Smurfit-Stone Container Enterprises, Inc.
Fernandina Beach Mill

Facility ID No.: 0890003
Nassau County

Title V Air Operation Permit Renewal

PROPOSED Permit Project No.: 0890003-009-AV

Permitting and Compliance Authority:
Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32056-7590
Telephone: 904-807-3300
Fax: 904-448-4363

Title V Air Operation Permit Renewal

PROPOSED Permit No.: 0890003-009-AV

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Department of Environmental Protection

Jeb Bush
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Colleen Castille
Secretary

Permittee:
Smurfit-Stone Container Enterprises, Inc.
Fernandina Beach Mill

PROPOSED Permit No.: 0890003-009-AV
Facility ID No.: 0890003
SIC Nos.: 26, 2631, 2653
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew Title V Air Operation Permit, No. 0890003-001-AV and incorporate the terms and conditions of Construction Permits 0890003-008-AC and 0890003-010-AC (pending status). This facility is located at North 8th Street, Fernandina Beach, Nassau County; UTM Coordinates: Zone 17, 456.2 km East and 3394.1 km North; Latitude: 30°40'53" North and Longitude: 81°27'26" West.

This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix U-1, List of Unregulated Emissions Units and/or Activities
APPENDIX TV-6, TITLE V CONDITIONS version dated 06/23/06
Appendix GP- General Provisions for 40 CFR Part 63
USEPA Region IV Condensates Alternative Compliance Plan Approval Letter dated 11/01/00
Fernandina Beach Condensate Compliance Plan, amended March 5, 2001
EPA Approval Letter dated December 11, 2000 of NCASI Method DI/HAPS-99.01
Order on Request for Alternate Procedures and Requirements, File No 01-H-AP, dated 02/05/02
Container Corporation of America Coal Sampling and Testing Procedures for Compliance Monitoring of SO2 for #7 Power Boiler
EPA Approval Letter dated September 22, 2003 for Alternative Inspection Frequency
Smurfit Stone Alternate Procedure Request dated June 2, 2006
Department Alternate Procedure Request Approval dated August 28, 2006
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS
EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT version dated 07/96
Appendix CAM
Appendix CP-1, Compliance Plan
Appendix CP-2, Compliance Plan
Appendix A to 40 CFR 63 Subpart DDDDD
Tables to 40 CFR 63 Subpart DDDDD

Effective Date:
Revision Effective Date:
Renewal Application Due Date:
Expiration Date:

Christopher L. Kirts. P.E.
District Air Program Administrator

CLK:RFS

Section I. Facility Information.

Subsection A. Facility 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. Also, it has a corrugated containers plant.

Also included in this permit are miscellaneous unregulated emissions units and/or activities.

Based on the Title V Renewal permit application received 12-02-02, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
006	#5 Power Boiler
007	#4 Recovery Boiler
011	#5 Recovery Boiler
013	#4 Smelt Dissolving Tank
014	#5 Smelt Dissolving Tank
015	#7 Power Boiler
020	Tall Oil Plant
021	#4 Lime Kiln
024	C-Line Brownstock Washer System
033	Pulping System MACT I
034	Package Boiler
045	Wide-web Flexographic Printers

Unregulated Emissions Units and/or Activities

E.U. ID No.	Brief Description of Emissions Units and/or Activity
025	Woodyard
026	Brownstock Washing *(Regulated under 40 CFR Part 63 Subpart S, extended compliance deadline per October 8, 2004 Extension Letter)*
028	Chemical Recovery Area
029	Converting Area/Warehouse
030	Facility Wide Miscellaneous
031	Secondary Fiber Pulp
032	Papermaking

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

<u>These documents are provided to the permittee for information purposes only:</u>
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes
Statement of Basis

<u>These documents are on file with permitting authority:</u>
Initial Title V Permit issued June 15, 1998
Application for a Title V Operation Permit Revision received 10/17/01
Additional Information Request dated 12/14/01
Additional Information Response received 03/18/02
Application for a Title V Air Operation Permit Renewal received 12/02/02
Additional Information received 02/03/03
Additional Information Request dated 03/05/03
Additional Information received 06/06/03
Additional Information Request dated 07/02/03
Additional Information received 12/05/03
Additional Information Request dated 01/02/04
Additional Information received 04/07/04
Additional Information Request dated 05/06/04
Additional Information received 10/04/04
Comments from applicant received 05/05/05
Comments from applicant dated 11/30/05
Comments from applicant received 12/1/05
Comments from applicant received 12/14 & 15/05
Comments from applicant received 1/9/06
Comments from applicant dated 1/30/06
Comments from applicant dated 5/5/06
Comments from applicant dated 8/25/06
Comments from applicant dated 9/7/06
Comments from applicant dated 9/11 & 12/06
Comments from applicant dated 9/14/06

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants, which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.; AC45-141877; AC45-141873; AC45-141872; AC45-141871; AC45-141875; AC45-141874]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Visible Emissions Standard – Emission Units equipped with Wet Scrubbers.
Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C. (refer to Subsection P).
[Rules 62-296.404(1)(b) F.A.C.]

Documents on file with USEPA

The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

5. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

6. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-6, TITLE V CONDITIONS):

The following requirements are "not federally enforceable":

Woodyard
Chips are transported to the chip screening building and stacker/reclaimers on a covered conveyor. Sawdust and rejected chips from the screening process are transported by covered conveyor to the bark reclaimer. Sawdust and chips are removed from the conveyors and transfer points and placed onto the ground. The chips, sawdust, and other wood debris that escapes are collected with heavy equipment and placed in the bark reclaimer or the bark pile.

Pulping Area General
Chips are transported to the digester building on covered conveyors. Chips are transported to the Kamyr Digester in a blow line providing complete enclosure. Chips and fines that escape the transfer system are removed and then swept and carried to a chute where it is dumped to the ground or directly into a dumpster outside the digester building. The pile that is created is reclaimed into the bark system.

Chemical Recovery Area
Purchased lime is unloaded in a closed system and transferred to storage. Kiln reburned lime is transferred in an enclosed elevator system to storage. Reburned lime is stored in a lime bin with a baghouse. Purchased lime is stored in a lime bin with a baghouse for railcar unloading. Lime piles are minimized by reclaiming as quickly as practicable and hauling offsite if necessary. Moisture applications are applied when necessary.

Facility
The particulate matter on roadways and any storage piles can be controlled from entrainment into the air by moisture applications if necessary. Paved parking areas are maintained on site for employee parking. Internal mill roadways are generally paved and speed limits are maintained. Vegetation and trees are maintained on the north and east perimeters of the facility to minimize as practicable windblown particulates.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the Title V Renewal permit application received 12-02-02.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (condition 57. of APPENDIX TV-6, TITLE V CONDITIONS.}

9. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which is day one. [Rule 62-213.440, F.A.C.]

10. Startup, Shutdown, Malfunction Plan. The Permittee shall adopt and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction. The plan shall meet the requirements of 40 CFR 63.6(e)(3) including containing a program of corrective action for malfunctioning processes and the air pollution control and monitoring equipment used to comply with the relevant standards of 40 CFR Part 63. The current SSM Plan shall be maintained at the facility and be available for inspection and copying by the Administrator upon request. If the SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), the Permittee shall maintain at the facility each previous (i.e., superseded) version of the SSM Plan, and shall make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a Part 70 or 71 permit revision. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield.

Note: This condition is applicable to Emissions Units 006, 007, 011, 013, 014 and 021.
[40 CFR 63.6(e)]

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-6, TITLE V CONDITIONS.}"

12. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

13. Submittals. All reports, tests, notifications or other submittals required by this permit shall be submitted to the Department's Northeast District, Air Section:

Florida Department of Environmental Protection
Northeast District Office, Air Program
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7590

Telephone: 904/807-3300
Fax: 904/448-4363

14. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155, Fax: 404/562-9163

15. A. Where a limit for an air pollution control parameter (e.g., scrubber flow rate and/or pressure drop, percent sulfur content in fuel oil, etc.) exist in a permit condition[1]:

i. Within 60 days of the operation of a pollution control device (e.g., scrubber, baghouse, etc.) lower than a minimum numerical control parameter limit specified in a condition of this permit, the permittee shall conduct a compliance test with the pollution control device operating at no higher than the lower value at which it operated, in order to demonstrate compliance; or

ii. Within 60 days of the operation of a pollution control device (e.g., scrubber, baghouse, etc.) higher than a maximum numerical control parameter limit specified in a condition of this permit, the permittee shall conduct a compliance test with the pollution control device operating at no lower than the higher value at which it operated, in order to demonstrate compliance. The test result(s) shall be submitted to this office within 45 days of testing. Acceptance of the test(s) by the Department will establish the fact that the operation of the pollution control device, at the observed parameter outside the permit limit, was not a violation of this permit. Furthermore, the permittee may submit an application to amend this permit to reflect the higher or lower control parameter. [Rule 62-213.440(1)(b)1.b., F.A.C.]

B. Where no limit for an air pollution control parameter (e.g., scrubber flow rate and/or pressure drop, percent sulfur content in fuel oil, etc.) exists in a permit condition:

i. Within 60 days of the operation of a pollution control device (e.g., scrubber, baghouse, etc.) lower than 90% of the minimum numerical control parameter determined during the most recent successful compliance test, the permittee shall conduct a compliance test with the pollution control device operating at no higher than the lower value at which it operated, in order to demonstrate compliance.

ii. Within 60 days of the operation of a pollution control device (e.g., scrubber, baghouse, etc.) higher than 110% of the maximum numerical control parameter determined during the most recent successful compliance test, the permittee shall conduct a compliance test with the pollution control device operating at no lower than the higher value at which it operated, in order to demonstrate compliance. The test result(s) shall be submitted to this office within 45 days of testing. Acceptance of the test(s) by the Department will establish the fact that the operation of the pollution control device, at the observed parameter, was not a violation of this permit. Furthermore, the permittee may submit an application to amend this permit to reflect the higher or lower control parameter.
[Rule 62-213.440(1)(b)1.b., F.A.C.]

C. All surrogate parameter setpoints established by this condition shall be verified during each specified compliance testing period. [Rule 62-4.070(3), F.A.C.]

[1] Not applicable to 1) parameters established pursuant to CAM, 2) during Startup, Shutdown, Malfunction (SSM) Events, and 3) during excess emissions events covered under Rule 62-210.700, F.A.C. During such SSM events, the facility shall comply with the Startup, Shutdown, Malfunction Plan required under facility-wide Condition No. 10 unless otherwise noted by permit or rule.

16. Compliance Plan. The No. 5 Power Boiler is subject to 40 CFR 61, Subpart E. Appendix CP-1 is a part of this permit.
[Rule 62-213.440(2), F.A.C.]

17. Compliance Plan. Under Air Construction Permit No. 0890003-008-AC, the permittee is authorized to operate (construct- after-the-fact) package boiler. The package boiler is subject to 40 CFR 60, Subpart Db. Appendix CP-2 is a part of this permit.
[Rule 62-213.440(2), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
006	No. 5 Power Boiler. Particulate matter emissions, including the fly ash, are controlled by a multiple cyclone (without fly ash reinjection), followed by an electrostatic precipitator. The ESP collected fly ash is injected into one of the No. 7 Power Boiler coal pulverizers and the boiler bottom ash to the wastewater treatment plant. The total maximum operational heat input of this emissions unit is 805 MMBtu/hr. This emissions unit may burn carbonaceous fuel and No. 6 fuel oil in any combination or 100% No. 6 fuel oil. The No. 6 fuel oil may contain on-specification used oil. No. 2 fuel oil may also be fired in the boiler during startup only. Low volume, high concentration (LVHC) Noncondensible gases (NCG) from the batch digester system, continuous digester system, turpentine recovery system, evaporator systems, and foul condensate collection tank are collected and burned in this boiler as the backup control device to the No. 4 Lime Kiln for compliance with 40 CFR 63, Subpart S. CAM applies to this emission unit for particulate matter.

{Permitting note (s): This emissions unit is regulated under: Rule 296.410, F.A.C. – Carbonaceous Fuel Burning Equipment; Rule 62-296.404, F.A.C. – Kraft Pulp Mills; Rule 62-296.405, F.A.C. – Fossil Fuel Steam Generators with More Than 250 Million Btu Per Hour Heat Input; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.; 40 CFR 61 Subpart E-National Emission Standard for Mercury; and 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters}

The following specific conditions apply to the emissions unit(s) listed above:

A.0. The Permittee shall comply with the milestones identified in Compliance Plan, Appendix CP-1 in addition to the following conditions.

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The operation rate shall not exceed 805 MMBtu/hr.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

A.2. Methods of Operation – This emissions unit shall be fired with carbonaceous fuel (bark, wood, sawdust, wastewater wood fiber residuals, and bark ash) and No. 6 fuel oil in any combination. The sulfur content in the No. 6 fuel oil shall not exceed 2.5% by weight.

Alternative Methods of Operation are described below:

Alternative Method	Fuel Options	Maximum Heat Input Rate (MMBtu/hr)	Maximum Operating Rate
1	Carbonaceous fuel only (24-hr)	457.0 MMBtu/hr[1]	107,600 lb/hr[1] (53.8 TPH)
2	No. 6 fuel oil only[2] (1-hr)	657.8 MMBtu/hr	4,417 gal/hr[2]
2	(24-hr)	573.4 MMBtu/hr[1]	3,850 gal/hr[1,2,3]
3	No. 2 fuel oil only[2] (1-hr)	657.8 MMBtu/hr	4,837 gal/hr
3	(24-hr)	573.4 MMBtu/hr[1]	4,216 gal/hr
4	Any combination of any alternative method listed above	805 MMBtu/hr	Bark – 457.0 MMBtu/hr Fuel oil - 348 MMBtu/hr

[1]Based on permit limit.
[2]Fuel oil may include on-spec used oil. Prior to blending it shall comply with the provisions of 40 CFR 279 & 761, and Used Oil Conditions in Subsection L.
[3]92,400 gallons per 24-hour period: 7AM – 7AM.

[Rule 62-213.410, F.A.C., Construction Permit No. AC45-194149; Construction Permit No. 0890003-003-AC; Construction Permit No. AC45-190382/PSD-FL-165]

A.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction permit No. AC45-194149]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

A.4.a. Particulate Matter Emissions – Alternative Methods 1 or 4. Particulate matter emissions shall not exceed 0.3 lb per MMBtu heat input from carbonaceous fuels or 0.1 lb per MMBtu heat input from No. 6 fuel oil, and 137.1 lb per hour and 598.9 TPY.

[Rule 62-296.410(1)(b)2., F.A.C.; Construction permit No. AC45-194149]

A.4.b.1. Particulate Matter Emissions – Alternative Methods 2 or 3[1]. Particulate Matter emissions shall not exceed 0.1 pounds per million Btu heat input, as measured by applicable compliance methods.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-296.405(1)(b), F.A.C.; Construction Permit No. AC45-194149]

A.4.b.2. Particulate Matter Emissions- Alternate Methods 2 or 3- Soot Blowing & Load Change[1]. Particulate Matter emissions shall not exceed an average of 0.3 lb/MMBTU heat input while boiler cleaning (soot blowing) or during a load change. These excess emissions resulting from operation in either of these two modes shall not exceed 3 hours in any 24-hour period. Best operational practices to minimize emissions shall be adhered to and the duration of excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-210.700(3), F.A.C.]

A.5. Sulfur Dioxide – All Methods of Operation. Sulfur Dioxide Emissions shall be limited to 1,733.7 lb/hr, and 1,511.1 lb/hr (24-hour average)[1], and 6,618.62 TPY. The sulfur content of the No. 6 fuel oil fired shall not exceed 2.5 percent by weight.

[1] When firing NCGs and No. 6 Fuel Oil in this emissions unit the pound per hour limit (24-hour average) shall be determined as stated in Condition A.10.
[Construction Permit No. 0890003-003-AC, Construction Permit No. AC45-194149; 62-296.405(1)(c)1.j.,F.A.C.]

A.6. Total Reduced Sulfur Emissions – All Methods of Operation. When NCG gases are collected and routed to this Emissions Unit, TRS emissions shall not exceed 5 ppm by volume on a dry basis at standard conditions corrected to 10% oxygen as a 12-hour average, and 11.74 lb/hr and 12.85 tons per year.
[Rule 62-296.404(3)(f), F.A.C.; Construction Permit No. 0890003-003-AC]

A.7.a. Visible Emissions — Alternative Methods 1 or 4. Visible emissions shall not exceed 30% opacity except for two minutes per hour of not more than 40% opacity.
[Rule 62-296.410(1)(b)1., F.A.C.; Construction Permit No. AC45-194149]

A.7.b. Visible Emissions – Alternate Methods 2 or 3[1]. Visible emissions shall not exceed 20% opacity except for one, two minute period per hour during which opacity shall not exceed 40%.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-296.405(1)(a), F.A.C.; Construction Permit No. AC45-194149]

A.7.c. Visible Emissions -Alternate Methods 2 or 3 - Soot Blowing & Load Change[1]. Excess emissions resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed 60% opacity, and provided (1) best operation practices to minimize emissions are adhered to and (2) the duration of excess emissions is minimized.

