

# Part 70 Operating Permit Amendment

**Permit Amendment No.:** 2631-185-0001-V-01-9      **Effective Date:** August 8, 2008

**Facility Name:** Packaging Corporation of America  
5495 Lake Park-Clyattville Road  
Clyattville, Georgia 31601 Lowndes County

**Mailing Address:** P.O. Box 1048  
Valdosta, Georgia 31603-1048

**Parent/Holding Company:** Packaging Corporation of America Inc.

**Facility AIRS Number:** 04-13-185-00001

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit and an amendment to the Part 70 Operating Permit for:

The construction and operation of a recovery furnace and associated smelt dissolving tank (proposed No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank). PCA will also shut down the existing No. 1 and No. 2 Recovery Furnaces and associated smelt dissolving tanks and black liquor oxidation system (BLOX), modify the No. 3 Recovery Furnace to act as a back-up boiler, with the CE Power Boiler and shut down the No. 3 Smelt Dissolving Tank.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit Amendment and Permit No. 2631-185-0001-V-01-0. Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 17736 dated October 17, 2007; any other applications upon which this Permit Amendment or Permit No. 2631-185-0001-V-01-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 17 pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 2631-185-0001-V-01-0.

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Director  
Environmental Protection Division

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**PART 1.0 FACILITY DESCRIPTION****1.3 Process Description of Modification**

PCA is proposing to install a recovery furnace and associated smelt dissolving tank (proposed No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank). PCA will also shut down the existing No. 1 and No. 2 Recovery Furnaces, the No. 1, 2 and 3 Smelt Dissolving Tank smelts dissolving tanks and black liquor oxidation system (BLOX). The existing No. 3 Recovery Furnace, will be modified and used in conjunction with the C.E. Power Boiler as back-up boilers.

In this project, PCA is replacing the three existing direct contact evaporator recovery (DCE) furnaces, the associated smelt dissolving tanks, and the BLOX system with a new non-direct contact evaporator (NDCE) recovery furnace (No. 4 Recovery Furnace), new smelt dissolving tank (No. 4 Smelt Dissolving Tank) and a high solids crystallizer to increase the multi effect evaporator (MEE) output from about 45% dry solids to about 75% dry solids, after which the existing recovery furnaces and associated smelt dissolving tanks will be shutdown except for the No. 3 Recovery Furnace. The No. 3 Recovery Furnace will be transitioned to a back-up power boiler, firing natural gas only. The multiple effect evaporator is subject to 40 CFR 60 Subpart BB and 40 CFR 63 Subpart S. The recovery furnaces and smelt dissolving tanks are affected units under 40 CFR 63 Subpart MM. The No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank will be new units under Subpart MM, subject to more stringent requirements than the existing units they will replace, as well as being subject to NSPS standards in 40 CFR 60 Subpart BB. In addition to multiple State Rules, the No. 4 Recovery Furnace will also be subject to 40 CFR 60 Subpart Db when firing natural gas.

**PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY**

**2.1 Facility Wide Emission Caps and Operating Limits**

- 2.1.2 The Permittee shall not supply more than 219,000 MW-hours of its electric output to any utility power distribution system for sale during any consecutive twelve-month period.  
[Avoidance of 40 CFR 72.6(b)(4), 40 CFR 60 Subpart Da and 40 CFR 96 Subpart AA]

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### PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

#### Additional Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
7040	No. 4 Recovery Furnace	40 CFR 60 Subpart BB 40 CFR 60 Subpart Db 40 CFR 63 Subpart MM 40 CFR 52.21 391-3-1-.02(2)(e) 391-3-1-.02(2)(gg)	3.3.2, 3.3.28, 3.3.36 thru 3.3.38, 3.3.39 thru 3.3.43, 3.4.24, 3.5.5, 4.2.1, 4.2.2, 4.2.19, thru 4.2.24, 5.2.1, 5.2.3, 6.1.7, 6.2.21, 6.2.23, 6.2.32, 6.2.33	C017	ESP
7045	No. 4 Smelt Dissolving Tank	40 CFR 60 Subpart BB 40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(gg)	3.3.2, 3.3.28, 3.3.36, 3.4.25 thru 3.4.27, 3.5.3, 3.5.5, 6.1.7, 6.2.33	7040	No. 4 Recovery Furnace (Smelt Tank vent gases are added as tertiary air in the Recovery Furnace)
7020A	RB3 Power Boiler	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.4.28, 3.4.29, 3.5.4, 4.2.25, 4.2.27	None	

Generally applicable requirements contained in this permit may also apply to emission units listed above.

