FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
8800 BAYMEADOWS WAY WEST, SUITE 100
JACKSONVILLE, FLORIDA 32256

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PERMITTEE

RockTenn CP, LLC
North 8th Street
Fernandina Beach, FL 32034

Authorized Representative:
Mr. Thomas Sweetser, General Manager

Air Permit No. 0890003-045-AC
Permit Expires: August 1, 2015
Issue Date: August 1, 2014
Fernandina Beach Kraft Pulp Mill
ARMS ID No. 0890003

Project: Modification No. 7 Power Boiler Flue Gas Oxygen Set Point for NO_x emissions in Permit Nos. 0890003-034-AC , PSD-FL-062, PSD-FL-062A, PSD-FL-062B, AC45-35532

This final air construction permit modifies Permit No. PSD-FL-062, by removing the BACT requirement for the Fernandina Beach Pulp Mill to maintain and continuously monitor a maximum flue gas oxygen set point for NO_x emissions at the No. 7 Power Boiler (EU 015) and replacing it with the requirement to install, calibrate, certify, and operate a NOx CEMS pursuant to the provisions of 40 CFR 60 Subpart D. This construction permit also modifies Permit Nos. PSD-FL-062A (DEP File No. 0890003-007-AC), PSD-FL-062B (DEP File No. 0890003-019-AC), 0890003-034-AC.

The proposed work will be conducted at the Fernandina Beach Pulp Mill, which is a Kraft Pulp Mill (Standard Industrial Classification No. 2611). The existing facility is located in Nassau County at North 8th Street in Fernandina Beach, Florida. The UTM coordinates are Zone 17: 456.2 km East; 3394.2 km North.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Permit Modification

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes 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 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida

Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on August 1, 2014, to the persons listed below.

Mr. David Buff, P.E., Golder Associates, Inc.dbuff@golder.com
Mr. Thomas Sweetser, RockTenn CP, LLC tsweetser@rocktenn.com
Ms. Michelle Rundlett, RockTenn CP, LLC mrundlet@rocktenn.com
Ms. Ashley Woolley, RockTenn CP, LLC awoolley@rocktenn.com

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

_____ August 1, 2014

FACILITY AND PROJECT DESCRIPTION

This facility is a fully integrated Kraft linerboard mill that consists of major activities areas such as: wood yard, pulp mill, recycle plant, chemical recovery, power house and paper mill. A corrugated containers plant is also located at the facility.

Existing Facility

The existing facility consists of the following emissions units.

Facility ID No. 0890003	
ID No.	**Emission Unit Description**
006	No. 5 Power Boiler
007	No. 4 Recovery Boiler
011	No. 5 Recovery Boiler
013	No. 4 Smelt Dissolving Tank
014	No. 5 Smelt Dissolving Tank
015	No. 7 Power Boiler
020	Tall Oil Plant
021	No. 4 Lime Kiln
024	C-Line Brownstock Washer System
033	Pulping System MACT
035	Wide-Web Flexographic Printers
041	Coal Handling System

Proposed Project

This project removes the requirement for the Fernandina Beach Pulp Mill to maintain a maximum flue gas oxygen set point for NO_x emissions control at the No. 7 Power Boiler (EU 015) as BACT and replacing it with the requirement to install, calibrate, certify, and operate a NOx CEMS pursuant to the provisions of 40 CFR 60 Subpart D.

.Facility ID No. 0890003	
ID No.	**Emission Unit Description**
015	No. 7 Power Boiler

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northeast District Office, Waste and Air Resource Management Program, Florida Department of Environmental Protection (Department). The Northeast District Office's mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256. All documents related to applications for permits to operate an emissions unit shall be submitted to the Northeast District Office. The Permitting Authority's telephone number is (904) 256-1700.

2. Compliance Authority: The compliance authority for this project is the Florida Department of Environmental Protection (Department), Northeast District Office, Compliance Assurance, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256. All documents related to compliance for an emissions unit shall be submitted to the Northeast District Office, Compliance Assurance.

3. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

5. Modifications: The permittee shall notify the Department upon commencement of construction of the equipment changes authorized by this permit. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining any required air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.