Visible emissions above 60% opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions for boilers that are operating continuous opacity monitors.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-210.700(3), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.8.a. Particulate Matter – Alternate Methods 1 or 4. The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year. [Rule 62-296.410(3)(b), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.]

A.8.b.1. Particulate Matter – Alternate Methods 2 or 3[1]. The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature at no mare than 320 degreed Fahrenheit. An acetone wash shall be used with the test method. A compliance test shall be performed annually, once each federal fiscal year. A test shall not be required, however, if the emissions unit does not burn liquid fuel, other than startup, for a total of more than 400 hours in a federal fiscal year.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-296.405(1)(e)2.,F.A.C.; Rule 62-297.310(7)(a)5.,F.A.C.; Construction Permit No. AC 45-194149]

A.8.b.2 Particulate Matter– Alternate Methods 2 or 3– Soot Blowing[1]. The test method for particulate matter emissions shall be as specified in Condition A.8.b.1. A compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which the fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-297.310(7)(a)2., F.A.C.]

A.9. Sulfur Dioxide-Alternate Methods 2 or 3. The permittee shall use fuel sampling and analysis as an alternate sampling procedure to EPA Method 6 testing. Results of the fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The Department retains the authority to require EPA Method 6 or 6C compliance testing if it has reason to believe that exceedances of the sulfur dioxide emissions limiting standard are occurring. The fuel sampling and analysis or EPA Method 6 testing (as applicable), shall be performed annually, once each federal fiscal year.

[Rule 62-296.405(1)(e)3., F.A.C.; Construction Permit No. AC45-194149; Smurfit Stone Alternate Procedure Request dated June 2, 2006; Department Alternate Procedure Request Approval dated August 28, 2006]

A.10. Sulfur Dioxide (24-hr) - NCG/Fuel Oil. The 24-hour average sulfur Dioxide emissions during period of NCG/Fuel Oil burning will be calculated by summing the Sulfur Dioxide emissions due to No. 6 fuel oil burning and the SO2 emissions due to NCG burning in the boiler.

For purposes of this condition, Sulfur Dioxide emissions due to No. 6 fuel oil burning will be determined by the total gallons of fuel oil fired as follows:

%S oil x 8.2 lb/gal x 2 lb SO_2/lb S = (16.4 x (S lb/100 lb oil)) lb SO_2/gal = (0.164 x S) lb SO_2/gal

(0.164 x S) lb/ SO_2/gal x gallons of fuel oil fired = lb SO_2

where S = Sulfur content of oil in percent

Each hour of NCG burning shall be deemed to result in SO_2 emissions of 498 lb/hr (24-hour average). SO_2 emissions that are calculated to be greater than 1,511.1 lb/hr (24-hour average) will be offset by burning lower sulfur content fuel oil. This lower sulfur fuel will be purchased and delivered within the next regular scheduled delivery. The offset will be calculated using the above equation for the lower sulfur content fuel oil and taking into account its sulfur content. The offsetting shall be completed no later than the end of the calendar year during which the excess emissions were emitted, or with the next scheduled deliver, whichever is later.
[Construction Permit No. 0890003-003-AC]

A.11. Fuel Oil Sulfur Content. The sulfur content of the No. 6 fuel oil shall be verified using DEP approved ASTM methods; and, the lab analysis data sheet, which is provided by the fuel oil vendor upon delivery, shall be kept on record for at least two years.
[Construction Permit No. AC45-194149; Applicant Request dated November 30, 2005]

A.12. Total Reduced Sulfur Emissions – All Methods of Operation. When routing TRS gases to this boiler for thermal destruction, the gases shall be introduced with the primary fuel or into the flame zone, or with the combustion air. The TRS gases shall be subject to a minimum temperature of 1200° F for at least 0.5 second. It is assumed that compliance with the TRS emissions limit stated in Condition No. A.6. is achieved by maintaining this minimum temperature and residence time.
[Rules 62-296.404(3)(a)1., and 62-296.404(5)(d), F.A.C.; 40 CFR 60.283(a)(1)(iii)]

A.13.a. Visible Emissions- Alternate Methods 1 or 4. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.
[Rule 62-296.410(3)(a), F.A.C. ; Rule 62-297.310(7)(a)4.a., F.A.C.]

A.13.b. Visible Emissions- Alternate Methods 2 or 3[1]. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-296.405(e)1., F.A.C. ; Rule 62-297.310(7)(a)4.a., F.A.C.]

A.13.c. Visible Emissions Alternate Methods 2 or 3– Soot Blowing and Load Change[1]. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-297.310(7)(a)4.a., F.A.C.]

Monitoring of Operations

A.14. A fuel flow meter with data storage and print capability shall be installed and calibrated on the fuel line supplying the fuel oil to the No. 5 Power Boiler. The fuel flow meter shall meet an accuracy of ± 2.0% of the upper range value, and calibrations will be performed at least annually.
[Construction Permit No. AC45-194149; Construction Permit No. 0890003-003-AC]

Continuous Monitoring Requirements

A.15. Opacity Monitor. A visible emissions (VE) continuous monitor system (CMS) shall be used to evaluate and record the opacity of the stack flue gas. The CMS shall be properly calibrated, operated and maintained in accordance with Rule 62-297.520, F.A.C.
[Rule 62-296.405(1)(f)1.a.,F.A.C.; Construction Permit No. AC45-194149]

Compliance Assurance Monitoring (CAM) Requirements

A.16. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

A.17. Excess Emissions – Alternate Methods 1 or 4 – Startup, Shutdown, Malfunction. Excess Emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.18. Excess Emissions Alternate Methods 2 or 3 – Startup and Shutdown[1]. Excess Emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-210.700(2), F.A.C.]

A.19. Excess Emissions- All Methods of Operation. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

A.20. Excess Emissions – All Methods of Operation. This emissions unit shall also meet the excess emissions requirements as stated in Condition No. M.3.
[40 CFR 63.443(e)(1)]

Recordkeeping Requirements

A.21. Sulfur Dioxide (24-hr) - NCG/Fuel Oil. The facility shall maintain records of the following:

- The date and time NCGs are fired into the boiler,
- The sulfur content of the lower sulfur fuel oil,
- The flow rate of the fuel oil,
- The amount (gallons) of the lower sulfur fuel oil
- The quantity of SO_2 emissions to be offset.
- The quantity of actual SO_2 emissions offset.

[Construction Permit No. 0890003-003-AC]

Reporting Requirements

A.22. SO_2 emissions offset report. A SO_2 emissions offset report shall be submitted to the Compliance Section of the Northeast District Office on an annual basis. All annual reports shall be postmarked no later than the 45th day following the end of the reporting period (February 15).
[Construction Permit No. 0890003-003-AC]

A.23. No. 6 Fuel Oil – 100% Firing. The Department shall be notified when the boiler is switched to operating at 100% No. 6 fuel oil; and, a log book shall be maintained recording, at a minimum, the date(s) and the beginning and ending "clock time(s)" of operation while firing 100% No. 6 fuel oil.
[Construction Permit No. AC45-194149]

A.24. Excess Emissions – Alternate Methods 2 or 3 -Quarterly Reporting Requirements[1]. The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards in Condition A.4.b.1., A.5., A.7.b. for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the facility for a period of two years.

[1] Applicable when the boiler is fired with 100% fuel oil during times other than startup, shutdown, or malfunction.

[Rule 62-296.405(1)(g), F.A.C.]

A.25. Excess Emissions- All Methods of Operation– Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

Common Conditions

A.26. This emissions unit is also subject to Common Condition Nos. L.1. - L.3.

A.27. This emissions unit is also subject to the applicable 40 CFR Part 63, Subpart S Common Conditions as stated in Subsection M.

A.28. This emissions unit is also subject to the requirements of Subsection O.

A.29. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
007	#4 Recovery Boiler (Babcock &Wilcox low odor design). Particulate matter emissions are controlled by an electrostatic precipitator. The total maximum operational rate of this emissions unit is 137,500 lbs Black Liquor Solids/hr (68.75 Tons BLS/hr). This emissions unit is capable of serving the mill with 492,000 lb/hr of high-pressure (quality) steam flow.

{Permitting note(s): This emissions unit is regulated by Rule 62-296.404, F.A.C. – Kraft Pulp Mills; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The operation rate shall not exceed 137,500 lbs Black Liquor Solids (BLS)/hr.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0890003-010-AC]

B.2. Methods of Operation – This emissions unit shall be fired with Black Liquor Solids and/or No. 6 fuel oil. The No. 6 fuel oil may contain on-spec used oil provided the on-spec used oil meets the requirements of Subsection L. The maximum sulfur content in the No. 6 fuel oil, prior to any blending with on-spec used oil, shall not exceed 2.5% by weight. The No. 6 fuel oil may be fired during periods of startup, shutdown and malfunction. If the No. 6 fuel oil contains on-spec used oil, the on-spec used oil must meet the requirements of Condition L.2.1. in order to be fired during periods of startup, shutdown or malfunction.

Alternative Methods of Operation are described below:

Alternative Method	Fuel Options	Design Heat Input Rate (MMBtu/hr)	Maximum Operating Rate
1	Black liquor solids (BLS) only (24-hr)	852 MMBtu/hr[1]	137,500 lb/hr
2	No. 6 fuel oil only[2] (24-hr)	852 MMBtu/hr	2,981 barrels/day
3	Any combination of the alternative methods listed above	Individual rates listed above	Individual rates listed above

[1]Based on 6,200 Btu/lb.
[2]Fuel oil may contain on-spec used oil.
[Rule 62-213.410, F.A.C.; Construction Permit No. AC45-190382/PSD-FL-165; Construction Permit No. 0890003-010-AC]

B.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

B.4.a. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen.
[40 CFR 63.862(a)(1)(i)(A), ; Construction Permit No. 0890003-010-AC]

B.4.b. Particulate Matter. Particulate Matter Emissions shall not exceed 3 lbs per 3000 lbs of BLS, 137.5 lbs/hr and 602.25 TPY.
[Rule 62-296.404(2)(a), F.A.C., Construction Permit No. 0890003-010-AC]

B.5. Total Reduced Sulfur (TRS). TRS emissions shall not exceed 5 ppm by volume on a dry basis at standard conditions corrected to 10% oxygen as a 12-hour average, 3.24 lbs/hr and 14.19 TPY.
[Rule 62-296.404(3)(c)1.b., F.A.C.; Operation Permit No. AO45-184171, FINAL Title V Operation Permit No. 0890003-001-AV]

B.6. Visible Emissions. Visible Emissions shall not exceed 45% opacity except visible emissions of up to 60% opacity shall be allowed for one six-minute period during any hour.

[Rule 62-296.404(1)(a)1., F.A.C.; FINAL Title V Operation Permit No. 0890003-001-AV]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.7. Particulate Matter. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be performed annually, once each federal fiscal year.
[40 CFR 63.865(b)(1); Rule 62-296.404(4)(a)2., F.A.C.]

B.8. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (21 - X)/(21 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (8 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2)]

B.9. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3A or 3B in Appendix A of 40 CFR Part 60. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.
[40 CFR 63.865(b)(3)]

B.10. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B; and

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

B.11. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.
[Rule 62-296.404(4)(a)1., F.A.C.; Construction Permit No. 0890003-010-AC]

B.12. Total Reduced Sulfur (TRS). The test method for TRS shall be EPA Method 16, EPA Method 16A, or EPA Method 16B, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal. EPA Method 16 or EPA Method 16A pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing.
[Rule 62-296.404(4)(a)3., F.A.C.; Rule 62-297.401(7)(a)3.,F.A.C.]

Continuous Monitoring Requirements

B.13. Total Reduced Sulfur (TRS). The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. The continuous emissions monitoring system shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

c. The continuous emissions monitoring system shall be located downstream of the control device such that representative measurements of process parameters can be obtained.

d. The continuous emissions monitoring system shall be certified pursuant to the provisions of 40 C.F.R. Part 60, Appendix B, Performance Specification 2 and Performance Specification 3, and 40 C.F.R. Part 60, Appendix B, Performance Specification 5, which are adopted by reference in Rule 62-204.800(7), F.A.C. The exception is that the phrase "or other approved alternative" in s. 3.2 of Performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 C.F.R. Part 60, Appendix A, Reference Method 16 and Method 16A, adopted by reference in Rule 62-204.800(7), F.A.C., are to be used.

e. The continuous emissions monitoring system shall be in continuous operation, except when the emissions unit is not operating, or during system breakdowns, repairs, calibration checks, and zero and span adjustments.

f. During any times as there is reason to believe the system does not conform to the performance specifications under this rule (for example, equipment repairs, replacements, excessive drift and such), the owner or operator of any affected emissions unit shall conduct continuous monitoring system performance evaluations and furnish the Department, within sixty days thereof, two copies of a written report of the results of such tests. These continuous emissions monitoring systems performance evaluations shall be conducted in accordance with the requirements and procedures contained in Rule 62-296.404(5)(b)1.d., F.A.C.

g. The continuous emissions monitoring system shall have a maximum span value not to exceed:

   (i) A total reduced sulfur concentration of 30 ppm.

h. The continuous emissions monitoring system shall be checked by the owner or operator in accordance with a written procedure at least once daily and after any maintenance to the system. The owner or operator shall check the zero (or low level value between 0 and 20 percent of span value) and span (90 to 100 percent of span value) calibration drifts. The zero and span shall be adjusted, as a minimum, whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications referenced in Rule 62-296.404(5)(b)1.d., F.A.C. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.

[Rule 62-296.404(5)(b)(1)]

B.14. Total Reduced Sulfur (TRS) – CEM Data. The permittee shall:

a. Reduce all data to one-hour averages for each 60-minute period beginning on the hour. One-hour averages shall be computed from a minimum of four data points equally spaced over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the computation. Either an arithmetic or integrated average shall be used. The data output of the continuous emissions monitoring system may, at the owner's or operator's option, include a numerical format showing individual numerical readings and averages in addition to the required strip chart format with legible ink tracings and calibration information. All data output shall be clearly and properly identified by the operator. All system breakdowns, repairs, calibration checks, span adjustments and periods of excess emissions shall legibly appear on all data output.

b. Calculate and record on a daily basis the 12-hour average total reduced sulfur concentrations for two consecutive 12-hour periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous one-hour average total reduced sulfur concentrations provided by the continuous emissions monitoring system.

c. Calculate and record on a daily basis 12-hour average oxygen concentrations for two consecutive 12-hour periods of each operating day. These 12-hour averages shall correspond to the 12-hour average total reduced sulfur concentrations from Rule 62-296.404(5)(b)2.b., F.A.C., and shall be determined as an arithmetic mean of the appropriate 12 contiguous one-hour average oxygen concentrations provided by each continuous emissions monitoring system.

d. Correct all 12-hour average total reduced sulfur (TRS) concentrations using the following equation:

Ccorr = Cmeas (21 - X)/(21 - Y)

where:

Ccorr = the TRS concentration corrected for oxygen.
Cmeas = the TRS concentration unconnected for oxygen.
X = the volumetric oxygen concentration in percentage that the measured TRS concentration is to be corrected to 8 percent.
Y = the measured 12-hour average volumetric oxygen concentration.

e. The data shall be rounded to the same number of significant digits as the standard.

[Rules 62-296.404(5)(b)2., F.A.C.]

B.15. Continuous Opacity Monitoring System (COMS). The Permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]
(2) [Reserved]
(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
(4) The COMS data must be reduced as specified in 40 CFR 63.8(g)(2).

[40 CFR 63.864(d)]

B.16. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition B.21. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

B.17. PM Emissions – Violations. It shall be considered a violation of the standards of Condition B.4.a. if the following monitoring exceedance occurs:

- when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period.

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

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

B.18. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup, shutdown, or malfunction is conditionally allowed for up to 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.
[Rule 62-210.700(1), F.A.C.]

B.19. Excess Emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Recordkeeping and Reporting Requirements

B.20. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. The excess emissions occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the kraft recovery furnace occurred and only the actual 12-hour periods when the kraft recovery furnace was not operating), and
2. N/A
3. N/A
4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

    a. Operation of all equipment within permit limits for loading rates and other process parameters,

    b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

    c. Training of personnel in the operation and maintenance of equipment,

    d. Visual and instrument inspections of equipment on a regular basis, and

    e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Rule 62-296.404(6)(c)1. through 3., F.A.C.

[Rules 62-296.404(6)(a), (b), (c)(1), (c)(4), and (d), F.A.C.]

B.21. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition B.15. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

B.22. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition B.16.
[40 CFR 63.866(b)]

B.23. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition B.17.
[40 CFR 63.866(b)]

B.24. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d

(2) N/A

(3) Records of parameter monitoring data required under 40 CFR 63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions B.7 through B.10.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

B.25. Excess Emissions Report - PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition B.16 or B.17. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition B.16. and the number and duration of occurrences when the source met or exceeded the conditions in Condition B.17. Reporting excess emissions below the violation thresholds of Conditions B.16. and B.17. does not constitute a violation of the applicable standard.

