 shall be used to determine compliance with the particulate matter emission limitations established in Revised Table 6, PSD-FL-010, for emissions units 18 and 19 that exhaust through a stack. If the opacity limits are not met for those emissions units that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests.

[Rules 62-4.070 and 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; and, PSD-FL-010]

TO:

a. SC F.1. 0310045-008-AV.

F.1. Revised Tables 2 and 6, PSD-FL-010, amended October 28, 1986, are incorporated by reference (attached) for emissions unit 18 (Table 2) and emissions unit 19 (Table 6).

[PSD-FL-010; PSD-FL-010, amended 10/28/1986; and, 0310045-012-AC/PSD-FL-010E]

b. SC F.3. 0310045-008-AV.

F.3. Controls. The permittee shall maintain and continue to use the control systems and control techniques established to minimize particulate matter emissions from emissions unit 18 in Revised Table 2, PSD-FL-010, amended October 28, 1986.

[Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; PSD-FL-010, amended 10/28/1986; and, 0310045-012-AC/PSD-FL-010E]

c. SC F.4. 0310045-008-AV.

F.4. Visible Emissions. Visible emissions shall not exceed the following:

- |  |             |
|--|-------------|
| a. Limestone and flyash handling systems | 10% opacity |
| b. Limestone transfer points             | 10% opacity |
| c. Limestone silo                        | 10% opacity |
| d. Reserved.                             |             |
| e. Flyash silos                          | 10% opacity |

[PSD-FL-010 and PA 81-13; and, 0310045-012-AC/PSD-FL-010E]

d. SC F.5. 0310045-008-AV.

F.5. Particulate Matter. Particulate matter emissions shall not exceed the following:

- |  |            |
|--|------------|
| a. Limestone silo                      | 0.05 lb/hr |
| b. Limestone hopper/transfer conveyors | 0.65 lb/hr |
| c. Limestone transfer points           | 0.4 lb/hr  |
| d. Reserved.                           |            |
| e. Flyash handling system              | 0.2 lb/hr  |

[Rule 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010 and PA 81-13; and, 0310045-012-AC/PSD-FL-010E]

Mr. James M. Chansler  
JEA: Northside Generating Station and St. Johns River Power Park  
0310045-012-AC/PSD-FL-010E/PSD-FL-265B  
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e. SC F.10. 0310045-008-AV.

F.10. Particulate Matter. In accordance with Chapter 62-297, F.A.C., EPA Method 5 shall be used to determine compliance with the particulate matter emission limitations established in Revised Table 6, PSD-FL-010, amended October 28, 1986, for emissions unit 19 that exhaust through a stack. If the opacity limits are not met for those emissions units that exhaust through a stack, permit compliance shall be determined on the basis of mass emission rate tests.

[Rules 62-4.070 and 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; PSD-FL-010; PSD-FL-010, amended October 28, 1986; and, 0310045-012-AC/PSD-FL-010E]

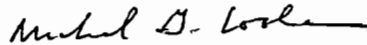
8. SC 31. 0310045-003-AC/PSD-FL-265. Since the SC is silent on the minimum number of data points required to establish a valid 24-hour average using a continuous emissions monitoring system (CEMS) for sulfur dioxide, the following "Permitting Note" has been added for clarity purposes:

{Permitting Note: At least three (3) hours of data are required to establish a 24-hour average for CEMS data.}

This permit (letter) is issued pursuant to Chapter 403, Florida Statutes (F.S.). Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Sincerely,





Michael G. Cooke  
Director  
Division of Air Resource Management


MGC/sms/bm

cc: Mr. Bert Gianazza, P.E., JEA, Application Contact  
Mr. Richard Robinson, RESD  
Mr. Hamilton Owen, DEP-SCO  
Mr. Gregg Worley, U.S. EPA, Region 4

# INTEROFFICE MEMORANDUM

TO: Michael Cooke

THRU: Trina Vielhauer   
Scott Sheplak 

FROM: Bruce Mitchell 

DATE: October 30, 2003

SUBJECT: JEA  
Northside Generating Station/St. Johns River Power Park  
Final Air Construction Permit (letter)  
0310045-012-AC/PSD-FL-010E/PSD-FL-265B

Attached is a Final Air Construction Permit, No. 0310045-012-AC/PSD-FL-010E/PSD-FL-265B. The subject of the Air Construction Permit is to: (1) allow coal coated with latex (used as a dust suppressant during the transporting of the coal from the mine) to be burned in the Northside Generating Station's (NGS) new circulating fluidized bed (CFB) Boilers Nos. 1 and 2; (2) modify some language of some federally enforceable specific conditions (SCs) established in some previously issued air construction (AC) permits for clarity purposes; (3) remove two emissions units from the NGS Materials Handling and Storage Operations that were never constructed and rename some of the emissions units that were constructed without changing any of their limits and compliance requirements; and, (4) recognize that an operation at St. Johns River Power Park (SJRPP) identified in two tables, specifically Revised Tables 2 & 6 (PSD-FL-010, amended 10/28/1986), has been removed from service.

There were no comments received during the Public Notice period. Therefore, it is recommended that the Final Permit be issued as drafted and noticed.

Attachments

MGC/bm