   [Rules 62-210.300(1) and 62-212.300(1) (a), F.A.C.]

6. Relation to Other Permits: The conditions of this permit supplements all other previously issued air construction and operation permits for these emissions units. These conditions are in addition to all other applicable permit conditions and regulatory requirements. The Permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, recordkeeping, reporting, and the like.

   [Rules 62-4.210, 62-4.030, and 62-210.300(1)(b), F.A.C.]

SECTION 3. PERMIT MODIFICATION

Subsection A. Modification of Permit N0. 0890003-034-AC

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permit Being Modified: Permit No. 0890003-034-AC

Affected Emissions Unit: EU 015

Upon installation, calibration, certification, and operation of the NO_x CEMS pursuant to the requirements of 40 CFR 60 Subpart D, 60.45, and Appendix CP-1, Compliance Plan in Title V Operation Permit No. 0890003-044-AV, Administrative Requirement No. 9 is hereby revised as follows:

9. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

   a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

   b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

      - The name, address and telephone number of the owner or operator of the major stationary source;
      - The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
      - If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
      - Any other information that the owner or operator wishes to include in the report.

   c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

   d. The following Table A provides the PSD analysis for this project:

Table A. Annual Emissions Summary and PSD Applicability

Pollutant	No. 4 Lime Kiln/No. 7 Power Boiler Annual Emissions Summary, Tons/Year					
	Baseline Actual Emissions	Projected Actual Emissions	Projected Increases	PSD Significant Emissions Rate	Demand Growth Excludable	Subject to PSD?
SO_2	3411.54	3433.72	22.18	40	376.07	**No**
NO_X	1579.46	1596.97	17.51	40	185.96	No
CO	31.52	48.64	17.12	100	4.50	No

Pollutant	No. 4 Lime Kiln/No. 7 Power Boiler Annual Emissions Summary, Tons/Year					
	Baseline Actual Emissions	Projected Actual Emissions	Projected Increases	PSD Significant Emissions Rate	Demand Growth Excludable	Subject to PSD?
PM	119.8	125.87	6.07	25	20.55	No
PM_{10}	82.20	86.37	4.17	15	14.04	No
$PM_{2.5}$	48.58	51.46	2.88	10	9.02	No
VOC	9.96	13.43	3.47	40	1.46	No
SAM	151.72	152.53	0.81	7	16.54	No
Pb	5.84E-02	5.87E-02	3.0E-04	0.6	6.39E-03	No
Hg	1.15E-02	1.16E-02	1.0E-04	0.1	1.25E-03	No
TRS	3.22	3.33	0.11	10	0.60	No
CO_2	800,605	822,607	22,001[a]	-	110,755	-
CH_4	86.11	91.22	5.11	-	10.07	-
N_2O	12.49	12.52	0.03	-	1.31	-
CO_2e	806,285	828,404	22118[a]	75000	111,372	No
GHG	800,704	822, 710	22,006	0	110,766	-
Fluorides	20.42	20.46	0.04	3	2.11	No

[a] GHG emission increase must be greater than or equal to zero TPY **and** CO_2e emissions increase must be greater than or equal to 75,000 TPY.

e. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual emissions for the following **pollutants** emitted from the No. 4 Lime Kiln (identified as Emission Unit No. 021):

- The permittee shall use the data collected from the required stack tests to determine and report the actual annual emissions of **PM**, **PM_{10}, $PM_{2.5}$,** and **TRS.** The methodology for calculating PM_{10}, and $PM_{2.5}$ baseline emissions shall be used to calculate the actual annual emissions. The permittee shall follow the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.
- Unless otherwise approved by the Department, the permittee shall use the same emissions factors for reporting the actual annual emissions of **SO_2**, **CO**, **NO_x**, **Pb**, **Hg**, **SAM**, **VOC, CO_2, CH_4, N_2O, GHG, and CO_2e** as used in the application to establish baseline emissions.

f. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual emissions for the following **pollutants** emitted from the No. 7 Power Boiler (identified as Emission Unit No. 015):

(1) For PM,PM_{10}, PM $_{2.5}$, SO_2, NOx, and CO emissions:

(i) For coal firing, the data collected from the required stack tests to determine and report the actual annual emissions. **The methodology** for calculating **PM_{10}**, and **$PM_{2.5}$** baseline emissions shall be

used to calculate the actual annual emissions. The permittee shall follow the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.