(1) When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

(2) The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

B.26. Excess Emissions – Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

Notifications

B.27. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.
[40 CFR 63.867(a)(1)]

Common Conditions

B.28. This emissions unit is also subject to the on-spec used oil conditions in Subsection L.

B.29. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

40 CFR Part 63, Subpart A, General Provisions

B.30. This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart A, General Provisions.

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
011	#5 Recovery Boiler (low odor design). Particulate matter emissions are controlled from the North and South stacks by an electrostatic precipitator. The furnace is capable of recovering chemicals from Kraft spent liquor (straight mode) and Neutral Sulfite semi-chemical process liquor (cross mode). The total maximum operation rate of this emissions unit is 156,780 lbs Black Liquor Solids/hr (78.39 Tons BLS/hr). This emissions unit is capable of serving the mill with 495,700 lb/hr of high-pressure (quality) steam flow.

{Permitting note(s): This emissions unit is regulated under: 40 CFR 52.21(d)(2)(ii), NSPS - 40 CFR 60, Subpart BB- Standards of Performance for Kraft Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and Rule 62-296.404, F.A.C. – Kraft Pulp Mills}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The operation rate shall not exceed 156,780 lbs Black Liquor Solids (BLS)/hr.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0890003-010-AC]

C.2. Methods of Operation – This emissions unit shall be fired with Black Liquor Solids and/or No. 6 fuel oil. The No. 6 fuel oil may contain on-spec used oil provided the on-spec used oil meets the requirements of Subsection L. The maximum sulfur content in the No. 6 fuel oil, prior to any blending with on-spec used oil, shall not exceed 2.5% by weight. The No. 6 fuel oil may be fired during periods of startup, shutdown and malfunction. If the No. 6 fuel oil contains on-spec used oil, the on-spec used oil must meet the requirements of Condition L.2.1. in order to be fired during periods of startup, shutdown or malfunction.

Alternative Methods of Operation are described below:

Alternative Method	Fuel Options	Design Heat Input Rate (MMBtu/hr)	Maximum Operating Rate
1	Black liquor solids (BLS) only (24-hr)	972 MMBtu/hr[1]	156,780 lb/hr
2	No. 6 fuel oil only[2] (24-hr)	972 MMBtu/hr	3,012 barrels/day
3	Any combination of the alternative methods listed above	Individual rates listed above	Individual rates listed above

[1]Based on 6,200 Btu/lb.

[2]Fuel oil may contain on-spec used oil.
[Rule 62-213.410, F.A.C.; Construction Permit No. AC45-190382/PSD-FL-165; Construction Permit No. 0890003-010-AC]

C.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8568 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0890003-010-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

C.4. Particulate Matter Emissions. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 gram per dry standard cubic meter (g/dscm) (0.044 grain per dry standard cubic foot (gr/dscf)) corrected to 8 percent oxygen; 83.3 lbs/hr and 356.9 TPY.
[Construction Permit No. AC45-2706; 40 CFR 63.862(a)(1)(i)(A); Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.282(a)(1)(i); PSD-FL-002 BACT requirement]

C.5. Total Reduced Sulfur (TRS) – Cross Recovery Furnace Operation Mode. TRS emissions shall not exceed 25 ppmvd corrected to 8% O_2, 26.3 lbs/hr and 112.67.
[Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.283(a)(3); Construction Permit No. AC45-2706; Operation Permit No. AO45-167572; FINAL Title V Operation Permit No. 0890003-001-AV]

C.6. Total Reduced Sulfur (TRS) - Straight Recovery Furnace Operation Mode. TRS emissions shall not exceed 5 ppmvd at 8% O_2, 5.26 lbs/hr and 22.53 TPY.
[Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.282(a)(1)(i); 40 CFR 60.283(a)(2); Construction Permit No. AC45-2706; Operation Permit No. AO45-167572; FINAL Title V Operation Permit No. 0890003-001-AV]

C.7. Visible Emissions. Visible emissions shall be less than 35% opacity.
[Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.282(a)(1)(ii); PSD-FL-002 BACT requirement]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.8. Particulate Matter. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used, except that Method 17 in Appendix A of 40 CFR Part 60 may be used in lieu of Method 5 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). For Methods 5 and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. The particulate concentration shall be corrected to the appropriate oxygen concentration according to Condition C.9. A compliance test shall be conducted annually, once each federal fiscal year.

[40 CFR 63.865(b)(1); 40 CFR 60.285(b)(1), 40 CFR 60.285(f); Construction Permit No. 0890003-010-AC]

C.9. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (21 - X)/(21 - Y)$$

Where:
C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (8 percent).
Y = the measured average volumetric oxygen concentration.
[40 CFR 63.865(b)(2); 40 CFR 60.285(b)(1); 40 CFR 60.284(c)(3)]

C.10. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3B in Appendix A of 40 CFR Part 60. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.
[40 CFR 63.865(b)(3); 40 CFR 60.285(b)(2); Construction Permit No. 0890003-010-AC]

C.11. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3B in Appendix A of 40 CFR Part 60 shall be used; and

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.

[40 CFR 63.865(b)(5) and (6); 40 CFR 60.285(b)(2); Construction Permit No. 0890003-010-AC]

C.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9 and the procedures in 40 CFR 60.11. A compliance test shall be conducted annually, once each federal fiscal year.

[40 CFR 60.285(b)(3); Construction Permit No. 0890003-010-AC]

C.13. Total Reduced Sulfur (TRS). The owner or operator shall determine compliance with the TRS standards in Condition Nos. C.5. and C.6.. as follows:

(1) Method 16 shall be used to determine the TRS concentration. As an alternative to Method 16, Method 16A or 16B may be used if the sampling time is 60 minutes. The TRS concentration shall be corrected to the appropriate oxygen concentration using the procedure in Condition C.9. The sampling time shall be at least 3 hours, but no longer than 6 hours. A compliance test shall be conducted annually, once each federal fiscal year when the recovery boiler has been operated in Cross Recovery Furnace Operation Mode during the given year. Otherwise, a compliance test shall be conducted once every five years, prior to operation permit renewal

(2) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the oxygen concentration. The sample shall be taken over the same time period as the TRS samples.

(3) When determining whether a furnace is a straight kraft recovery furnace or a cross recovery furnace, TAPPI Method T.624 (incorporated by reference-see 40 CFR 60.17) shall be used to determine sodium sulfide, sodium hydroxide, and sodium carbonate. These determinations shall be made 3 times daily from the green liquor, and the daily average values shall be converted to sodium oxide (Na_20) and substituted into the following equation to determine the green liquor sulfidity:

$$GLS = 100\ C\ Na_2S\ /(C\ Na_2S + CNa_2H + CNa_2CO3\ )$$

where:

GLS = green liquor sulfidity, percent.
CNa_2S = concentration of Na_2S as Na_2O, mg/liter (gr/gal).
CNaOH = concentration of NaOH as Na_2O, mg/liter (gr/gal).
CNa_2CO_3 = concentration of Na_2CO_3 as Na_2O, mg/liter (gr/gal).

[40 CFR 60.285(d); 40 CFR 60.285(f); Construction Permit No. 0890003-010-AC]

Continuous Monitoring Requirements

C.14. Total Reduced Sulfur (TRS) and O_2. The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. The continuous emissions monitoring system shall be located downstream of the control device such that representative measurements of process parameters can be obtained.

c. The continuous emissions monitoring system shall have a maximum span value not to exceed:
   (i) A total reduced sulfur concentration of 30 ppm when in Straight Mode.
   (ii) A total reduced sulfur concentration of 50 ppm when in Cross Mode
   (iii) 20 percent oxygen for the continuous oxygen monitoring system

[Rule 62-204.800(8)(b)35, F.A.C.; 40 CFR 60.284(a)(2)(i); 40 CFR60.284(a)(2)(ii)]

C.15. Total Reduced Sulfur (TRS). – CEM Data. The permittee shall:

(1) Calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed pursuant to Condition C.14.

(2) Calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under Condition C.15.(1) and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed pursuant to Condition C.14.

(3) Correct all 12-hour average TRS concentrations to 8 volume percent using the following equation:

$$Ccorr = Cmeas*(21-X/21-Y)$$

where:

Ccorr = the concentration corrected for oxygen.
Cmeas = the concentration uncorrected for oxygen.
X = the volumetric oxygen concentration in percentage to be corrected to (8 percent for recovery furnaces).
Y = the measured 12-hour average volumetric oxygen concentration.
[40 CFR 60.284(c)]

C.16. Continuous opacity monitoring system (COMS). The permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition. The span of this system shall be set at 70 percent opacity.

(1) [Reserved]
(2) [Reserved]
(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
(4) The COMS data must be reduced as specified in 40 CFR 63.8(g)(2).

[Rule 62-204.800(8)(b)35; 40 CFR 60.284(a)(1); 40 CFR 63.864(d)]

C.17. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition C.28. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

C.18. PM Emissions – Violations**.** It shall be considered a violation of the standards of Condition C.4. if the following monitoring exceedance occurs:

- when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period;

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

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

C.19. Excess Emissions - Violation – Opacity and TRS (40 CFR 60 Subpart BB). The Department will not consider periods of excess emissions reported under Conditions C.27. and C.22.b. to be indicative of a violation of 40 CFR 60.11(d) provided that:

(1) The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur does not exceed:

(i) One percent for TRS emissions.
(ii) Six percent for average opacities.

(2) The Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner, which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

[40 CFR 60.284(e)]

C.20. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup, shutdown, or malfunction is conditionally allowed for up to 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.
[Rule 62-210.700(1), F.A.C.]

C.21. Excess Emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Recordkeeping and Reporting Requirements

C.22.a. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(a) and (b), F.A.C]

C.22.b. Excess Emissions Report - TRS. For the purpose of reports required under 40 CFR 60.7(c), the owner or operator shall report semiannually[1] periods of excess emissions as follows:

(1) For emissions from any recovery furnace periods of excess emissions are:
(i) All 12-hour averages of TRS concentrations above 5 ppm by volume for straight kraft recovery furnaces and above 25 ppm by volume for cross recovery furnaces.

[1] Quarterly reports are required by Rules 62-296.404(6)(a) and (b), F.A.C.

[40 CFR 60.284(d)(1)(i)]

C.23. PM Emissions Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition C.17.
[40 CFR 63.866(b)]

C.24. PM Emissions- Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition C.18.
[40 CFR 63.866(b)]

C.25. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d

(2) N/A

(3) Records of parameter monitoring data required under Condition C.16., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions C.8. through C.13.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

C.26. Excess Emissions Report - PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition C.17. or C.18. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition C.17. and the number and duration of occurrences when the source met or exceeded the conditions in Condition C.18. Reporting excess emissions below the violation thresholds of Conditions C.17. and C.18. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

C.27. Excess Emissions Report – Opacity (40 CFR 60 Subpart BB). For the purpose of reports required under 40 CFR 60.7(c), the owner or operator shall report semiannually periods of excess emissions as follows:

(1) For emissions from any recovery furnace periods of excess emissions are:
(ii) All 6-minute average opacities that exceed 35 percent.

[40 CFR 60.284(d)(1)(ii)]

C.28. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition C.16. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

C.29. Cross Recovery Furnace Operation Mode – Records & Reporting. The owner or operator shall maintain adequate records to document period of operation in the cross recovery furnace mode. The owner or operator shall provide written notification to the Department when the recovery furnace is operated in this mode. This notice shall be postmarked 30 days or as soon as practicable before the change is commenced.
[Rule 62-4.070, F.A.C.]

Notifications

C.30. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.
[40 CFR 63.867(a)(1)]

40 CFR Part 60, Subpart A, General Provisions

C.31. This emissions unit is subject to the requirements of 40 CFR Part 60, Subpart A, General Provisions.

40 CFR Part 63, Subpart A, General Provisions

C.32. This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart A, General Provisions.

Common Conditions

C.33. This emissions unit is also subject to the on-spec used oil conditions in Subsection L.

C.34. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

Subsection D. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
013	#4 Smelt Dissolving Tank (SDT) with a Venturi scrubber to control particulate matter emissions. CAM applies to this emission unit for TRS.

{Permitting note(s): This emissions unit is regulated by Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-296.404, F.A.C. – Kraft Pulp Mills; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The operation rate shall not exceed 137,500 lbs (BLS)/hr[1].

[1]Based on the maximum Black Liquor Solids fired in the #4 Recovery Boiler and equivalent to 56,513 lbs/hr green liquor solids

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC45-184171, Construction Permit No. AC45-141875; Construction Permit No. 0890003-010-AC]

D.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC45-141875; Construction Permit No. 0890003-010-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

D.3. Particulate Matter**.** The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired.

[40 CFR 63.862(a)(1)(i)(B); Rule 62-296.320(4)(a)2., F.A.C.; Construction Permit No. 0890003-010-AC (pending)]

D.4. Total Reduced Sulfur (TRS). TRS emissions shall not exceed 0.048 lb TRS/3000 lb BLS, 2.2 lbs/hr and 9.64 TPY.
[Rule 62-296.404(3)(d)1., F.A.C.; Construction Permit No. AC45-141875; Construction Permit No. 0890003-010-AC (pending)]

D. 5. Visible Emissions. Visible emissions from this emissions unit shall not be equal to or greater than 20% Opacity.
[Rule 62-296.320(4)(b)1., F.A.C., Construction Permit No. AC45-141875; Construction Permit No. 0890003-010-AC (pending)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D. 6. Particulate Matter. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used. For Methods 5, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be conducted annually, once each federal fiscal year.
[Rule 62-296.404(4)(c)1., F.A.C.; Construction Permit No. AC45-141875; 40 CFR 63.865(b)(1)]

D.7. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B;

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used; and.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 63.865(b)(5) and (6)]

D.8. Visible Emissions. The test method for Visible Emissions shall be EPA Method 9. A compliance test shall be conducted annually, once each federal fiscal year and as established in Condition No. D.9. below.
[Rule 62-296.404(2)(b), F.A.C., Construction Permit No. AC45-141875]

D.9. Visible Emissions-Testing Frequency. Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C. (refer to Subsection P).
[Rule 62-296.404(2)(b), F.A.C.; Construction Permit No. AC45-141875]

D.10. TRS Emissions. The test method for total reduced sulfur shall be EPA Method 16, or 16A incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.

[Rules 62-296.404(4)(c)3., 62-297.310(7)(a)3., (7)(a)4.b. F.A.C., 62-297.401(16) and (16)(a), F.A.C.; Construction Permit No. AC45-141875, Amendment dated May 26, 1988, Construction Permit No. 0890003-010-AC; Operation Permit No. AO45-184171]

Continuous Monitoring Requirements

D.11. Total Reduced Sulfur (TRS) – Surrogate Parameters. The owner or operator shall maintain and operate a continuous monitoring device that will be used to determine and record scrubbing medium (weak wash) flow rate to the Venturi scrubber. The minimum flow rate shall be 45 gpm per each 12-hr averaging period.
[Rule 62-296.404(5)(d), Operation Permit No. AO45-184171; Testing dated 07/10/06]

D.12. Continuous Parameter Monitoring System (CPMS)- PM. The owner or operator shall calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in paragraphs (i) and (ii) of this condition:

(i) The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of +/-500 pascals (+/-2 inches of water gage pressure); and

(ii) The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within +/-5 percent of the design scrubbing liquid flow rate.

The minimum pressure drop across the scrubber shall be 11.0 in. H_2O and the minimum scrubbing liquid recirculation flow rate shall be 303 gallons per minute.

[40 CFR 63.864(e)(10), Testing dated 07/10/06]

D.13. CPMS – Meter Reading Reestablishment. The owner or operator may establish expand or replace operating ranges for the minimum scrubbing liquid recirculation flow rate and the minimum pressure drop values during subsequent performance tests using the test methods stated in Conditions D.6. and D.7.

The owner or operator shall continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.
[40 CFR 63.864(j)(3) and (4)]

D.14. PM Emissions – Corrective Action. The owner or operator shall implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under Condition D.23. if the following monitoring exceedance occurs:

- when any 3-hour average parameter value is outside the range of values established in Condition D.12. and D.13.

[63.864(k)(1)(ii)]

D.15. PM Emissions – Violations. It shall be considered a violation of the standards of Condition D.3. if the following monitoring exceedance occurs:

- when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in Condition D.12. and D.13.

For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.
[63.864(k)(2)(iii) and (k)(3)]

Compliance Assurance Monitoring (CAM) Requirements

D.16. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

D.17. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup, shutdown or malfunction are conditionally allowed for up to 2 in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.
[Rule 62-210.700, F.A.C.;]

D.18. Excess Emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

D.19. TRS Surrogate Parameter -Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

3. The excess emissions as indicated by the appropriate surrogate parameters occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

    a. Operation of all equipment within permit limits for loading rates and other process parameters,

    b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

    c. Training of personnel in the operation and maintenance of equipment,

    d. Visual and instrument inspections of equipment on a regular basis, and

e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

[Rules 62-296.404(6)(c)(3) and (4), F.A.C.]