#### Removed Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
7000	No. 1 Recovery Furnace-Removed	-		C011	ESP
7010	No. 2 Recovery Furnace - Removed	-		C013	ESP
7020	No. 3 Recovery Furnace - Removed	-		C015	ESP
7005	No. 1 Smelt Dissolving Tank - Removed	-		C012	Dynamic Scrubber
7015	No. 2 Smelt Dissolving Tank - Removed	-		C014	Dynamic Scrubber
7025	No. 3 Smelt Dissolving Tank - Removed	-		C016	Dynamic Scrubber
7032	Primary BLOX - Removed	-		none	none
7033	Secondary BLOX - Removed	-		none	none

**3.3 Equipment Federal Rule Standards**

Additional 40 CFR 63 Subpart MM – Pulping Combustion Requirements

3.3.28 The Permittee shall not discharge or cause the discharge into the atmosphere any gases which contain particulate matter in excess of the listed limit from the following equipment: [40 CFR 63.862(a)(1)(i), 40 CFR 63.862(a)(1)(iii) 40 CFR 63.862(b)(1) and 40 CFR 63.862(b)(2)]

- d. No. 4 Recovery Furnace (Source Code 7040) - 0.034 g/dscm (0.015 gr/dscf), corrected to 8 percent oxygen.
- e. No. 4 Smelt Dissolving Tank ( Source Code 7045) - 0.06 kg/Mg (0.12 pounds per ton) of black liquor solids fired.

No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank

3.3.36 The Permittee shall comply with the applicable standards, provisions and requirements of Title 40 of the Code of Federal Regulations Part 60 Subpart BB “Standards of Performance for Kraft Pulp Mills” for the No. 4 Recovery Furnace (Source Code 7040) and No. 4 Smelt Dissolving Tank (Source Code 7045).  
[40 CFR 60 Subpart BB, 391-3-1-.02(8)(b)34]

No. 4 Recovery Furnace

3.3.37 The Permittee shall comply with the applicable standards, provisions and requirements of Title 40 of the Code of Federal Regulations Part 60 Subpart Db “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units” for the No. 4 Recovery Furnace (Source Code 7040). Subpart Db requirements apply to fossil fuel firing only.  
[40 CFR 60 Subpart Db, 391-3-1-.02(8)(b)4]

3.3.38 The Permittee shall burn as auxiliary fossil fuel in No. 4 Recovery Furnace only natural gas, which shall be limited to 10% of the annual capacity factor of the furnace, which is considered the maximum rated annual heat input of black liquor solids. Natural gas firing shall be limited to no more than 872 million cubic feet (at 1,025 BTU per cubic feet) per rolling 12-month period in the No.4 Recovery Furnace (Source Code 7040).  
[40 CFR 60.44(b)(c), 391-3-1-.02(8)(b)4]

3.3.39 The Permittee shall not discharge or cause discharge into the atmosphere from the No. 4 Recovery Furnace (Source Code 7040) , any gases which contain Total Recovered Sulfur (TRS) emissions in amounts equal to or exceeding 5 parts per million on a dry basis and as a 12-hour average, corrected to 8% oxygen by volume.  
[40 CFR 60.283(a)(2), 391-3-1-.02(8)(b)34, 391-3-1-.02(2)(gg) Subsumed]

3.3.40 The Permittee shall not cause, let, suffer, permit or allow emissions from No. 4 Recovery Furnace (Source Code 7040) the opacity of which is equal to or greater than thirty-five (35) percent, expressed as a 6-minute average.  
[40 CFR 60.282(a)(1)(ii), 391-3-1-.02(8)(b)34 and 391-3-1-.02(2)(b)1 Subsumed]