(ii) For No. 6 fuel oil firing, the same emission factors for reporting the actual annual emissions of PM, PM_{10}, $PM_{2.5}$, SO_2, ~~NOx,~~ and CO as used in the application to establish baseline emissions.

(iii) For natural gas firing, the same emission factors for reporting the actual annual emissions of PM, PM_{10}, $PM_{2.5}$, SO_2, ~~NOx,~~ and CO as used in the application to establish projected actual emissions.

(iv) NOx emissions: As measured by CEMS for all fuels.

(2) Unless otherwise approved by the Department, for **Pb**, **Hg**, **SAM**, **VOC, CO_2, CH_4, N_2O, GHG, and CO_2e, and Fluoride** emissions:

(i) For coal and No. 6 fuel oil, the same emission factors for reporting the actual annual emissions of **Pb**, **Hg**, **SAM**, **VOC, CO_2, CH_4, N_2O, GHG, and CO_2e, and Fluoride** emissions as used in the application to establish baseline emissions.

(ii) For natural gas, the same emission factors for reporting the actual annual emissions of **Pb**, **Hg**, **SAM**, **VOC, CO_2, CH_4, N_2O, GHG, and CO_2e, and Fluoride** emissions as used in the application to establish projected actual emissions.

g. As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Permit No. 0890003-034-AC; Permit No. 0890003-045-AC; Rules 62-212.300(1)(e), and 62-210.370, F.A.C.]

Subsection 3, EU 015, Specific Condition No. 8. is hereby revised as follows:

8. The owner or operator may use the following as alternatives to the reference methods and procedures in this section or in other sections as specified:

(1) The emission rate (E) of PM~~,~~ and SO_2 ~~and NO_x~~ may be determined by using the Fc factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = CF_c\left(\frac{100}{\%CO_2}\right)$$

where:

E=emission rate of pollutant, ng/J (lb/million Btu).

C=concentration of pollutant, ng/dscm (lb/dscf).

$\%CO_2$=CO_2 concentration, percent dry basis; and

F_c=factor as determined in appropriate sections of Method 19 of appendix A of 40 CFR 60.

(ii) If and only if the average Fc factor in Method 19 of appendix A of 40 CFR 60 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B of appendix A of 40 CFR 60 shall be used to determine the O_2 and CO_2 concentration according to the procedures in paragraph (b)(2)(ii), (4)(ii), or (5)(ii) of this section. Then if F_o (average of three runs), as calculated from the equation in Method 3B of appendix A of 40 CFR 60, is more than ±3 percent than the average F_o value, as determined from the average values of $F_{.D.}$ and F_c in Method 19 of appendix A of 40 CFR 60, *i.e.* , $F_{oa} = 0.209\ (F_{da}/F_{ca})$, then the following procedure shall be followed:

(A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_o is less than 0.97 F_{oa} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_o is greater than 1.03 F_{oa} and when the average difference d is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B of Appendix A-3 of Part 60, Method 17 of Appendix A-6 of Part 60 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B of Appendix A of Part 60 may be used with Method 17 of Appendix A-6 of Part 60 only if it is used after wet FGD systems. Method 17 of Appendix A of Part 60 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO_2 may be determined simultaneously with the Method 5 of Appendix A of Part 60 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5 of Appendix A of Part 60.

(ii) All applicable procedures in Method 8 of Appendix A of Part 60 for the determination of SO_2 (including moisture) are used:

(4) For Method 6 of Appendix A of Part 60, Method 6C of Appendix A of Part 60 may be used. Method 6A of Appendix A of Part 60 may also be used whenever Methods 6 and 3B of Appendix A of Part 60 data are specified to determine the SO_2 emission rate, under the conditions in paragraph (1) of this condition.