Recordkeeping and Reporting Requirements

D.20. TRS Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

[Rule 62-296.404(6)(a), F.A.C.].

D.21. TRS Surrogate Parameters- Files. The owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(b), F.A.C.].

D.22. TRS Surrogate Parameter -Excess Emissions Notification. The owner or operator shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition D.19.3.
[Rule 62-296.404(6)(d), F.A.C.]

D.23. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Condition D.12. and D.13. including the procedures in paragraphs (1)(i) and (ii) of this Condition:

(i) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(ii) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition D.12. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

D.24. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition D.14.
[40 CFR 63.866(b)]

D.25. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition D.15.
[40 CFR 63.866(b)]

D.26. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces

(2) N/A

(3) Records of parameter monitoring data required under Condition D.12., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions D.6. through D.7.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

D.27. Excess Emissions Report - 40 CFR 63.867(c). The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition D.14. or D.15. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition D.14. and the number and duration of occurrences when the source met or exceeded the conditions in Condition D.15. Reporting excess emissions below the violation thresholds of Condition D.15. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of this subpart and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

Notifications

D.28. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 of 40 CFR 63 Subpart MM.
[40 CFR 63.867(a)(1)]

40 CFR Part 63, Subpart A, General Provisions

D.29. This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart A, General Provisions.

Common Conditions

D. 30. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

Subsection E. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
014	#5 Smelt Dissolving Tank (SDT) with a Venturi scrubber to control particulate matter emissions. CAM applies to this emission unit for TRS.

{Permitting note(s): This emissions unit is regulated under: : 40 CFR 52.21(d)(2)(ii), NSPS - 40 CFR 60, Subpart BB- Standards of Performance for Kraft Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; 40 CFR 63, Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-296.404, F.A.C. – Kraft Pulp Mills; and by Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The operation rate shall not exceed 156,780 lbs (BLS)/hr[1].

[1]Based on the maximum Black Liquor Solids fired in the #5 Recovery Boiler.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

E.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8568 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0890003-010-AC]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

E.3. Particulate Matter. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.10 kilogram per megagram (kg/Mg) (0.20 pound per ton (lb/ton)) of black liquor solids fired[1], 15.68 lbs/hr and 67.17 TPY.

[1] Equivalent to PSD-FL-002 BACT PM standard of not exceeding 0.15 grams per kilogram of unbleached air dried pulp (0.3 lb/ton).

[40 CFR 63.862(a)(1)(i)(B); 40 CFR 60.282(a)(2); PSD-FL-002 BACT requirement; Construction Permit No. 0890003-010-AC]

E.4. Total Reduced Sulfur (TRS). TRS emissions shall not exceed 0.016 g/kg black liquor solids as H2S (0.033 lb TRS/ton of BLS as H2S), 2.59 lbs/hr and 11.08 TPY.

[Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR 60.283(a)(4); Construction Permit No. 0890003-010-AC (pending)]

E.5. Visible Emissions. Visible emissions from this emissions unit shall not be equal to or greater than 20% Opacity.
[Rule 62-296.320(4)(b)1., F.A.C. ; Construction Permit No. 0890003-010-AC (pending)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.6. Particulate Matter - Concentration. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used, except that Method 17 in Appendix A of 40 CFR Part 60 may be used in lieu of Method 5 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). For Methods 5 and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. A compliance test shall be conducted annually, once each federal fiscal year.

[40 CFR 63.865(b)(1); 40 CFR 60.285(c); 40 CFR 60.285(f); Rule 62-296.404(4)(c)1., F.A.C.]

E.7. Particulate Matter – Emission Rate.

(1) The emission rate of particulate matter shall be computed for each run using the following equation:

$$E = cs\ Qsd/BLS$$

where:

E = emission rate of particulate matter, g/kg (lb/ton) of BLS.
cs = concentration of particulate matter, g/dsm (lb/dscf).
Qsd = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).
BLS = black liquor solids (dry weight) feed rate, kg/hr (ton/hr).

(2) The particulate matter concentration (cs) shall be determined using the test method in Condition No. E.6.

(3) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(4) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR Part 60 shall be used;

(5) For purposes of conducting gas analysis, Method 3, 3A, or 3B in Appendix A of 40 CFR Part 60 shall be used. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see 40 CFR 63.14) may be used as an alternative to using Method 3B;

(6) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used; and.

(7) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis.

[40 CFR 60.285(c); 40 CFR 63.865(b)(5) and (6)]

E.8.a. Total Reduced Sulfur (TRS). The owner or operator shall determine compliance with the TRS standards in Condition E.4. as follows. A compliance test shall be conducted prior to operation permit renewal during the federal fiscal year.:

(1) The emission rate of TRS shall be computed for each run using the following equation:

E = CTRS F Qsd/P

where:

E = emission rate of TRS, g/kg (lb/ton) of BLS or ADP.
CTRS = average combined concentration of TRS, ppm.
F = conversion factor, 0.001417 g H_2S/m^3 ppm ($0.08844*10^{-6}$ lb H_2S/ft^3 ppm).
Qsd = volumetric flow rate of stack gas, dscm/hr (dscf/hr).
P = black liquor solids feed or pulp production rate, kg/hr (ton/hr).

(2) Method 16 shall be used to determine the TRS concentration (CTRS).
(3) Method 2 shall be used to determine the volumetric flow rate (Qsd) of the effluent gas.

(4) Process data shall be used to determine the black liquor feed rate or the pulp production rate (P).

[40 CFR 60.285(e); Rules 62-296.404(4)(c)3., 62-297.310(7)(a)3., (7)(a)4.b. F.A.C., 62-297.401(16) and (16)(a), F.A.C.; Construction Permit No. 0890003-010-AC (pending)]

E.8.b. Total Reduced Sulfur (TRS). The owner or operator may use an alternative to the Method 16 specified in Condition E.8.a., Method 16A or 16B if the sampling time is 60 minutes. Pursuant to Rule 62-297.401(16), F.A.C., EPA Method 16 or EPA Method 16A shall be required for instrument certification and compliance testing.
[40 CFR 60.285(f)(2); Rule 62-297.401(16), F.A.C.]

E.9. Visible Emissions. The test method for Visible Emissions shall be EPA Method 9. A compliance test shall be conducted annually, once each federal fiscal year and as established in Condition No. E.10. below.
[Rule 62-296.404(2)(b), F.A.C.]

E.10. Visible Emissions- Testing Frequency. Visible emissions limits for Kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation. If the Department determines that visible emissions exceed 20 percent opacity, a special compliance test may be required in accordance with Rule 62-297.310(7)(b), F.A.C. (refer to Subsection P).

[Rule 62-296.404(2)(b), F.A.C.]

Continuous Monitoring Requirements

E.11.a. Continuous Parameter Monitoring System (CPMS)- PM. The owner or operator shall calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15-minute period using the procedures in 40 CFR 63.8(c), as well as the procedures in paragraphs (i) and (ii) of this condition:

(i) The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber must be certified by the manufacturer to be accurate to within a gage pressure of +/-500 pascals (+/-2 inches of water gage pressure); and

(ii) The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within +/-5 percent of the design scrubbing liquid flow rate.

The minimum pressure drop across the scrubber shall be 5.9 in. H_2O and the minimum scrubbing liquid recirculation flow rate shall be 227 gallons per minute.

[40 CFR 63.864(e)(10), Initial Performance Test conducted October 23, and 28, 2003]

E.11.b. Continuous Parameter Monitoring System (CPMS) – PM. The owner or operator shall install, calibrate, maintain, and operate the following continuous monitoring devices:

(i) A monitoring device for the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device is to be certified by the manufacturer to be accurate to within a gage pressure of ±500 pascals (ca. ±2 inches water gage pressure).

(ii) A monitoring device for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±15 percent of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point.

The minimum pressure drop across the scrubber shall be 5.9 in. H2O.

The owner or operator shall record, once per shift, the measurements obtained from the continuous monitoring devices installed under Condition E.11.b.(i) and (ii) above.

[40 CFR 60.284(b)(2)(i); 40 CFR 60.284(b)(2)(ii); 40 CFR 60.284(c)(4)]

E.11.c. Continuous Parameter Monitoring System (CPMS) - TRS. The owner or operator shall maintain and operate a continuous monitoring device that will be used to determine and record the scrubbing medium flow rate (weak wash). The minimum flow rate shall be 45 gallons per minute per each 12-hour averaging period.
[Facility letter dated March 29, 1990; Rule 62-296.404(5)(d), F.A.C.; Testing dated 10/23/03]

E.12. CPMS (PM) – Meter Reading Reestablishment. The owner or operator may establish expanded or replacement operating ranges for the minimum scrubbing liquid flow rate and the minimum pressure drop values during subsequent performance tests using the test methods stated in Conditions E.6., and E.7.

The owner or operator shall continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.

[40 CFR 63.864(j)(3) and (4)]

E.13. PM Emissions – Corrective Action. The owner or operator shall implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under Condition E.21. if the following monitoring exceedance occurs:

- when any 3-hour average parameter value is outside the range of values established in Condition E.11. and E.12.

[40 CFR 63.864(k)(1)(ii)]

E.14. PM Emissions – Violations**.** It shall be considered a violation of the standards of Condition E.3. if the following monitoring exceedance occurs:

- when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in Condition E.11. and E.12.

For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.
[63.864(k)(2)(iii) and (k)(3)]

Compliance Assurance Monitoring (CAM) Requirements

E.15. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

E.16. Excess Emissions – Startup, Shutdown, Malfunction. Excess Emissions due to startup and shutdown are conditionally allowed for up to 2 in any 24-hour period unless specifically authorized by the Department for longer duration. The permittee shall follow best operational practices to minimize emissions.
[Rule 62-213.410, F.A.C.; Rule 62-210.700(1), F.A.C.]

E.17. Excess Emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

E.18. TRS Surrogate Parameter –Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

    a. Operation of all equipment within permit limits for loading rates and other process parameters,

    b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

    c. Training of personnel in the operation and maintenance of equipment,

    d. Visual and instrument inspections of equipment on a regular basis, and

    e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

[Rule 62-296.404(6)(c)(4), F.A.C.]

Recordkeeping and Reporting Requirements

E.19. TRS Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

[Rule 62-296.404(6)(a), F.A.C.]

E.20. TRS Surrogate Parameters- Files. The owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.
[Rule 62-296.404(6)(b), F.A.C.].

E.21. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under Condition E.11 and E.12. including the procedures in paragraphs (1)(i) and (ii) of this Condition:

(i) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(ii) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition E.14. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

E.22. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition E.13.
[40 CFR 63.866(b)]

E.23. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition E.14.
[40 CFR 63.866(b)]

E.24. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1) Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces

(2) N/A

(3) Records of parameter monitoring data required under Condition E.11., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions E.6. and E.7.;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6) N/A

(7) N/A

[40 CFR 63.866(c)]

E.25. Excess Emissions Report- 40 CFR 63.867(c). The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition E.13. or E.14. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition E.13. and the number and duration of occurrences when the source met or exceeded the conditions in Condition E.14. Reporting excess emissions below the violation thresholds of Condition E.14. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of this subpart and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

Notifications

E.26. The owner or operator of any affected source or process unit must submit the applicable notifications from 40 CFR 63 Subpart A, as specified in Table 1 of this 40 CFR 63 Subpart MM.
[40 CFR 63.867(a)(1)]

40 CFR Part 60, Subpart A, General Provisions

E.27. This emissions unit is subject to the requirements of 40 CFR Part 60, Subpart A, General Provisions.

40 CFR Part 63, Subpart A, General Provisions

E.28. This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart A, General Provisions.

Common Conditions

E. 29. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

Section III. Emissions Unit(s) and Conditions.

Subsection F. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
015	#7 Power Boiler with an electrostatic precipitator to control particulate matter. This boiler is a coal-fired boiler. In addition, the Coal Handling System (EP 01) and the Ash Handling System (EP 02) are identified under this emissions unit. PM emissions from the Ash Handling System are controlled by fabric filters. CAM applies to this emission unit for particulate matter.

{Permitting note(s): The No. 7 Power Boiler is regulated under NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971**,** adopted and incorporated by reference in Rule 62-204.800, F.A.C. and Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit(s) No(s). PSD-FL-062; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated October 11, 1980 and amended in 1984, Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and 40 CFR 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters}

The Coal Handling System (EP 01) is regulated under Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-062 and 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation Plants.

The Ash Handling System (EP02) is regulated under Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit(s) No(s). PSD-FL-062.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity. The operation rate shall not exceed 1,021 MMBtu/hr. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

F.2. Methods of Operation - This emissions unit is fired primarily with coal. Nos. 2 and 6 Fuel Oil may be fired during start-up, shutdown, and stand-by when coal is not available, provided that the amount of oil burned annually shall not exceed 10% of the annual capacity factor. The sulfur content in the No. 6 fuel oil shall not exceed 2.5% sulfur by weight.

Alternative Methods of Operation are described below:

Alternative Method	Fuel Options[1]	Maximum Heat Input Rate (MMBtu/hr)	Maximum Operating Rate
1	Coal only (24-hr)	1,021 MMBtu/hr	81,680 lb/hr[2]
2	No. 6 fuel oil only[3] (24-hr)	1,021 MMBtu/hr	6,800 gal/hr
3	No. 2 fuel oil only (24-hr)	1,021 MMBtu/hr	7,293 gal/hr[4]
4	Any combination of the alternative methods listed above	1,021 MMBtu/hr	Individual rates listed above
5	Any combination of the alternative methods listed above with No. 5 Power Boiler ash	1,021 MMBtu/hr	Individual rates listed above, 10 tons (bark ash)[5]/hr

[1]Fly ash from the No. 5 Power Boiler may be injected with any alternate method of operation.
[2]Based on coal heating value of 12,500 Btu/lb. Operating rate is not measured; instead, this value is calculated. The sulfur content of the coal shall not exceed 0.75 percent sulfur. See Condition F.26. below.
[3]Fuel oil may contain on-spec used oil. Based on No. 6 Fuel Oil heating value of 150mmBtu/1000 gallons.
[4] Based on No. 2 Fuel Oil heating value of 140 mmBtu/1000 gallons.
[5]Heating value associated with bark ash is included in 1,021 MMBtu/hr.

[Rule 62-213.410, F.A.C., AO45-169854; EPA Modification to PSD-FL-062 dated 4/13/81; Construction Permit No. AC45-35532]

F.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC45-35532 Modification dated 1/22/85]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

From the boiler stack:

F.4. Particulate Matter. Particulate Matter Emissions shall not exceed 0.10 lb per MMBTU of heat input, 102.10 lbs/hr and 447.20 TPY.
[Rule 62-204.800(8)(b)1., F.A.C.; 40 CFR 60.42(a)(1); EPA Modification, PSD-FL-062 dated April 13, 1981; Construction Permit No. AC45-35532]

F.5.a. Sulfur Dioxide – Solid Fossil Fuel/Solid Fossil Fuel. Sulfur Dioxide Emissions shall not exceed 1.2 lb per MMBTU of heat input, 1,225.20 lbs/hr and 5,366.38 TPY.
[Rule 62-204.800(8)(b)1., F.A.C.; 40 CFR 60.43(a)(2); EPA Modification, PSD-FL-062 dated April 13, 1981; Construction Permit No. AC45-35532]

F.5.b. Sulfur Dioxide – Liquid Fossil Fuel/Liquid Fossil Fuel. Sulfur Dioxide Emissions shall not exceed 0.8 lb per MMBTU of heat input when the boiler is fired with fuel oil during times other than startup, shutdown, or stand-by operation as specified in Condition. F.2.
[40 CFR 60.43(a)(1)]

F.5.c. Sulfur Dioxide – Combination of Fuels[1]. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$PS_{SO2} = [y(340) + z(520)]/(y+z)$

where:
PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels ,
y is the percentage of total heat input derived from liquid fossil fuel, and
z is the percentage of total heat input derived from solid fossil fuel.

[1] Applicable when the boiler is fired with fuel oil during times other than startup, shutdown, or stand-by operation as specified in Condition. F.2.

[40 CFR 60.43(b)]

F.5.d. Sulfur Dioxide – Combination of Fuels[1]. Compliance shall be based on the total heat input from all fossil fuels burned.

[1] Applicable when the boiler is fired with fuel oil during times other than startup, shutdown, or stand-by operation as specified in Condition. F.2.

[40 CFR 60.43(c)]

F.6.a. Nitrogen Oxides – Liquid Fossil Fuel/Liquid Fossil Fuel. Nitrogen Oxides Emissions, expressed as NO_2, shall not exceed 0.3 lb per MMBTU of heat input when the boiler is fired with fuel oil during times other than startup, shutdown, or stand-by operation as specified in Condition. F.2.