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- 3.3.41 The Permittee shall not discharge or cause the discharge into the atmosphere from the No. 4 Recovery Furnace (Source Code 7040) any gases that contain gaseous organic HAP, measured as methanol, greater than 0.012 kg/Mg (0.025 lb/ton) of black liquor solids fired.  
[40 CFR 63.862(c)(1), 391-3-1-.02(9)(b)53]
- 3.3.42 The Permittee shall not cause, let, suffer, permit or allow emissions from the No. 4 Recovery Furnace (Source Code 7040) of nitrogen oxides (NO<sub>x</sub>) in excess of seventy-five (75) ppmv on a dry basis, corrected to 8% oxygen, and expressed as an annual average.  
[40 CFR 52.21 – BACT Limit]
- 3.3.43 The Permittee shall not cause, let, suffer, permit or allow emissions from the No. 4 Recovery Furnace (Source Code 7040) of sulfuric acid, mist, vapors, etc, (H<sub>2</sub>SO<sub>4</sub>) in excess of 0.042 lb/ton BLS.  
[40 CFR 52.21 – BACT Limit]

### 3.4 Equipment SIP Rule Standards

#### No. 4 Recovery Furnace

- 3.4.24 The Permittee shall not cause, let, permit, suffer, or allow the rate of emission from the No. 4 Smelt Dissolving Tank (Source Code 7040) particulate matter in total quantities equal to or exceeding the allowable rates calculated using the equation  
[391-3-1-.02(2)(e)]

$$E = 0.55P^{0.11} - 40, \text{ where}$$

E = emission rate in pounds per hour and

P = process input weight rate in tons per hour.

#### No. 4 Smelt Dissolving Tank

- 3.4.25 The Permittee shall not cause, let, suffer, permit or allow emissions from the No. 4 Smelt Dissolving Tank (Source Code 7045) the opacity of which is equal to or greater than forty (40) percent.  
[391-3-1-.02(2)(b)(1)]

- 3.4.26 The Permittee shall not discharge or cause the discharge into the atmosphere from the No. 4 Smelt Dissolving Tank (Source Code 7045), any gases which contain Total Reduced Sulfur (TRS) emissions in amounts equal to or exceeding 0.0168 pounds per ton of black liquor solids (dry weight).  
[391-3-1-.02(2)(gg)1(iii), 40 CFR 60.283(a)(4) subsumed]

- 3.4.27 The Permittee shall not cause, let, permit, suffer, or allow the rate of emission from the No. 4 Smelt Dissolving Tank (Source Code 7045) particulate matter in total quantities equal to or exceeding the allowable rates calculated using the equation  
[391-3-1-.02(2)(e)]

$$E = 0.55P^{0.11} - 40, \text{ where}$$

E = emission rate in pounds per hour and

P = process input weight rate in tons per hour.

#### RB3 Power Boiler

- 3.4.28 The Permittee shall not cause, let, suffer, permit or allow emissions from the transitioned RB3 Power Boiler (Source Code 7020A) the opacity of which is equal to or greater than twenty (20) except for one six minute period per hour and of not more than twenty-seven (27) percent.  
[391-3-1-.02(2)(d)(3)]

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3.4.29 The Permittee shall not cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from the transitioned RB3 Power Boiler (Source Code 7020A) in amounts equal to or exceeding the rate derived from [391-3-1-.02(2)(d)1(ii)]

$P = 0.70(10/R)^{0.202}$  pounds per million BTU heat input where

P = the allowable weight of emissions of fly ash and/or particulate matter in pounds per million BTU heat input

R = heat input of fuel-burning equipment in million BTU per hour.

### 3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

- 3.5.3 The Permittee shall exhaust the No. 4 Smelt Dissolving Tank (Source Code 7045) vent gases with the tertiary air flow into the No. 4 Recovery Furnace and shall have no direct emissions point, except during emergency situations and for short durations during shutdown, startup and significant malfunctions such as, but not limited to, an Emergency Shutdown Procedure (ESP) on No. 4 Recovery Furnace, trip the No. 4 Recovery Furnace ID fan or excessive pressure in the No. 4 Smelt Dissolving Tank.  
[391-3-1-.02(2)(a)]
- 3.5.4 The Permittee shall burn only natural gas in the transitioned RB3 Power Boiler (Source Code 7020A).
- 3.5.5 Within 180 days following initial startup for its intended purpose of the No. 4 Recovery Furnace and the No. 4 Smelt Dissolving Tank:
- a. The following units will be decommissioned and their operation shall be permanently shutdown:
    - i. No. 1 Recovery Furnace ( Source Code 7000)
    - ii. No. 2 Recovery Furnace ( Source Code 7020)
    - iii. No. 1 Smelt Dissolving Tank (Source Code 7005)
    - iv. No. 2 Smelt Dissolving Tank (Source Code 7015)
    - v. No. 3 Smelt Dissolving Tank (Source Code 7025)
    - vi. BLOX System, including Primary BLOX Tank (Source Code 7032) and Secondary BLOX Tank (Source Code 7033)
  - b. The following unit shall be decommissioned for operation as a kraft recovery furnace and shall be permanently transitioned to operation as a power boiler:
    - i. No. 3 Recovery Furnace (Source Code 7020) shall be transitioned to No. 3 RB Power Boiler (Source Code 7020A)