(5) For Method 7 of Appendix A of Part 60, Method 7A, 7C, 7D, or 7E of Appendix A of Part 60 may be used. If Method 7C, 7D, or 7E of Appendix A of Part 60 is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration (%O_2) for the emission rate correction factor.

(6) For Method 3 of Appendix A of Part 60, Method 3A or 3B of Appendix A of Part 60 may be used.

(7) For Method 3B of Appendix A of Part 60, Method 3A of Appendix A of Part 60 may be used.

[40 CFR 60.46(d), Rule 62-4.070(3), F.A.C.; Construction Permit No. 0890003-045-AC]

Subsection 3, EU 015, Specific Condition No. 12. Is hereby revised as follows:

12. Nitrogen Oxides. Demonstration of compliance with the BACT shall be the use of a NO_x CEMS that is installed, calibrated, certified, and operated pursuant to the requirements of 40 CFR 60 Subpart D, §60.45. ~~Combustion conditions shall be optimized to minimize NO_x formation in accordance with the following:~~

    ~~a. The provisions of "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls".~~
    ~~b. The set point for the oxygen continuous monitoring system at the location of the monitor (Economizer) shall not be greater than 7.7% as the high limit point at which the allowable NO_x emissions rate shall not be exceeded.~~
    ~~c. A 3-hour averaging time shall be used for the Oxygen set point.~~
    ~~d. Alarms shall be set to sound when flue gas oxygen levels exceed the 7.7% set point.~~
    ~~e. Any operation above the 7.7% set point will constitute noncompliance with this condition and shall be recorded and reported as stated in Condition F.35. of the Title V Air Operation permit.~~
    ~~**f. Should any combustion equipment modifications be made such as different type burners, combustion air relocation, fuel conversion, tube removal or addition, etc., emissions correlations as described above shall be conducted within 90 days of attaining full operation after such modification. Results of all emission determinations shall be sent to the permitting authority within 90 days after completion of the tests.**~~

    [~~40 CFR 60.45(b)(3);~~ Permit No. AO45-169854; EPA Modification to PSD-FL-062 dated 4/13/81; DEP 10/30/02 Modification of PSD-FL-062A; ~~Title V Operation Permit No. 0890003-028-AV~~; Permit No. 0890003-045-AC]

Subsection A. Modification of Permit N0. 0890003-034-AC

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permit Being Modified: Permit No. 0890003-034-AC

Affected Emissions Unit: EU 015

Subsection 3, EU 015, Specific Condition No. 5.

5. Nitrogen Oxides – Gaseous Fossil Fuel. Nitrogen Oxides Emissions, expressed as NO_2, shall not exceed 0.20 lb per MMBTU of heat input when the boiler is fired with gaseous fossil fuel during times other than startup, shutdown, or malfunction.

   Nitrogen Oxides – Combination of Fuels[1]. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ~~ng/J~~ lb/MMBtu) is determined by proration using the following formula:

   $$PS_{NOx} = \frac{x(\cancel{86}0.20)+y(\cancel{130}0.30)+z(\cancel{300}0.6)}{x+y+z}$$

   where:

   PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in ~~nanograms per joule~~ pounds per MMBTU heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

   x= is the percentage of total heat input derived from gaseous fossil fuel; and
   y = is the percentage of total heat input derived from liquid fossil fuel (or liquid fossil fuel and wood residue or gaseous fossil fuel and wood residue); and,
   z = is the percentage of total heat input derived from solid fossil fuel (or Solid Fossil Fuel and Wood Residue, except lignite).

   [1] Applicable when the boiler is fired with gaseous fossil fuel and/or liquid fossil fuel and/or solid fossil fuel (except lignite) during times other than startup, shutdown, or malfunction.