[40 CFR 60.44(a)(2)]

F.6.b Nitrogen Oxides – Solid Fossil Fuel/Solid Fossil Fuel. Nitrogen Oxides Emissions, expressed as NO_2, shall not exceed 0.6 lb per MMBTU of heat input, 612.60 lbs/hr and 2683.19 TPY.
[Rule 62-204.800(8)(b)1., F.A.C.; 40 CFR 60.44(a)(3); BACT Determination dated October 11, 1984; Construction Permit No. AC45-35532]

F.6.c. Nitrogen Oxides – Combination of Fuels[1]. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NOx} = \frac{y(130)+z(300)}{y+z}$$

where:

PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels fired;
y = is the percentage of total heat input derived from liquid fossil fuel; and,
z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[1] Applicable when the boiler is fired with fuel oil during times other than startup, shutdown, or stand-by operation as specified in Condition. F.2.

[40 CFR 60.44(b)]

F.7. Carbon Monoxide. Carbon Monoxide Emissions shall not exceed 93.6 lbs/hr and 409.97 TPY.
[Permit No. AO45-169854 references EPA/DER Agreement & 40 CFR 52.21(j)]

F.8. Visible Emissions. Visible emissions shall not exceed 20% opacity except for one six-minute period per hour of not more than 27 percent opacity.
[Rule 62-204.800(8)(b)1., F.A.C.; 40 CFR 60.42(a)(2) ; Construction Permit No. AC45-35532]

From the coal preparation and handling system and silos vent (EP 01):

F.9. Visible Emissions. Visible Emissions shall be less than 20% opacity.
[Rule 62-204.800(8)(b)31., F.A.C.; 40 CFR 60.252(c); EPA Modification, PSD-FL-062 dated April 13, 1981]

From the fly ash handling system and silo vent (EP 02):

F.10. Visible Emissions. Visible Emissions shall not exceed 5% opacity.
[Rule 62-204.800(3), F.A.C.; 40 CFR 52.21(j); EPA Modification, PSD-FL-062 dated April 13, 1981]

F.11. Particulate Matter. Particulate Matter emissions shall not exceed 0.5 lbs/hr while operating at the maximum operating rate.
[EPA Modification, PSD-FL-062 dated April 13, 1981]

F.12. Dust suppression systems shall be used in the coal preparation and handling facilities which includes: a) a bottom discharge system employing side curtains and surfactant spray for coal unloading operations; b) housing the coal crusher in the power boiler building; c) surfactants control in conjunction with the coal pile; and d) covered conveyors to transport the coal.
[Operation Permit No. AO45-169854]

F.13. A chemical stabilizer shall be applied to the active and inactive storage piles as needed to maintain an opacity of equal to or below 20 percent. Chemicals shall be added in accordance with the manufacturer's recommendations.
[EPA Modification to PSD-FL-062 dated 4/13/81]

F.14. The permittee shall operate a wet suppression spray system at all car dumps and shall enclose conveyors and transfer points to maintain an opacity of equal to or below 20 percent.
[EPA Modification to PSD-FL-062 dated 4/13/81]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

From the boiler stack:

F.15. Particulate Matter. Compliance with the Particulate Matter emission standards stated in Condition F.4. shall be determined as follows. A compliance test shall be conducted annually, once each federal fiscal year:

(1) The emission rate (E) shall be computed for each run using the following equation:

$$E=C\ F_d\ (20.9)/(20.9–\%\ 0_2)$$

Where:

E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
$\%O_2$ = oxygen concentration, percent dry basis.
F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particular matter concentration (C).

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train shall be set to provide an average gas temperature of 160±14 °C (320±25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.

[40 CFR 60.46(b)(1),(2); Construction Permit No. AC45-35532]

F.16. Sulfur Dioxide. A compliance test shall be conducted upon Department request. If a test is required, compliance with the Sulfur Dioxide emission standards stated in Condition F.5 shall be determined in accordance with the following:

(1) The emission rate (E) shall be computed for each run using the following equation:

$$E=C\ F_d\ (20.9)/(20.9-\%\ 0_2)$$

Where:

E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
$\%O_2$ = oxygen concentration, percent dry basis.
F_d = factor as determined from Method 19.

(4) Method 6 shall be used to determine the SO_2 concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(c) When combinations of fossil fuels or fossil fuel are fired, the owner or operator (in order to compute the prorated standard as shown in Condition F.5.c. shall determine the percentage (y or z) of the total heat input derived from each type of fuel as follows:

(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

(2) ASTM Methods D2015–77 (Reapproved 1978), 96, or D5865–98 (solid fuels), D240–76 or 92 (liquid fuels), (incorporated by reference—see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.

(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

[40 CFR 60.46(b)(1),(4), (c) ; Construction Permit No. AC45-35532; 62-297.310(7)(b), F.A.C.]

F.17. Nitrogen Oxides. A compliance test shall be conducted upon Department request. If a test is required, compliance with the Nitrogen Oxides emission standards stated in Condition F.6 shall be determined in accordance with the following:

(1) The emission rate (E) shall be computed for each run using the following equation:

$$E=C\ F_d\ (20.9)/(20.9–\%\ 0_2)$$

Where:

E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
$\%O_2$ = oxygen concentration, percent dry basis.
F_d = factor as determined from Method 19.

(5) Method 7 shall be used to determine the NO_X concentration.

(i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.

(iii) The NO_X emission rate shall be computed for each pair of NO_X and O_2 samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

(c) When combinations of fossil fuels or fossil fuel are fired, the owner or operator (in order to compute the prorated standard as shown in Condition F.6.c. shall determine the percentage (y or z) of the total heat input derived from each type of fuel as follows:

(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

(2) ASTM Methods D2015–77 (Reapproved 1978), 96, or D5865–98 (solid fuels), D240–76 or 92 (liquid fuels), (incorporated by reference—see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.

(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

[40 CFR 60.46(b)(1),(5), (c); Construction Permit No. AC45-35532; 62-297.310(7)(b), F.A.C.]

F.18. Particulate Matter, Sulfur Dioxide, Nitrogen Oxides - Alternative. As alternative to the reference methods and procedures stated in Conditions F.15., F.16., and F.17., the following may be used:

(1) The emission rate (E) may be determined by using the Fc factor, provided that the following procedure is used:

(i) The emission rate (E) of particulate matter, SO_2 and NO_X shall be computed using the following equation:

$$E=C\ Fc\ (100/\%CO_2)$$

where:

E=emission rate of pollutant, ng/J (lb/million Btu).
C=concentration of pollutant, ng/dscm (lb/dscf).
$\%CO_2$=carbon dioxide concentration, percent dry basis.
Fc=factor as determined in appropriate sections of Method 19.

(ii) If and only if the average Fc factor in Method 19 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 shall be used to determine the O_2 and CO_2 concentration according to the procedures in Condition F.12.(2)(ii), F.13.(4)(ii), or F.14.(5)(ii). Then if Fo (average of three runs), as calculated from the equation in Method 3B, is more than ±3 percent than the average Fo value, as determined from the average values of Fd and Fc in Method 19, i.e., Foa=0.209 (Fda/Fca), then the following procedure shall be followed:

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

(B) When Fo is less than 0.97 Foa 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 Foa, e.g., if Fo is 0.95 Foa, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When Fo is greater than 1.03 Foa and when the average difference d is positive, then E shall be decreased by that proportion over 1.03 Foa, e.g., if Fo is 1.05 Foa, 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, Method 17 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 may be used with Method 17 only if it is used after wet FGD systems. Method 17 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 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.

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

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

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E 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, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(d)]

F.19. Carbon Monoxide. CO Emissions stack testing shall be performed on request.
[Permit AO45-169854 references EPA/DER Agreement & 40 CFR 52.21(j); 62-297.310(7)(b), F.A.C]

F.20. Visible Emissions. EPA Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. The Visible Emissions test shall be observed during the PM compliance testing. A compliance test shall be conducted annually, once each federal fiscal year.
[40 CFR 60.46(b)(3); EPA Modificaiton, PSD-FL-062 dated April 13, 1981]

From the coal preparation and handling system and silos vent (EP 01):

F.21. Visible Emissions. Opacity shall be determined by using EPA Method 9 in 40 CFR 60 Appendix A and the procedures in 40 CFR 60.11. A compliance test shall be conducted annually, once each federal fiscal year.
[40 CFR 60.254(a), (b)(2)]

From the fly ash handling system and silo vent (EP 02):

F.22. Particulate Matter. Performance testing for the particulate matter mass emissions rate shall not be required provided compliance with the visible emissions standard is demonstrated and maintained.
[EPA Modification, PSD-FL-062 dated April 13, 1981]

F.23. Visible Emissions. Visible emissions shall be determined by using EPA Method 9. A compliance test shall be conducted annually, once each federal fiscal year.
[Rule 62-297.401(9), F.A.C.]

Continuous Monitoring Requirements

F.24. Visible Emissions. A continuous monitoring systems for measuring the opacity of emissions shall be calibrated, maintained, and operated.
[40 CFR 60.45(a)]

F.25. Performance Evaluations and Calibration Checks. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent.
[40 CFR 60.45(c)(3)]

F.26. Sulfur Dioxide. Sulfur dioxide emissions shall be monitored by fuel sampling and analysis as specified in the "Container Corporation of America Coal Sampling and Testing Procedures for Compliance Monitoring of SO2 for #7 Power Boiler" in lieu of the installation and operation of a continuous monitoring system.[1,2] Coal fuel is limited to a maximum sulfur content determined by the following formula:

%S (max allowed) = (6.32×10^{-5}) x (BTU per lb coal)

[1] The mill shall use the ASTM Methods stated in RAI response dated December 4, 2003 or other methods approved by the Department.
[2] At no time shall the sulfur content exceed 0.75 percent (EPA established BACT dated April 13, 1981).

[40 CFR 60.45(b)(2), Construction Permit No. AC45-35532, Container Corporation of America Coal Sampling and Testing Procedures for Compliance Monitoring of SO2 for #7 Power Boiler; ASTM Methods in RAI response dated December 4, 2003; EPA approval dated 11/21/89, DER approval dated 12/6/89]

F.27. Oxygen. Oxygen shall be continuously monitored. The continuous Oxygen monitoring system shall comply with the applicable requirements of 40 CFR Part 60, Appendix B, Performance Specification 3.
[Construction Permit No. AC45-35532; EPA Modification to PSD-FL-062 dated 4/13/81]

F.28. Nitrogen Oxides. Combustion conditions shall be optimized to minimize NO_X formation in accordance with the following:

1. The provisions of "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls".
2. The set point for the oxygen continuous monitoring system at the boiler exit to the flue shall not be greater than 7.7% as the high limit point at which the allowable NO_X emissions rate shall not be exceeded.
3. A 3-hour averaging time shall be used for the Oxygen set point.
4. Alarms shall be set to sound when flue gas oxygen levels exceed the 7.7% set point.
5. 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.
6. 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]

F.29. Carbon Monoxide**.** Combustion conditions shall be optimized to minimize CO formation in accordance with the following:

1. The provisions of "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls".
2. The set point for the oxygen continuous monitoring system at the boiler exit to the flue shall not be lower than 2.7% as the low limit point at which the allowable CO emissions rate shall not be exceeded.
3. A 3-hour averaging time shall be used for the Oxygen set point.

4. Alarms shall be set to sound when flue gas oxygen levels are below the 2.7% set point.
5. Any operation below the 2.7% set point will constitute noncompliance with this condition and shall be recorded and reported as stated in Condition F.35.
6. 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.

[Permit No. AO45-169854; EPA Modification to PSD-FL-062 dated 4/13/81; DEP 10/30/02 Modification of PSD-FL-062A]

Compliance Assurance Monitoring (CAM) Requirements

F.30. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

F.31. Excess Emissions – Startup and Shutdown. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-213.410, F.A.C.; Rule 62-210.700(2), F.A.C.]

F.32. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-213.410, F.A.C.; Rule 62-210.700(4), F.A.C.]

F.33. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-213.410, F.A.C.; Rule 62-210.700(6), F.A.C.;]

F.34. Excess Emissions – Opacity. Periods of excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
[40 CFR 60.45(g)(1)]

Recordkeeping and Reporting

F.35. Oxygen Set Points - Any occurrence of operation outside of either the minimum or maximum oxygen set points stated in Conditions F.28. and F.29. shall be recorded in accordance with APPENDIX TV-6, Title V Condition No. 12(14)(b). and reported quarterly along with excess emissions in accordance with 40 CFR 60.7(c).
[EPA Modification to PSD-FL-062 dated 4/13/81]

F.36. No. 7 Power Boiler Fuel Input. The fuel input to the No. 7 boiler shall be monitored and a daily record of fuels fired shall be maintained.
[EPA Modification to PSD-FL-062 dated 4/13/81]

F.37. Excess Emissions. Excess emissions and monitoring system performance reports shall be submitted to the Administrator quarterly for each three-month period in the calendar year. All quarterly reports shall be postmarked by the 30th day following the end of each three-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c).
[40 CFR 60.45(g); EPA Modification to PSD-FL-062 dated 4/13/81]

40 CFR Part 60, Subpart A, General Provisions

F.38. This emissions unit is subject to the requirements of 40 CFR Part 60, Subpart A, General Provisions.

Common Conditions

F.39. This emissions unit is also subject to the on-spec used oil conditions in Subsection L.

F.40. This emissions unit is also subject to the requirements of Subsection O.

F.41. This emissions unit is also subject to the requirements of F.A.C. Testing Subsection P.

Subsection G. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
020	Tall Oil Plant with a Packed-Gas Adsorption Column to control Total Reduced Sulfur (TRS) emissions from the acidulator, the lignin tank and the saltcake tank. The scrubber system uses a solution of caustic soda as the absorbing medium

{Permitting note(s): This emissions unit is regulated under Rule 62-296.404, F.A.C. – Kraft Pulp Mills}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The operation rate shall not exceed 17,000 lbs (12-hr avg. of Tall Oil)/hr[1].

[1] Based on a process input of 24,573 lbs/hr soap, 3,866 lbs/hr sulfuric acid, and 5,872 lbs/hr caustic.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC45-141874]

G.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC45-141874]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

G.3. Total Reduced Sulfur (TRS). TRS emissions from the Tall Oil Plant shall not exceed 0.05 lb /ton of crude tall oil produced as a 12-hr average, 0.43 lbs/hr and 1.9 TPY.
[Rule 62-296.404(3)(b)1., F.A.C.; AC45-141874]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

G.4. Total Reduced Sulfur (TRS). The test method for TRS shall be either EPA Method 16 or 16A as incorporated and adopted by reference in Chapter 62-297, F.A.C. EPA Method 16 or EPA Method 16A, pursuant to Rule 62-297.401(16), F.A.C., shall be required for instrument certification and compliance testing. A compliance test shall be conducted every 5 years, prior to permit renewal.
[Rule 62-296.404(4)(d), F.A.C.; Rule 62-297.310(7)(a)3., F.A.C.; Construction Permit No. AC45-141874; Amendment dated May 26, 1988; Operation Permit No. AO45-166568]

Continuous Monitoring Requirements

G.5. Total Reduced Sulfur (TRS) – Surrogate Parameters. The permittee shall maintain and operate a continuous monitor of the scrubber liquid flow. The minimum flow rate shall be 322 gpm per each 12-hr averaging period. The Permittee shall monitor the surrogate parameter, pH, by collecting grab samples of the scrubber water at the beginning, middle and end of each batch run for a total of (3) grab samples over the course of each tall oil cook. The pH of each grab sample shall be compared with the minimum pH set point of 11.75 S.U. Excess emissions shall be deemed to have occurred if these minimum parameter values are not met.

[Rule 62-296.404(5)(d); AO45-166568; Title V Permit Revision request letter dated October 12, 2001]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

G.6. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

Recordkeeping and Reporting Requirements

G.7. Surrogate Parameters- Quarterly Reports. The owner or operator shall submit a surrogate parameter data report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

(c) Evaluation of Excess Emissions. The Department shall consider periods of excess emissions from this emissions unit to be evidence of improper operation and maintenance of the monitored emissions unit provided that:

1. N/A

2. N/A

3. The excess emissions occur during more than one percent of the total number of possible contiguous 12-hour periods of excess emissions in a calendar quarter rounded to the nearest whole number (excluding only the actual 12-hour periods during which a startup, shutdown or malfunction of the emissions unit or its control equipment occurred and only the actual 12-hour periods when the source was not operating), and

4. The Department determines that the affected emissions unit, including air pollution control equipment, is not maintained and operated in a manner which is consistent with good air pollution control practices for minimizing emissions. Such determination shall be based on the failure of the owner or operator of the facility to provide records of maintenance and operation of the emissions unit and related equipment showing operation consistent with good air pollution control practices. Good air pollution control practices shall include:

    a. Operation of all equipment within permit limits for loading rates and other process parameters,

    b. An adequate preventive maintenance program based on manufacturer's recommendations or other accepted industry practices,

    c. Training of personnel in the operation and maintenance of equipment,

    d. Visual and instrument inspections of equipment on a regular basis, and

    e. Maintenance of an adequate on-site, or readily available, supply of equipment for routine repairs.