**PART 4.0 REQUIREMENTS FOR TESTING**

**4.1 General Testing Requirements**

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 which pertain to the emission units listed in Section 3.1 are as follows:

- y. EPA Conditional Method CTM-013A for Sulfuric Acid Emissions from Kraft Recovery furnaces and Boilers with Dry Particulate Control Equipment.

**4.2 Specific Testing Requirements**

4.2.1 The Permittee shall conduct performance tests for the following specified equipment and pollutants:  
[391-3-1-.02(6)(b)]

Source Code	Equipment	Pollutants
7040	No. 4 Recovery Furnace	Particulate Matter
7000	Recovery Furnace No. 1	Particulate Matter
7010	Recovery Furnace No. 2	Particulate Matter
7020	Recovery Furnace No. 3	Particulate Matter
7005	No. 1 Smelt Dissolving Tank	Particulate Matter, TRS
7015	No. 2 Smelt Dissolving Tank	Particulate Matter, TRS
7025	No. 3 Smelt Dissolving Tank	Particulate Matter, TRS
6063	No. 4 Lime Kiln	Particulate Matter
1058	Package Boiler	Opacity (when No. 2 Oil is being burned)
6076	NCG Thermal Oxidizer	Sulfur Dioxide (when all HVLC & LVHC gases are being combusted in this source, to establish/verify a conservative emission factor.
1005 & 1006	Riley & C.E. Combination Boilers	Particulate Matter, Sulfur Dioxide (when burning only HVLC gases and bark, to establish/verify a conservative emission factor)

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- 4.2.2 The Permittee shall conduct performance tests as specified by the following table and criteria unless otherwise specified by the Division:  
[391-3-1-.02(6)(b)]

Equipment	Testing Frequency
No. 4 Recovery Furnace	PM - annual
Recovery Furnaces 1 and 2	PM – annual
Recovery Furnace 3	PM – annual
Smelt Tanks 1,2 and 3	PM – annual TRS - biennial
No. 4 Lime Kiln	PM – annual
NCG Thermal Oxidizer	SO <sub>2</sub> - annual
Riley & CE Combination Boiler	PM – annual SO <sub>2</sub> – annual
Package Boiler	Opacity – annual (only on oil)

- a. Where the results of a performance test which is required annually are less than or equal to 50 percent of the allowable limit, the Permittee may skip the next scheduled performance test;
- b. Where the results of a performance test which is required annually are greater than 85 percent of the allowable limit, the Permittee shall begin testing on a semiannual basis with the next performance test due approximately six months following that test. If any subsequent test is less than or equal to 85 percent of the allowable limit, the Permittee shall resume annual testing. The provisions of 4.2.2.a do not apply until the results of two consecutive tests are less than or equal to 85 percent of the allowable.
- c. Where the results of a performance test which is required biennially are greater than 85 percent of the allowable limit, the Permittee shall begin testing on an annual basis with the next performance test due approximately twelve months following that test. If any subsequent test is less than or equal to 85 percent of the allowable limit, the Permittee shall resume biennial testing.

Note: When no oil has been burned in the package boiler during the previous 12 months, the annual opacity test is not required.

### No. 4 Recovery Furnace

- 4.2.19 Prior to conducting initial performance testing on the No. 4 Recovery Furnace (Source Code 7040), the TRS continuous emissions monitor system (CEMS) and Continuous Opacity Monitor System (COMS) for the No. 4 Recovery Furnace shall be installed and operational.