   {Permitting Note: The most stringent standard applicable when firing Solid Fossil Fuel or Solid Fossil Fuel and Wood Residue (0.6 lb/MMBTU based on the BACT Determination and stated in Condition F.7.b.) is to be used in the above formula when determining a prorated NOx standard due to the firing of a combination of fuels}

   [40 CFR 60.44(a)(1), 40 CFR 60.44(b); Permit No. 0890003-045-AC]

Subsection B. Modification of Permit Nos. PSD-FL-062 and PSD-FL-062A,

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permits Being Modified: Federal PSD Permit No. PSD-FL-062 issued by EPA on April 13, 1981
Permit No. PSD-FL-062A (DEP File No. 0890003-007-AC)

Affected Emissions Unit: No. 7 Power Boiler - EU 015

Specific Condition No. 6.

Upon installation, calibration, certification, and operation of the NOx CEMS pursuant to the requirements of 40 CFR 60 Subpart D, 60.45, and Appendix CP-1, Compliance Plan in Title V Operation Permit No. 0890003-044-AV, Specific Condition No. 6 of Permit Nos. PSD-FL-062 and PSD-FL-062A (DEP File No. 0890003-007-AC) is revised as follows:

6. The applicant shall optimize combustion conditions to minimize NO_x formation-in accordance with the attached provisions, "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls." A 3-hour averaging time shall be used for the Oxygen set point~~s~~ used to minimize CO formation. The applicant shall install, calibrate, maintain, and operate a continuous monitoring system for measuring NO_x emissions in accordance with the provisions of 40 CFR 60 Subpart D, §60.45.

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permits Being Modified: Federal PSD Permit No. PSD-FL-062 issued by EPA on April 13, 1981
Permit No. PSD-FL-062B (DEP File No. 0890003-019-AC)

Affected Emissions Unit: No. 7 Power Boiler - EU 015

Attachment II

Upon installation, calibration, certification, and operation of the NOx CEMS pursuant to the requirements of 40 CFR 60 Subpart D, 60.45, and Appendix CP-1, Compliance Plan in Title V Operation Permit No. 0890003-044-AV, Attachment II – Use of Flue Gas Oxygen Meter as BACT for Combustion Controls is revised as follows:

ATTACHMENT II

USE OF FLUE GAS OXYGEN METER AS BACT FOR
COMBUSTION CONTROLS

Within the time limits specified in General Condition 3 of this permit, the permittee shall determine the emissions of ~~nitrogen oxides and~~ carbon monoxide from the permitted combustion device in accordance with the test method~~s~~ and procedures set out in 40 CFR Part 60, Appendix A, Method~~s~~ ~~7 and~~ 10~~, respectively~~. The~~se~~ emission determination~~s~~ shall be made at:

1) Maximum design capacity; and

2) Normal operational load.

To promote good combustion practices, the permittee shall install, calibrate, operate and maintain an oxygen meter in the flue of the No. 7 Power Boiler to continuously monitor and record the oxygen content of the boiler flue gas. At least monthly, the permittee shall calibrate the flue gas oxygen meter. Results of emission determinations shall be correlated to the flue gas oxygen content to define:

~~1)The point at which Nitrogen Oxides (NOx) emissions (lb/MMbtu) equals the allowable NOx emission rate contained in the permit.~~

~~2)~~1) The point at which carbon monoxide (CO) emissions exceed the allowable CO emission rate contained in the permit.

The flue gas oxygen content shall be maintained ~~between these~~ above this point~~s~~ and alarms shall be set to sound when flue gas oxygen level~~s~~ ~~exceed either side of this range~~ is below this point. Any operation ~~outside of this range~~ below this point will constitute noncompliance with this specific condition, shall be recorded in accordance with General Condition 4 of this permit, and will be reported quarterly along with excess emissions in accordance with 40 CFR 60.7(c).

Should any combustion equipment modifications be made such as different type burners, combustion air relocation, fuel conversion, tube removal or addition, etc., emissions correlations as described above shall be conducted within 90 days of attaining fuel operation after such modifications. Results of all emission determinations shall be sent to the permitting authority within 90 days after completion of the tests.