(d) The owner or operator of any kraft pulp mill or tall oil plant shall notify the Department in writing within fourteen days of the date on which periods of excess emissions exceed the percentages allowed by Condition G.6.(c)1. through 3.

[Rules 62-296.404(6)(a),(b),(c),(d), F.A.C.]

G.8. This emissions unit is also subject to the requirements of F.A.C. Testing Subsection P.

Section III. Emissions Unit(s) and Conditions.

Subsection H. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
021	No. 4 Lime Kiln with an electrostatic precipitator to control particulate matter. ▪ NCG (Non-Condensable Gases) from the Kamyr digester system, batch digester system, No. 5 Multi-Effect Evaporators system and No. 6 Multi-Effect Evaporators system are combusted in this kiln as a control of the TRS (Total Reduced Sulfur) compounds in the NCG. ▪ Low volume, high concentration (LVHC) Noncondensible gases (NCG) from the batch digester system, continuous digester system, turpentine recovery system, evaporator systems, and foul condensate collection tank are collected and burned in the No. 4 Lime Kiln with the No. 5 Power Boiler as the back up for compliance with 40 CFR 63, Subpart S. No. 1 Lime Bin receives lime from the No. 4 Lime Kiln and the slaker systems (re-burned lime). A bag fabric filter is used to control particulate matter. No. 2 Lime Bin receives purchased lime by railcar or truck. A bag fabric filter is used to control particulate matter during railcar and truck unloading.

{Permitting note(s): The No. 4 Lime Kiln, the Batch Digester System, and the Kamyr Digester System are regulated under: NSPS - 40 CFR 60, Subpart BB - Standards of Performance for Kraft Pulp Mills adopted and incorporated by reference in Rule 62-204.800, F.A.C. The Kamyr digester system, batch digester system, No. 5 Multi-Effect Evaporators system and No. 6 Multi-Effect Evaporators system are regulated under Rule 62-296.404, F.A.C. – Kraft Pulp Mills. The No. 4 Lime Kiln is also regulated under 40 CFR 63- Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.;

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The operation rates shall not exceed the following:

Unit	Rate
No. 4 Lime Kiln	630 TPD, maximum lime production rate – corresponding to a process input rate of 46.87 tons (lime mud-$CaCO_3$)/hr
No. 1 Lime Bin	26.25 tons (reburned lime-CaO)/hr input
No. 2 Lime Bin	44.0 tons (purchased lime)/hr input
Kamyr Digester System	maximum production rate of 85 tons (ADUP)/hr[1,2,3]

Batch Digester System	101 tons (ADUP)/hr[1,3] output
No. 5 Multi-Effect Evaporators System	308,359 lbs (BLS)/hr input
No. 6 Multi-Effect Evaporators System	274,089 lbs (BLS)/hr input

[1] PSD Permit restriction.
[2] Based on the nominal utilization rate of 300,104 lbs/hr wood chips (dry) and 1,573,191 lbs/hr black/white liquor..
[3] Total production rate for both the Kamyr and the Batch digester system shall not exceed 3,210 ADTUP per day

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Construction Permit No. AC45-141877, Construction Permit No. AC45-141878; Construction Permit No. AC45-141873; Construction Permit No. AC45-190382/PSD-FL-165, Construction Permit No. AC45-141872, Construction Permit No. AC45-141871, Operation Permit No. AO45-188167; Construction Permit No. 0890003-011-AC]

H.2. Methods of Operation - This emissions unit is permitted to fire primarily No. 6 fuel oil, which may contain on-spec used oil from mill operations at a maximum of 1176.8 gallons per hour[1.] The sulfur content of the No. 6 fuel oil shall not exceed 2.5% by weight. Liquefied Petroleum Gas (LPG) is fired during startups only.

[1]Basis 170.63 MMBtu/hr heat input

[Rule 62-213.410, F.A.C.; Construction Permit No. AC45-141877, Construction Permit No. AC45-190382/PSD-FL-165, Construction Permit No. 0890003-003-AC]

H.3. Hours of Operation. The hours of operation shall not exceed 8736 hours/year for the following emissions units:

No. 4 Lime Kiln
No. 5 Multiple Effect Evaporator System
Kaymr Digester System

The hours of operation shall not exceed 8760 hours per year for the following emissions units:

Batch Digester system
No. 6 Multiple Effect Evaporator System
No. 1 Lime Bin
No. 2 Lime Bin

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Construction Permit No. AC45-141877, Construction Permit No. AC45-141873; Construction Permit No. AC45-190382/PDS-FL-165; Construction Permit No. AC45-141871]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

From lime kiln stack

H.4. Particulate Matter Emissions. The owner or operator shall ensure that the concentration of particulate matter in the exhaust gases discharged to the atmosphere is less than or equal to 0.15 g/dscm (0.064 gr/dscf) corrected to 10 percent oxygen.

[40 CFR 63.862(a)(1)(i)(C); Rule 62-204.800(7)(b)35., F.A.C.; 40 CFR 282(a)(3)(ii); Construction Permit No. AC45-141877]

H.5. Total Reduced Sulfur (TRS). TRS Emissions shall not exceed 8 ppm by volume on a dry basis, corrected to 10% O_2, 2.63 lbs/hr and 11.5 TPY.

[Rule 62-204.800(7)(b)35., F.A.C.; 40 CFR 60.283(a)(5); Rule 62-296.404(3)(a)1., F.A.C.; Construction Permit No. AC45-141877]

H.6. Visible Emissions. Visible emissions shall not exceed 20% opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; Construction Permit No. AC45-141877]

No. 1 Lime Bin Vent

H.7. Visible Emissions. Visible Emissions shall not exceed 5% opacity.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC45-141878]

H.8. Particulate Matter Emissions. Particulate Metter emissions shall not exceed 0.03 gr/dscf, 1.2 lbs/hr, and 5.3 TPY.

[Construction Permit No. AC45-141878]

No. 2 Lime Bin Vent

H.9. Visible Emissions. Visible Emissions shall not exceed 5% opacity.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC45-141878]

H.10. Particulate Matter Emissions. Particulate Metter emissions shall not exceed 0.03 gr/dscf, 1.2 lbs/hr, and 5.3 TPY.

[Construction Permit No. AC45-141878]

Lime Handling System

H.11. The lime handling system (i.e., conveyors, shutes, elevators, storage bins, etc.) shall be enclosed to minimize PM emissions pursuant to Rule 62-296.320(c), F.A.C.
[Construction Permit No. AC45-141878]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

No. 4 Lime Kiln Stack

H.12. Particulate Matter. For the purposes of determining the concentration of PM emitted from this emissions unit, EPA Method 5 in Appendix A of 40 CFR Part 60 shall be used, except that Method 17 in Appendix A of 40 CFR Part 60 may be used in lieu of Method 5 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205 °C (400 °F). For Methods 5, and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. The particulate concentration shall be corrected to the appropriate oxygen concentration according to Condition H.13. A compliance test shall be conducted annually, once each federal fiscal year.

[40 CFR 63.865(b)(1); Construction Permit No. AC45-141877; 40 CFR 60.285(b)(1), 40 CFR 60.285(f)]

H.13. PM Concentration Correction. The PM concentration shall be corrected to the appropriate oxygen concentration using the following equation:

$$C_{corr} = C_{meas} \times (21 - X)/(21 - Y)$$

Where:

C_{corr} = the measured concentration corrected for oxygen, g/dscm (gr/dscf).
C_{meas} = the measured concentration uncorrected for oxygen, g/dscm (gr/dscf).
X = the corrected volumetric oxygen concentration (10 percent).
Y = the measured average volumetric oxygen concentration.

[40 CFR 63.865(b)(2); 40 CFR 60.285(b)(1); 40 CFR 60.284(c)(3)]

H.14. Oxygen Concentration. The oxygen concentration shall be determined using EPA Method 3B in Appendix A of 40 CFR Part 60. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.

[40 CFR 63.865(b)(3); 40 CFR 60.285(b)(2)]

H.15. The Permittee shall comply with the following:

(i) For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in Appendix A of 40 CFR Part 60 shall be used;

(ii) For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in Appendix A of 40 CFR Part 60 shall be used;

(iii) For purposes of conducting gas analysis, Method 3B in Appendix A of 40 CFR Part 60 shall be used; and

(iv) For purposes of determining moisture content of stack gas, Method 4 in Appendix A of 40 CFR Part 60 shall be used.

(v) Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.

[40 CFR 63.865(b)(5) and (6); 40 CFR 60.285(b)(2)]

H.16. Total Reduced Sulfur (TRS). EPA Method 16 or 16A shall be used to determine the TRS concentration. The TRS concentration shall be corrected to the appropriate oxygen concentration using the procedure in Condition H.25.(3). The sampling time shall be at least 3 hours, but no longer than 6 hours. A compliance test shall be conducted annually, once each federal fiscal year.

[Construction Permit No. AC45-141877; 40 CFR 60.285(d)(1); 40 CFR 60.285(f); Rule 62-296.404(4)(a)3., F.A.C.]

H.17. Oxygen Concentration. The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the oxygen concentration. The sample shall be taken over the same time period as the TRS samples.

[Construction Permit No. AC45-141877; 40 CFR 60.285(d)(2)]

H.18. Visible Emissions The test method for Visible Emissions shall be EPA Method 9, as incorporated in Chapter 62-297. A compliance test shall be conducted annually, once each federal fiscal year.

[Construction Permit No. AC45-141877]

No. 1 Lime Bin Vent

H.19. Visible Emissions The test method for Visible Emissions shall be EPA Method 9, as incorporated in Chapter 62-297, F.A.C. A compliance test shall be conducted annually, once each federal fiscal year.
[Construction Permit No. AC45-141878]

H.20. Particulate Matter. Compliance shall be demonstrated by compliance with visible emissions standards specified in Condition H.7. Failure to comply with this standard shall necessitate the requirement to conduct a mass emissions compliance test for particulate matter emissions using EPA Methods 1, 2, 3, and 5 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A.

[Construction Permit No. AC45-141878]

No. 2 Lime Bin Vent

H.21. Visible Emissions The test method for Visible Emissions shall be EPA Method 9, as incorporated in Chapter 62-297, F.A.C. A compliance test shall be conducted annually, once each federal fiscal year.

[Construction Permit No. AC45-141878]

H.22. Particulate Matter. Compliance shall be demonstrated by compliance with visible emissions standards specified in Condition H.9. Failure to comply with this standard shall necessitate the requirement to conduct a mass emissions compliance test for particulate matter emissions using EPA Methods 1, 2, 3, and 5 pursuant to Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A.

[Construction Permit No. AC45-141878]

Continuous Monitoring Requirements

H.23. Continuous Opacity Monitoring System (COMS). The permittee shall install, calibrate, maintain, and operate a COMS according to the provisions in 40 CFR 63.6(h) and 63.8 and paragraphs (1) through (4) of this Condition.

(1) [Reserved]
(2) [Reserved]
(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
(4) The COMS data must be reduced as specified in Sec. 63.8(g)(2).

[Rule 62-204.800(8)(b)35; 40 CFR 63.864(d)]

H.24. Total Reduced Sulfur (TRS) and O_2. The permittee shall calibrate, certify, and operate a total reduced sulfur continuous emissions monitoring system pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. These systems shall be located downstream of the control device(s) and the spans of these continuous monitoring system(s) shall be set:

(i) At a TRS concentration of 30 ppm for the TRS continuous monitoring system.

(ii) At 20 percent oxygen for the continuous oxygen monitoring system.

[40 CFR 60.284(a)(2)]

H.25. Total Reduced Sulfur (TRS). – CEM Data. The permittee shall:

(1) Calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed pursuant to Condition H.24.

(2) Calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under Condition H.25.(1) and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed pursuant to Condition H.24.

(3) Correct all 12-hour average TRS concentrations to 10 volume percent oxygen using the following equation:

$$Ccorr = Cmeas*(21-X/21-Y)$$

where:

Ccorr = the concentration corrected for oxygen.
Cmeas = the concentration uncorrected for oxygen.
X = the volumetric oxygen concentration in percentage to be corrected to (10 percent for lime kilns).
Y = the measured 12-hour average volumetric oxygen concentration.

[40 CFR 60.284(c)(1),(2), and (3); Rule 62-296.404(5)(b), F.A.C.]

H.26. PM Emissions – Corrective Action. The Permittee shall implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan prepared under Condition H.34. if the following monitoring exceedance occurs:

- When the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity.

[40 CFR 63.864(k)(1)(i)]

H.27. PM Emissions – Violations**.** It shall be considered a violation of the standards of Condition H.4. if the following monitoring exceedance occurs:

- when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period;

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

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

No. 1 Lime Bin Vent and No. 2 Lime Bin Vent

H.28. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

H.29. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

Lime Kiln Stack

H.30. Excess Emissions - TRS. Periods of excess emissions from this emissions unit are all 12-hour average TRS concentration above 8 ppm by volume.

[40 CFR 60.284(d)(2)]

H.31. Excess Emissions – TRS - Violation. The Department will not consider periods of excess emissions reported under Condition H.32. to be indicative of a violation of 40 CFR 60.11(d) provided the Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

[40 CFR 60.284(e)(2), Rule 62-296.404(6)(c) , F.A.C.]

Recordkeeping and Reporting Requirements

Lime Kiln Stack

H.32. TRS CEM- Quarterly Reports. The owner or operator shall submit a written total reduced sulfur emissions report to the Department postmarked by the 30th day following the end of each calendar quarter.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted. Excess emissions shall be all 12-hour periods for which the appropriate surrogate parameter data or total reduced sulfur continuous emissions monitoring data indicates that an applicable 12-hour average total reduced sulfur emission limiting standard for the emissions unit was exceeded.

3. The date and time identifying each period during which each continuous emissions monitoring system used to measure total reduced sulfur emissions or surrogate parameters was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator subject to the provisions of Rule 62-296.404(5) and (6), F.A.C., shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection. The file shall be retained for at least three years following the date of such measurements, maintenance, reports and records.

[Rule 62-296.404(6)(a) and (b), F.A.C.; Construction Permit No. AC45-141877]

H.33. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

H.34. Startup Shutdown Malfunction Plan. The owner or operator must develop and implement a written plan as described in 40 CFR 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in 40 CFR 63.6(e), the plan must include the requirements in paragraphs (1) and (2) of this Condition.

(1) (a) Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and

(b) Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.

(2) The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (2)(i) and (ii) of this Condition:

(i) A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and

(ii) An inspection schedule for the continuous monitoring system required under Condition H.23. to ensure, at least once in each 24-hour period, that the continuous monitoring system is properly functioning.

[40 CFR 63.866(a)]

H.35. Corrective Action Records. The owner or operator of an affected source or process unit must maintain records of any occurrence when corrective action is required under Condition H.26.

[40 CFR 63.866(b)]

H.36. Violation Records. The owner or operator shall maintain records of any occurrence when a violation is noted under Condition H.27.

[40 CFR 63.866(b)]

H.37. Additional Records. In addition to the general records required by 40 CFR 63.10(b)(2), the owner or operator shall maintain records of the following information:

(1)N/A

(2)Records of CaO production rates in units of Mg/d or ton/d

(3) Records of parameter monitoring data required under Condition H.23., including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

(4) Records and documentation of supporting calculations for compliance determinations made under Conditions H.12. through H.15;

(5) Records of monitoring parameter ranges established for each affected source or process unit;

(6)N/A

(7) N/A

[40 CFR 63.866(c)]

H.38. Excess Emissions Report – PM. The owner or operator must report quarterly if measured parameters meet any of the conditions stated in Condition H.26. or H.27. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Condition H.26. and the number and duration of occurrences when the source met or exceeded the conditions in Condition H.27. Reporting excess emissions below the violation thresholds of Condition H.27. does not constitute a violation of the applicable standard.

1. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.

2. The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of this part may combine excess emissions and/or summary reports for the mill.

[40 CFR 63.867(c)]

Notifications

H.39. The owner or operator of any affected source or process unit must submit the applicable notifications from subpart A of this part, as specified in Table 1 of this subpart.

[40 CFR 63.867(a)(1)]

40 CFR 60, Subpart A - General Provisions Requirements

H.40. The No. 4 Lime Kiln is subject to the provisions of 40 CFR 60, Subpart A, General Provisions.

40 CFR Part 63, Subpart A, General Provisions

H.41. This emissions unit is subject to the requirements of 40 CFR Part 63, Subpart A, General Provisions.

Common Conditions

H.42. This emissions unit is also subject to the on-spec used oil conditions in Subsection L.

H.43. This emissions unit is also subject to the applicable 40 CFR Part 63, Subpart S Common Conditions as stated in Subsection M.