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- 4.2.20 Within 60 days of achieving maximum capacity but no later than 180 days after initial startup of the No. 4 Recovery Furnace (Source Code 7040), initial performance testing shall be conducted on the No. 4 Recovery Furnace for compliance with the PM limits as listed in Conditions 3.3.28 (Subpart MM).
- 4.2.21 Within 60 days of achieving maximum capacity but no later than 180 days after initial startup of the No. 4 Recovery Furnace (Source Code 7040), initial performance testing shall be conducted on the No. 4 Recovery Furnace for compliance with the TRS limits as listed in Condition 3.3.39. This test may be conducted as part of the TRS continuous emissions monitor certification.
- 4.2.22 Within 60 days of achieving maximum capacity but no later than 180 days after initial startup of the No. 4 Recovery Furnace (Source Code 7040), initial performance testing shall be conducted on the No. 4 Recovery Furnace for compliance with the NO<sub>x</sub> limit as listed in Condition 3.3.42
- 4.2.23 Within 60 days of achieving maximum capacity but no later than 180 days after initial startup of the No. 4 Recovery Furnace (Source Code 7040), initial performance testing shall be conducted on the No. 4 Recovery Furnace for compliance with the H<sub>2</sub>SO<sub>4</sub> limit as listed in Condition 3.3.43

### RB3 Power Boiler

- 4.2.24 Within 60 days of achieving maximum capacity but no later than 180 days after initial startup of the RB3 Power Boiler (Source Code 7020A), initial performance testing shall be conducted on the RB3 Power Boiler for compliance with the opacity limit as listed in Condition 3.4.28.
- 4.2.25 Within 60 days of achieving maximum capacity but no later than 180 days after initial startup of the RB3 Power Boiler (Source Code 7020A), initial performance testing shall be conducted on the RB3 Power Boiler for compliance with the particulate matter limit as listed in Condition 3.4.29.

**PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)****5.2 Specific Monitoring Requirements**

- 5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. [391-3-1-.02(6)(b)1, 40 CFR 63.864 and 40 CFR 70.6(a)(3)(i)]
- a. TRS concentration on a dry basis and specified percent oxygen by volume in each of the flue gas streams from the No. 4 Recovery Furnace (Source Code 7040) and the No. 4 Lime Kiln (Source Code 6063)
    - iii For the No. 4 Recovery Furnace, the Permittee shall calculate the arithmetic mean of the TRS data provided by the CEMS, on a dry basis and corrected to 8 percent oxygen for each consecutive 12-hour period beginning at 7:00 am and 7:00 pm, or other appropriate starting time as may be specified or approved by the Division.
  - c. Opacity from the No. 4 Recovery Furnaces (Source Codes 7040), to be sampled and analyzed for each successive 10-second period at a minimum and averaged and recorded for each successive 6-minute period. [40 CFR 63.864(d)(3), 40 CFR 63.864(d)(4)]
- 5.2.3 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- d. No. 1,2,3 and 4 Recovery furnace (Source Codes:7000, 7010, 7020 & 7040)
    - i. Secondary current and secondary voltage for each electrical isolatable section (bus section) of the electrostatic precipitator for the No. 1, 2, 3 and 4 Recovery Furnace (ESP Source Codes C011, C013, C015 & C017). Data shall be recorded at least once per hour of operation. The total power for each precipitator shall be determined and recorded from the secondary parameters no less than once per two hours of operation.

**PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS****6.1 General Record Keeping and Reporting Requirements**

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)
  - i. For any source for which a continuous TRS monitor is required by this permit, any averaging period as specified for which the applicable TRS standard as specified below is exceeded.

No. 4 Recovery Furnace

(C) No. 4 Recovery Furnace (Source Code 7040): 5 parts per million TRS on a dry basis and as a 12 hour average, corrected to 8 percent oxygen by volume.

[40 CFR 60 Subpart BB]

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

40 CFR 63 Subpart MM

vii. Periods of monitoring exceedances reported for Conditions 6.1.7.b.vii(A) thru 6.1.7.b.vii(C) shall be a violation of 40 CFR 63 Subpart MM if the total period of monitoring exceedance (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time, in a quarterly reporting period, exceeds 6%.

[40 CFR 63.864(k)(2)(i) and 40 CFR 63.864(k)(2)(ii)]

(C) No. 4 Recovery Furnace (Source Code 7040); opacity greater than 20% (six-minute average).

- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

Recovery Furnaces

- xv. Any 12-month rolling total natural gas usage in the No. 4 Recovery Furnace that exceeds 872 million cubic feet.
- d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:
- x. Any period when ten consecutive 6-minute opacity averages result in a measurement greater than 20% opacity for the No. 4 Recovery Furnace (Source Code 7040).
- xi. Any period of 4 hours or more when the No. 4 Smelt Dissolving Tank (Source Code 7045) is in operation and either the explosion damper or emergency vent is open to the bypass stack.
- xii. The total electrical energy physically sent and sold to the electrical utility grid for the calendar year-to-date in each quarterly report.

## 6.2 Specific Record Keeping and Reporting Requirements

- 6.2.21 The Permittee shall implement the corrective action plan as developed in condition 6.2.22 if any of the following monitoring exceedances occur:  
[40 CFR 63.864(k)(1)(i)]

- vii No. 4 Recovery furnace (Source Code 7040) opacity greater than 20% for 10 consecutive 6-minute averages.

- 6.2.23 In addition to the general records required by Condition 6.1.4, the Permittee shall maintain records of the following information:  
[40 CFR 63.866(c)]

- f. Records of the corrective actions taken as required by Condition 6.2.21 including the cause the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken.
- g. Black liquor firing rates in either Mg/day or tons/day for the No. 4 Recovery Furnace.

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- 6.2.32 The Permittee shall maintain records of the natural gas usage in the No. 4 Recovery Furnace (Source Code 7040) for five years from the date of record. The records shall be available for inspection and submittal to the Division upon request and shall contain:
- a. The natural gas use in the No. 4 Recovery Furnace as a monthly total and rolling 12-month total.
- 6.2.33 The Permittee shall provide the following notifications to the Division as specified:  
[40 CFR 60.8]
- a. The Permittee shall provide notification of the start of construction of the No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank, which shall be postmarked no later than 30 days following the date of the start of construction.
  - b. The Permittee shall provide notification of the initial startup of the No. 4 Recovery Furnace and No. 4 Smelt Dissolving Tank, which shall be postmarked no later than 15 days following the date of the initial startup of the Recovery Furnace.
  - c. The Permittee shall provide notification to the Division no less than 30 days in advance of the performance tests required by 40 CFR 60.8, except that 60 days notice shall be provided along with the test protocol for performance tests required by 40 CFR 63 unless the additional advance notice is waived by the Division.

**PART 7.0 OTHER SPECIFIC REQUIREMENTS****7.14 Specific Conditions Associated with this Amendment**

7.14.1 The following new and modified Part 3.0 conditions shall become effective upon startup of each new unit listed below. The associated testing, monitoring, record keeping, and reporting requirements shall also become effective upon startup of each respective piece of equipment.

[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)(1)]

- a. No. 4 Recovery Furnace (Conditions 3.3.2, 3.3.28, 3.3.36 thru 3.3.43, 3.4.24, 3.5.5)
- b. No. 4 Smelt Dissolving Tank (Conditions 3.3.2, 3.3.28, 3.3.36, 3.4.25 thru 3.4.27, 3.5.3, 3.5.5)
- c. RB3 Power boiler (Conditions 3.4.28, 3.4.29, 3.5.4)

7.14.2 Once each of the following equipment is permanently shutdown, all associated emission limits, testing, monitoring, record keeping, and reporting requirements for each piece of equipment shall become null and void.

[40 CFR 70.6(a)(3)(i) and 391-3-1-.02(6)(b)(1)]

- a. No. 1 Recovery Furnace (Source Code 7000)
- b. No. 2 Recovery Furnace (Source Code 7010)
- c. No. 3 Recovery Furnace (Source Code 7020)
- d. No. 1 Smelt Dissolving Tank (Source Code 7005)
- e. No. 2 Smelt Dissolving Tank (Source Code 7006)
- f. No. 3 Smelt Dissolving Tank (Source Code 7007)
- g. Primary BLOX (Source Code 7032)
- h. Secondary BLOX (Source Code 7033)

**Attachments**

- A. List of Standard Abbreviations and List of Permit Specific Abbreviations
- C. List of References



**ATTACHMENT C****LIST OF REFERENCES**

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.
2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.
3. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.*
4. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees.*
5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at [www.epa.gov/ttn/chief/ap42.html](http://www.epa.gov/ttn/chief/ap42.html).
6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at [www.epa.gov/ttn/chief/tanks.html](http://www.epa.gov/ttn/chief/tanks.html).
7. The Clean Air Act (42 U.S.C. 7401 et seq).
8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).
9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).