Subsection D. Modification of Permit Nos. PSD-FL-062 Table 3

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permits Being Modified: Federal PSD Permit No. PSD-FL-062 issued by EPA on April 13, 1981

Affected Emissions Unit: No. 7 Power Boiler - EU 015

Table 3

Upon installation, calibration, certification, and operation of the NOx CEMS pursuant to the requirements of 40 CFR 60 Subpart D, 60.45, and Appendix CP-1, Compliance Plan in Title V Operation Permit No. 0890003-044-AV, Table 3 is revised as follows:

Table 3

Allowable Emission Limits

Facility	**lb/hr**	**Emission Limits**		**Basis**
		Opacity	**lb/MMBtu**	
Coal Handling System[h]	---	20%	---	NSPS, BACT
Coal Handling System (Coal Crusher)[i]	---	10%	---	NSPS
Ash Handling System	0.5[a]	5%	---	BACT
No. 7 power Boiler (fueled by coal alone)				
PM	102	20%	0.1	NSPS, BACT
SO_2	1225	---	1.2	NSPS, BACT
NO_x	613	---	0.6[a,c]	BACT[eg]
CO	[d]	---	[d]	BACT[e]
No. 7 Power Boiler (with a maximum of 71.3% of heat input from coal and a minimum of 28.7% waste				
PM	108	20%	0.1	NSPS, BACT
SO_2	930	---	1.2 coal[a]	BACT
			0.01 ww[a]	
NO_x	516	---	0.6 coal[a,c]	BACT[eg]
			0.17 ww[a,f]	
CO	[d]	---	[d]	BACT[e]
			[d]	

[a] Proposed by applicant.

[b] Determined by EPA consistent with mass rate

[c] Based upon manufacturer's guarantee.

[d] Emission limits will be determined by compliance testing. Worst case conditions will be used.

[e] BACT control is to be established in accordance with Attachment II.

[f] Based upon TRW, 1979; Air Pollutant Emission Factors for Wood-Fired Boilers, EPA Contract 68-02-2613, Task No. 30, Durham, NC, Table 3-2, EPA-600/7-79-219.

[g] BACT compliance to be demonstrated with use of NOx CEMS installed, calibrated, maintained, and operated pursuant to 40 CFR 60.45.

[h] Emission Points 01, 02, 04-08 identified in Permit No. 0890003-040-AC, and Emission Point 09 identified in Permit No. 0890003-043-AC

[i] Coal Crusher identified in Permit No. 0890003-040-AC

Subsection E. Modification of Permit No. AC45-35532 and PSD-FL-062B

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permits Being Modified: Permit No. AC45-35532
Permit No. PSD-FL-062B (DEP File No. 0890003-019-AC)

Affected Emissions Unit: No. 7 Power Boiler - EU 015

Specific Condition No. 4

Upon installation, calibration, certification, and operation of the NOx CEMS pursuant to the requirements of 40 CFR 60 Subpart D, 60.45, and Appendix CP-1, Compliance Plan in Title V Operation Permit No. 0890003-044-AV, Specific Condition No. 4 is hereby revised as follows:

Before the construction permit expires, the proposed boiler will be sampled for pollutant emissions. Test procedures will be EPA reference methods 1, 2, 3, 4, 5, 6, 7, and 9 as described in 40 CFR 60, Appendix A or other approve methods. Minimum sampling time and volume will be as specified in new source performance standard for this type of source. Stack sampling facilities will include the eyebolts and angle described in the attached figures. During each federal fiscal year (September 1 – October 31), the permittee shall conduct testing in accordance with the above methods to demonstrate compliance with the emissions standards for particulate matter (PM), sulfur dioxide (SO_2), ~~nitrogen oxides (NO_x),~~ and opacity. During the NO_X performance evaluation tests required by 40 CFR 60.45(c), the permittee shall also conduct reference method 10 tests to determine carbon monoxide (CO) emissions and verify the minimum ~~and maximum~~ set point~~s~~ for the flue gas oxygen meter. Performance tests shall be conducted in accordance with the requirements of Rule 62-297.310, F.A.C., which includes notifications, operating rates during testing, record keeping and reporting requirements. The pollutant emission results shall be reported in terms of the emissions standards.

[Permit Nos. AC45-35532, 0890003-019-AC and 0890003-045-AC; Rule 62-297.310(7), F.A.C.]