H.44. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

Subsection I. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
024	C-Line Brownstock Washer System (BSWS), which is a two-stage combination drum/diffusion washer system. The C-Line BSWS consists of the C-Line 1st and 2nd Stage Filtrate Tanks, 2nd Stage Pressure Diffusion Washer, and C-Line 1st Stage Vacuum Washer. Gases from these sources are vented to the C-Line Turpentine extraction tower then to the C-Line packed gas adsorption wet scrubber to control TRS (Total Reduced Sulfur) emissions.

{Permitting note(s): This emissions unit is regulated under: NSPS - 40 CFR 60, Subpart BB, Standards of Performance for Kraft Pulp Mills, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-165.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

I.1. Permitted Capacity. The maximum process input rate to the C-Line BSWS shall not exceed 51,000 lbs /hr pulp, bone dry, plus 76,739 lbs/hr black liquor solids (BLS), for a total of 127,739 lbs/hr process input rate. The maximum product weight is 51,000 lbs/hr pulp, bone dry (54,570 lbs/hr pulp, air dried (9.3 percent moisture)).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC45-190383/PSD-FL-165]

I.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. ; Construction Permit No. AC45-190383/PSD-FL-165]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

I.3. Total Reduced Sulfur (TRS) Emissions. Total Reduced Sulfur (TRS) Emissions shall not exceed 5 ppm by volume on a dry basis, corrected to the actual oxygen content of the untreated gas stream, 0.16 lbs/hr and 0.7 TPY.

[Rule 62-204.800(8)(b)35., F.A.C.; 40 CFR60. 283(a)(1)(v) ; Construction Permit No. AC45-190383/PSD-FL-165]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

I.4. Total Reduced Sulfur (TRS) Emissions. EPA Method 16 shall be used to determine the TRS concentration. The sampling time shall be at least 3 hours, but no longer than 6 hours. Method 16A or 16B may be used in place of Method 16. A compliance test shall be conducted every five years, prior to operation permit renewal.

[40 CFR 60.285(d); 40 CFR 60.285(f)(2); Rule 62-297.310(7)(a)3., F.A.C.]

Continuous Monitoring Requirements

I.5. Total Reduced Sulfur (TRS) Surrogate Parameters. Pursuant to Rule 62-296.404(5)(d), F.A.C. and in lieu of complying with 40 CFR 60.284(a)(2), (c)(1), and (f), the facility shall operate and maintain continuous monitoring devices that measure the scrubber liquid flow (at least 90% of 326 gpm, minimum 12-hr avg.) and the pressure drop across the scrubber tower (at least 90% of 0.03 psi, minimum 12-hr avg.).
[Rule 62-296.404(5)(d), F.A.C.; Final Determination dated 2/19/91 of Construction Permit No. AC45-190383; Test Report dated May 8, 1996]

Excess Emissions

{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

I.6. Excess Emissions – TRS. For the purpose of reports required under 40 CFR 60.7(c), the owner or operator shall report semiannually periods of excess emissions. Excess emissions are all 12-hour average TRS concentrations above 5 ppm by volume.
[40 CFR 60.284(d)(3)(i)]

I.7. Periods of excess emissions reported under Condition No. I.9. shall not be considered to be indicative of a violation of 40 CFR 60.11(d) provided that the Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner, which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.
[40 CFR 60.284(e)(2)]

40 CFR 60, Subpart A - General Provisions Requirements

I.8. This emissions unit is also subject to the provisions of 40 CFR 60, Subpart A, General Provisions.

Common Conditions

I.9. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

Section III. Emissions Unit and Conditions.

Subsection J. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
045	Product and packaging rotogravure and wide-web flexographic printing presses. 37.5" Ward Flexographic press – water-based ink and glue 50" S&S Flexographic press – water-based ink and glue 66" Ward RDC – water-based ink 38" S&S Flexographic press – water-based ink and glue 38" Langston Saturn press – water-based ink and glue The Fernandina Beach Boxplant (Container Division), which is part of the Fernandina Beach Mill facility, produces corrugated boxes from Kraft and coated linerboard. The corrugated box plant process involves the use of numerous pieces of product and packaging rotogravure printing and converting equipment. HAP emissions from the Boxplant can be attributed to that small quantity of HAPs contained in the inks and glues used in the processes The HAP emissions from the Boxplant are minor sources of HAP emissions. However, because the Boxplant is located at the Fernandina Beach Mill (a major source of HAPs), the product and packaging rotogravure and wide-web flexographic printing presses meet the applicability of 40 CFR 63 Subpart KK.

The following specific conditions apply to the emissions unit(s) listed above:

Operational Parameters

J.1. Permitted Capacity. The Permittee shall apply no more than 400 kg per month, for every month, of organic HAP on the product and packaging wide-web flexographic printing presses.
[40 CFR 63.821(b)(2)]

Recordkeeping

J.2. Total Volume and Organic HAP Content. The permittee shall maintain records of the total volume and organic HAP content of each material applied on the product and packaging, wide-web flexographic printing presses during each month. The owner or operator shall maintain these records for five years, and upon request, submit them to the Department.
[40 CFR 63.829(e)]

40 CFR Part 63, Subpart KK Applicability

J.3. In the event that the Permittee does not comply with the criterion of Condition J.1. in any month, starting with that month, the facility is subject to all relevant requirements of 40 CFR Part 63, Subpart KK and is no longer eligible to use the provisions of Condition J.1., even if in subsequent months the affected source does comply with the criteria of Condition. J.1. The Permittee shall then comply with the applicable standards of 40 CFR 63, Subpart KK and apply for and obtain all necessary air permits.
[40 CFR 63.821(c), 40 CFR 63.826(a)]

Section III. Emissions Unit and Conditions.

Subsection K. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
034	Package Boiler with low NOx (Nitrogen Oxides) burners. This boiler is a standby unit that only operates when the No. 5 Power Boiler, the No. 7 Power Boiler, the No. 4 Recovery Boiler or the No. 5 Recovery Boiler is not in operation or is being operated at a reduced rate.

This emissions unit is subject to regulation under 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per hour Heat Input, New and Existing Sources, BACT Determination dated XX-XX-XX.

The following specific conditions apply to the emissions unit(s) listed above:

K.0. Upon demonstration of compliance with Air Construction Permit No. 0890003-008-AC and the milestones identified in Compliance Plan, Appendix CP-2, the permittee shall operate the referenced emissions unit in accordance with the conditions specified below.

Essential Potential to Emit (PTE) Parameters

K.1. Permitted Capacity. The maximum heat input rate for this emissions unit shall not exceed 190 MMBtu/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit 0890003-008-AC]

K.2. Methods of Operation. The boiler shall be fired only with No. 2 Fuel Oil with a maximum sulfur content not to exceed 0.05% by weight. No. 2 Fuel Oil usage shall be limited to a maximum of 1,232.9 kgal/year, which is based on an annual capacity factor of 10% or less of the maximum fuel usage, and 135,000 Btu/gal for ultra low sulfur No. 2 fuel oil.

[BACT Determination dated XX-XX-XX; Permit No. 0890003-008-AC]

K.3. Hours of Operation. The hours of operation are not limited.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0890003-008-AC]

K.4. Alternative Methods of Operation. This emissions unit shall operate **only** when one of the named boilers is not in operation or is being operated at a reduced rate.

Alternative Methods of Operation	Package Boiler	No. 5 Power Boiler	No. 7 Power Boiler	N0 4 Recovery Boiler	No, 5 Recovery Boiler
1	YES	YES*	YES*	YES*	YES*
2	NO	YES	YES	YES	YES
3	YES	NO	YES	YES	YES
4	YES	YES	NO	YES	YES
5	YES	YES	YES	NO	YES
6	YES	YES	YES	YES	NO

YES Represents boiler service.
YES* Represents one or more boilers operating at a reduced rate such that the net emissions are not increased.
NO Represents boiler not in service.

[Construction Permit No. 0890003-008-AC; FINAL Title V Permit No. 0890003-001-AV]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

K.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall be limited to a maximum sulfur content in the No. 2 fuel oil of 0.05 percent, by weight, and 10.3 lb/hr and 4.5 TPY.
[Rule 62-296.406(3), F.A.C.; BACT Determination dated XX-XX-XX; Construction Permit No. 0890003-008-AC]

K.6. Particulate Matter. Particulate Matter emissions shall be controlled by the firing of low sulfur content liquid fuel. Particulate Matter emissions shall not exceed 2.8 lbs/hr and 1.2 TPY.
This standard shall apply at all times, except during periods of startup, shutdown or malfunction.

[Rule 62-296.406(2), F.A.C.; BACT Determination dated XX-XX-XX; Construction Permit No. 0890003-008-AC; 40 CFR 60.43b(g)]

K.7. Visible Emissions. No gases shall be discharged into the atmosphere that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. This standard shall apply at all times, except during periods of startup, shutdown or malfunction.

[Rule 62-296.406(1), F.A.C.; Construction Permit No. 0890003-008-AC; 40 CFR 60.43b(f); 40 CFR 60.43b(f)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

K.8. Visible Emissions. The test method for Visible Emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed once each federal fiscal year. In addition, the facility shall conduct Visible Emissions testing in accordance with the Alternative Monitoring Plan (Condition K.10.)

[Construction Permit No. 0890003-008-AC; 40 CFR 60.46b(d)7.]

K.9. Sulfur Dioxide – Sulfur Content. Determine and record the as-fired fuel sulfur content for the No. 2 fuel oil using certified ASTM fuel oil analysis method in lieu of a stack test. A copy of a certified ASTM fuel oil analysis of the oil delivered is acceptable. This information shall be reported annually by March 1 for the previous year.

[Construction Permit No. 0890003-008-AC; 40 CFR 60.47b(f)]

Continuous Monitoring Requirements

K.10. Alternative Monitoring Plan**.** In lieu of a Continuous Opacity Monitor as required by Rule 40 CFR 60.48b(a), the facility has requested this Alternate Monitoring Plan for infrequently operated facilities:

- The mill will perform an EPA Method 9 visible emissions test during each fiscal year, if the boiler is operated during the calendar year.
- The mill will have a Method 9 – trained and certified visible emissions observer perform a 6 minute opacity test once a daylight shift whenever the package Boiler is operated on the daylight shift.
- If the opacity readings exceed 10 percent for a 6-minute test, the observer will continue the readings for another 12 minutes to obtain two additional data sets for a total of three (3) 6-minute data sets.
- The observer will log in the reading results along with the date and time, and maintain the records on site for inspection by DEP.
- Fuel usage and analysis data will be maintained onsite to verify that the 10-percent annual capacity factor is not exceeded.

- The mill will follow the boiler manufacturer's maintenance schedule and procedures to ensure that serviceable components are well maintained.

[Rule 40 CFR 60.13(i)(2); EPA letter dated March 9, 2003]

Recordkeeping and Reporting Requirements

K.11. Annual Capacity Factor. Record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor. The annual capacity factor is determined on a 12- month rolling average basis with a new annual capacity factor calculated at the end of each month.
[40 CFR 60.49b(d)]

K.12. Submit Notifications. Submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include:

- The design heat input capacity of the affected facility and identification of the fuels to be combusted.
- The annual capacity factor at which the operator anticipates operating the facility based on the fuel fired.
- Notification that an emerging technology will be used for controlling emissions of sulfur dioxide. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the facility submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42b(a) unless and until this determination is made by the Administrator.

[40. CFR 60.49b(a)]

K.13. Submission Of Test Data. The owner or operator of each affected facility subject to the sulfur dioxide and particulate matter emissions limit under §§ 60.42b, 60.43b shall submit to the Administrator the performance test data from the initial performance test. The owner or operator of each affected facility described in § 60.44b(j) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.
[40 CFR 60.49b(b)]

K.14. Opacity. Facilities subject to the opacity standard under § 60.43b shall maintain records of opacity.
[40 CFR 60.49b(f)]

K.15. Reporting. The reporting period for written reports is each 6-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
[40 CFR 60.49b(w)]

K.16. Alternate Quarterly Reporting. The facility may submit electronic quarterly reports for SO_2 and or Opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l). The format of each report shall be coordinated with the permitting authority. The electronic reports shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternate format.
[40 CFR 60.49b(v)]

K.17. Low Sulfur Oil. The facility shall obtain and maintain at the facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil under 40 CFR 60.41b. Reports shall be submitted to the Department certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period.

For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the reporting period.

[40 CFR 60.49b(r)]

K.18. Excess Emissions. Excess emission reports shall be submitted for any excess emissions which occurred during the reporting period. For the purposes of 40 CFR 60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards stated in Condition K.7.
[40 CFR 60.49b(h)(1) and (3)]

K.19. Records. All records shall be maintained by the owner for a period of 2 years following the date of such record.
[40 CFR 60.49b(o)]

Common Conditions

K.20. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

K.21. This emissions unit is also subject to the requirements in Subsection O.

General Provisions

K.22. The permittee shall comply with the applicable reporting requirements of 40 CFR Part 60, Subpart A – General Provisions.
[Permit No. 0890003-008-AC]

Subsection L. Used Oil -Common Conditions.

E.U. ID No.	Brief Description
006	#5 power boiler
015	#7 power boiler
007	#4 recovery boiler
011	#5 recovery boiler
021	#4 lime kiln

The following conditions apply to the emissions unit(s) listed above:

L.1. The on-specification used oil fired in the emissions unit(s) listed above shall not exceed 10% of the fuel consumed and shall be blended with #6 fuel oil. The on-spec used oil prior to blending shall comply with the limits **listed below**, the provisions of 40 CFR 279 & 761 and shall be recorded. Used oil which fails to comply with any of these specification levels is considered "off-specification" used and shall not be burned:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	**Allowable Level**
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum
PCB	2 ppm maximum

[40 CFR 279.11]

L.2. On-specification used oil, whether generated on or off-site, may be fired as follows:

1. At any time provided the maximum concentration of PCBs is less than 2 ppm. The analysis and recordkeeping requirements apply to each amount of used oil, prior to blending.

2. Only during normal operation temperature and not during startup or shutdown, if the maximum concentration of PCBs is greater than, or equal to 2 ppm, but less than 50 ppm.

[40 CFR 279.61 and 761.20(e)]

L.3. Used Oil – Off-site Generation. The Permittee shall obtain from the vendor, for each load of used oil received, a certification that the used oil meets the specifications for on-specification used oil as stated in Condition L.1., and contains a PCB concentration of less than 50 ppm. This certification shall also describe the basis for the certification, such as analytical results.
[40 CFR 761.20]

L.4. Used Oil – On-site Generation. For used oil generated on-site, the Permittee shall sample and analyze the used oil to be burned, prior to any blending utilizing the procedures stated below.

(1) The permittee shall collect representative samples of used oil from the Used Oil Day Tank once per week.

(2) Each of the collected used oil samples shall be submitted to an independent laboratory for analysis of the constituents identified in Condition L.1. within 2 days of collection.

(3) Testing (sampling, extraction and analysis) shall be performed using approved DEP, ASTM or EPA methods (such as those specified in EPA Publication SW-846 -Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

(4) Prior to burning used oil, the samples shall be collected once per week for a period of ten (10) weeks to verify the used oil meets the specifications stated in Condition L.1.

(5) Provided the analysis results of the sampling collected over the ten (10) week period demonstrates that the used oil specifications stated in Condition L.1. have been met, the permittee shall then collect representative samples of used oil on a once per month basis for a period of six (6) months.

(6) Provided the analysis results of the sampling collected over the six (6) month period demonstrates that the used oil specifications stated in Condition L.1. have been met, the permittee shall then collect representative samples of used oil on a once per year basis.

(7) If any analysis result indicates noncompliance with the specifications stated in Condition L.1., the used oil shall not be burned as stated in Condition L.1. The permittee shall then return to the sampling and analysis frequency stated in paragraph (4) of this condition.

[Rule 62-4.070(3), F.A.C.; 40 CFR 279; and, 40 CFR 761; Comments from applicant dated 9/14/06]

L.5. Used Oil Recordkeeping: The owner or operator shall obtain, make, and keep records related to the use of used oil in a form suitable for inspection at the facility by the Department. The records should include, but are not limited to the following:

(1) The gallons of on-specification used oil received each month.

(2) The gallons of on-specification used oil generated on-site each month.

(3) The gallons of on-specification used oil burned each month.

(4) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period.

(5) The name and address of all vendors delivering used oil to the facility.

(6) Copies of the vendor certifications, including the PCB concentration of the used oil, and any supporting information.

(6) Results of the analyses required in any of the above conditions.

(7) The permittee shall maintain on-site records of all used oil sampling documentation and laboratory analysis information for a period of up to 5 years

[Rule 62-4.070(3), F.A.C.; 40 CFR 279.72; and, 40 CFR 761.20(e)]

Subsection M. 40 CFR Part 63, Subpart S Common Conditions.

E.U. ID No.	Brief Description
033	Pulping System MACT I

Low volume, high concentration (LVHC) Noncondensible gases (NCG) from the batch digester system, continuous digester system, turpentine recovery system, evaporator systems, and foul condensate collection tank are collected and burned in the No. 4 Lime Kiln with the No. 5 Power Boiler as the back up for compliance with 40 CFR 63, Subpart S.

High Volume, Low Concentration (HVLC) NCGs from the named systems in 40 CFR 63.441 and 40 CFR 63.443(a)(ii)-(v) are also included in this emissions unit.

{Permitting note(s): This emissions unit is regulated under: NESHAP - 40 CFR 63, Subpart S, adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The following conditions apply to the emissions unit(s) listed above:

M.0. The permittee shall comply with the Conditions M.37. through M.68. (Pulping system provisions of 40 CFR Part 63, Subpart S) no later than the compliance deadline established in the Subpart, i.e. no later than April 17, 2006. [1] The Permittee shall apply for and obtain air construction permits as needed, in order to meet these requirements.

[1] On October 8, 2004, the Department approved a six-month compliance date extension for the Fernandina Beach Mill for the Clean Condensate Alternative option allowed by §63.447, and up to a one-year compliance date extension for the HVLC-NCG compliance option of §63.443 should the Fernandina Beach Mill elect this option. The Fernandina Beach Mill shall achieve final compliance by October 17, 2006 or April 17, 2007, respectively.

M.1. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart A – General Provisions as specified in 40 CFR Part 63, Subpart S, Table 1.
[40 CFR 63.440(g)]

M.2. Total HAP Emissions. Each equipment system listed below[1] shall be enclosed and vented (as specified in Condition No. M.11.) into a closed-vent system and routed to the No. 4 Lime Kiln (primary control device) or the No. 5 Power Boiler (secondary control device) for total HAP emission reduction. The HAP emission stream shall be introduced with the primary fuel or into the flame zone.

- Kamyr Blow Tank
- Kamyr Vent Gas Condenser
- Kamyr Secondary Condenser and NCG Cooler
- Batch Turpentine Secondary Condenser
- Batch BHA Secondary Condenser and NCG Cooler

- No. 5 Evaporator Hotwell
- No. 6 Evaporator Hotwell
- Turpentine Decanter and storage Tank
- UNOX Condensate Feed Tank

[1] In accordance with 40 CFR 63.443(a), the facility is required to control the total HAP emissions from the LVHC system as defined as the collection of equipment including the digester, turpentine recovery (condensers, decanters, turpentine storage tanks), evaporator, steam stripper systems, and any other equipment serving the same function as those previously listed.

[40 CFR 63.443(a), 40 CFR 63.443(c), 40 CFR 63.443(d)].

M.3. Excess Emissions. Periods of excess emissions reported under Condition M.26., shall not be considered a violation of Condition M.2. provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 1% for No. 4 Lime Kiln (EU 021) and No. 5 Power Boiler (EU 006) combined.

[40 CFR 63.443(e)(1)]

Kraft pulping process condensates Standards

M.4. Pulping Process Condensates. The pulping process condensates from the following equipment systems[1] shall be treated to meet the requirements specified in Conditions M.5 - M.9.:

- Kamyr No. 1 Primary Turpentine Condenser
- Kamyr No. 2 Primary Turpentine Condenser
- Batch Blow Heat Accumulator
- Turpentine Decanter Underflow
- No. 5 Evaporator Hotwell
- No. 6 Evaporator Hotwell
- No. 5 Evaporator Fifth Effect Level Pot
- UNOX Condensate Feed Tank
- NCG Low Point Drains

[1] Pursuant to 40 CFR 63.446(b), equipment systems for the purpose of this condition shall include: each digester system, each turpentine recovery system, each evaporator system condensate from: a) the vapors from each stage where weak liquor is introduced (feed stages) and b) each evaporator vacuum system for each stage where weak liquor is introduced (feed stages), each HVLC collection system; and each LVHC collection system.

[40 CFR 63.446(b)]

M.5. Pulping Process Condensates – Collection. All of the pulping process condensates generated, produced, or associated with the equipment systems listed in Condition M.4. shall be subject to the requirements of Conditions M.6.- M.9.
[40 CFR 63.446(c)(1)]

M.6. Pulping Process Condensates – Closed Collection System. The pulping process condensates from the equipment systems listed in Condition M.4.,shall be conveyed in a closed collection system that is designed and operated to meet the individual drain system requirements specified in 40 CFR Part 63, Subpart RR, Sections 63.960, 63.961, and 63.962 (Condition Nos. N.1., N.2., and N.3.), except closed vent systems and control devices shall be designed and operated in accordance with Condition M.2. and M.11., instead of in accordance with 40 CFR Part 63, Subpart RR, Section 63.693 as specified in 40 CFR 63.962 (a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(A), and (b)(5)(iii) (Condition N.3.).
[40 CFR 63.446(d)(1)]

M.7. Closed Collection System - Foul Condensate Tank – Detectable Leaks. The fixed roof and all openings (access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements in Condition No. M.11. and routed to the No. 4 Lime Kiln or the No. 5 Power Boiler as a backup control device.
[40 CFR 63.446(d)(2)(i)]

M.8. Closed Collection System - Foul Condensate Tank – Openings. Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.
[40 CFR 63.446(d)(2)(ii)]

M.9. Pulping Process Condensates – Treatment. All of the pulping process condensates from the equipment systems listed in Condition No. M.4. shall be treated in the UNOX system to reduce or destroy the total HAPs by at least 92 percent or more by weight.
[40 CFR 63.446(e)(3)]

M.10. All new or modified pulping process condensates shall be evaluated to determine if they meet the applicable requirements of 40 CFR 63.446.
[40 CFR 63.446(h)]

Enclosures and Closed-Vent Systems Requirements

M.11. Each enclosure and closed-vent system specified in Condition No. M.2. for capturing and transporting vent streams that contain HAP shall meet the following requirements.

(a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in Condition No. M.32. Each enclosure or hood opening closed during the initial performance test specified in §§ 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(b) Each component of the closed-vent system used to comply with Condition No. M.2. that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in Condition No. M.31.

(c) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in §§63.443 shall comply with either of the following requirements:

(1) On each bypass line, the permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(2) For bypass line valves that are not computer controlled, the permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

[40 CFR 63.450, 40 CFR 63.454(e)]

Continuous Monitoring Requirements

M.12. Continuous Monitoring System. The permittee shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS) as specified in Condition Nos. M.13. and M.15. The CMS shall include a continuous recorder.
[40 CFR 63.453(a)]

M.13. Continuous Monitoring System – UNOX Operating Parameters. A CMS shall be operated to measure the following UNOX parameters:

(1) Oxygen feed rate
(2) Average vent gas purity

[40 CFR 63.453(m); Condensate Compliance Plan as amended 3/5/01; Initial Compliance Test dated 3/5/01]

M.14. UNOX Operating Parameters – Minimum/Maximum. The UNOX system shall be operated in a manner consistent with the oxygen feed rate operating in the range of 20 to 82 KCFH and the average vent gas purity operating in the range of 11 to 84%.

[40 CFR 63.453(o), Condensate Compliance Plan as amended 3/5/01; Initial Compliance Test dated 3/5/01, Compliance Testing dated 11/28/04]

M.15. Continuous Monitoring System – Condensate Collection. A CMS shall be operated to verify the collection of condensate pursuant to Condition M.5. by monitoring the duration of any period when condensate is not collected from the equipment systems listed in Condition M.4.

All manual condensate bypass line valves shall be maintained in the closed position. The valves shall be secured in the closed position with a lock-tie device. Lock-ties shall be inspected at a frequency of no less than during the monthly visual inspections required by Condition M.18. Any valve manipulation that causes condensate not to be collected shall be recorded.

The time that all computer controlled condensate bypass (divert) valves are in the open position shall be continuously monitored. Such events shall be documented.

Condensate tank levels shall be continuously monitored. Any overflows shall be documented.

[40 CFR 63.453(i)]

M.16. Quarterly Performance Test. The owner of operator shall conduct a direct measurement performance test each quarter using the procedures specified in paragraphs below.

(1) Conduct a performance test as specified in Condition M.35. within 45 days after the beginning of each quarter and meet the percent reduction emission limit specified in Condition M.9.

(i) The annual performance test shall be performed for total HAP as specified in Condition M.35.(1). This test shall be over a 15-consecutive day period.

(ii) The remaining quarterly performance tests shall be performed as specified in Condition M.35.(2) provided the initial demonstration indicated equivalent HAP removal efficiency. This test shall be over a 3-consecutive day period.

[Condensate Compliance Plan as amended 3/5/01]

M.17. UNOX Operating Parameters – Excursions. A UNOX Operating Parameter Excursion occurs whenever either of the operating parameters specified in Condition M.14. are either below the established minimum or above the established maximum operating parameter values for 3 consecutive 1-hour averages, and the mill and/or waste water treatment process is not in a Startup, Shutdown, Malfunction mode or the SSM Plan is not followed.

(1) As soon as practical after the beginning of the UNOX Operating parameter excursion, the following requirements shall be met:

(i) Before the steps in paragraph (1)(ii) or (iii) of this Condition are performed, all sampling and measurements necessary to meet the requirements in paragraph (2) of this Condition shall be conducted.

(ii) Steps shall be taken to repair or adjust the operation of the process to end the parameter excursion period.

(iii) Steps shall be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.

(2) Composited samples of the UNOX influent from the primary clarifier, the collected condensate (UNOX Feed Tank) and the UNOX effluent will be collected daily in accordance with Condition M.32, and retained for 24 hours.

(3) A UNOX Operating parameter excursion shall not be considered a violation of the treatment limit established in Condition M.9., if the results of the direct measurement performance test conducted, using the procedures as described below, demonstrate that at least 92% or more by weight of total HAPs has been removed.

(i) Conduct a direct measurement performance test using the samples collected per paragraph (2) of this Condition for the day of, the day before, and the day after the excursion. The HAP fraction removed shall be calculated using the equation specified in Condition M.37(2):

(ii) The results of the direct measurement performance test specified in paragraph (2)(i) of this Condition shall be recorded as specified in Condition M.24.

(iii) The owner or operator may apply to the Department pursuant to Condition M 30., for an expansion of the compliance operating parameter range. Reestablishment of the operating parameter range shall be in accordance with the following:

a. During subsequent performance tests, continuously record the operating parameter;

b. Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

c. The owner or operator shall provide for the Department's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

(3) A UNOX Operating parameter excursion shall be considered a violation of removal limit established in Condition M.9., if the results of the hardpipe treatment efficiency test conducted, using the procedures specified in paragraph (2)(i) of this Condition, do not demonstrate that at least 92% or more by weight of total HAPs has been removed.

[Condensate Compliance Plan as amended 3/5/01, 40 CFR 63.453(n)]

M.18. Enclosure and Closed-Vent System –Inspections. Each enclosure and closed-vent system used to comply with Condition No. M.11. shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in Condition No. M.11.(a) shall be performed once during each calendar month, with at least 21 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections, and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition No. M.11.(b) measured annually by the procedures in Condition No. M.31.

(4) Demonstrate annually that each enclosure opening is maintained at negative pressure as specified in Condition No. M.32.

(5) The valve or closure mechanism specified in Condition No. M.11.(c)(2) shall be inspected once during each calendar month, with at least 21 days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by Conditions Nos. M.18.(1) through M.18.(5) above, identifies visible defects in ductwork, piping, enclosures or connections to covers required in Condition No. M.11., or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k); EPA Approval Letter dated September 22, 2003 for Alternative Inspection Frequency]

M.19. Condensate Closed Collection System – Inspections. Each pulping process condensate closed collection system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections, and shall comply with the inspection and monitoring requirements specified in 40 CFR 63.964 of Subpart RR (Condition N.4.), except:

(1)(i) Owners or operators shall comply with the recordkeeping requirements of Conditions M.20. through M.22. instead of the requirements specified in 40 CFR 63.964(a)(1)(vi) and (b)(3) of Subpart RR (Condition N.4.).

(ii) Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in Conditions M.12. and M.18. instead of the requirements specified in 40 CFR 63.964(a)(2) of Subpart RR (Condition N.4.).

(2) Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in Condition M.7. measured initially and annually by the procedures specified in Condition M.31.

(3) If an inspection required by this section identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in 40 CFR 63.964(b) of Subpart RR (Condition N.4.) shall be taken.

[40 CFR 63.453(l)]

Recordkeeping Requirements

M.20. The owner or operator of each affected source subject to the requirements of this subpart shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1, and the requirements specified in Conditions M.21. through M.24. for the monitoring parameters specified in 40 CFR 63.453.

[40 CFR 63.454(a)]

M.21. Enclosure Opening, Closed-Vent System, Closed Collection System. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;
(2) The equipment type and identification;
(3) Results of negative pressure tests for enclosures;
(4) Results of leak detection tests;
(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
(7) Repair methods applied in each attempt to repair the defect or leak;
(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
(10) The date of successful repair of the defect or leak;
(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

M.22. New Affected Process Equipment. The owner or operator shall record the CMS parameters specified in §63.453 and meet the requirements specified in Condition M.20. for any new affected process equipment or pulping process condensate stream that becomes subject to the standards of 40 CFR 63 Subpart S due to a process change or modification.

[40 CFR 63.454(d)]

M.23. The owner or operator shall maintain logs of the following on a daily basis:

- UNOX Operating Parameter excursions;
- UNOX downtime;
- UNOX Startup, Shutdown, and Malfunction events

[Condensate Compliance Plan as amended 3/5/01]

M.24. UNOX Operating Parameter Excursions – Records. The owner or operator shall prepare a written record specifying the results of the performance test specified in Condition M.17.(2)(ii).

M.25. UNOX System SSM Plan. The Permittee shall adopt and implement a written startup, shutdown, and malfunction (SSM) Plan for the UNOX System pursuant to Facility-wide Condition No. 10.
[Condensate Compliance Plan as amended 3/5/01]

Reporting Requirements

M.26. Each owner or operator of a source subject to this subpart shall comply with the reporting requirements of 40 CFR Part 63 Subpart A as specified in Table 1 and all the following requirements in this section.
[40 CFR 63.455(a)]

M.27. Each owner or operator of a kraft pulping system specified in §63.440(d)(1) or a bleaching system specified in §63.440(d)(3)(ii) shall submit, with the initial notification report specified under §63.9(b)(2) of subpart A of this part and paragraph (a) of this section and update every two years thereafter, a non-binding control strategy report containing, at a minimum, the information specified in paragraphs (b)(1) through (b)(3) of this section in addition to the information required in §63.9(b)(2) of subpart A of this part.

(1) A description of the emission controls or process modifications selected for compliance with the control requirements in this standard.

(2) A compliance schedule, including the dates by which each step toward compliance will be reached for each emission point or sets of emission points. At a minimum, the list of dates shall include:

(i) The date by which the major study(s) for determining the compliance strategy will be completed;

(ii) The date by which contracts for emission controls or process modifications will be awarded, or the date by which orders will be issued for the purchase of major components to accomplish emission controls or process changes;

(iii) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;

(iv) The date by which on-site construction, installation of emissions control equipment, or a process change is to be completed;

(v) The date by which final compliance is to be achieved;

(vi) For compliance with paragraph §63.440(d)(3)(ii), the tentative dates by which compliance with effluent limitation guidelines and standards intermediate pollutant load effluent reductions and as available, all the dates for the best available technology's milestones reported in the National Pollutant Discharge Elimination System authorized under section 402 of the Clean Water Act and for the best professional milestones in the Voluntary Advanced Technology Incentives Program under 40 CFR 430.24 (b)(2); and

(vii) The date by which the final compliance tests will be performed.

(3) Until compliance is achieved, revisions or updates shall be made to the control strategy report required by paragraph (b) of this section indicating the progress made towards completing the installation of the emission controls or process modifications during the 2-year period.

[40 CFR 63.455(b)]

M.28. New Affected Process Equipment. The owner or operator shall comply with the reporting requirements of 40 CFR 63, Subpart A as specified in Table 1 upon startup of any new affected process equipment or pulping process condensate stream that becomes subject to the standards of this subpart due to a process change or modification.
[40 CFR 63.455(d)]

Test methods and procedures

M.29. Annual Test Requirements. An annual performance test is required for all emission sources subject to the limitations in 40 CFR 63.446.
[Rule 62-297.310(7)(a)4.c., F.A.C.]

M.30. Liquid sampling locations and properties. For purposes of selecting liquid sampling locations and for determining properties of liquid streams such as wastewaters, process waters, and condensates, the owner or operator shall comply with the following procedures:

(1) Samples shall be collected using the sampling procedures of the test method listed in paragraph (3) of this condition selected to determine liquid stream HAP concentrations;

(i) Where feasible, samples shall be taken from an enclosed pipe prior to the liquid stream being exposed to the atmosphere; and

(ii) When sampling from an enclosed pipe is not feasible, samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of HAP compounds prior to sampling.

(2) The individual flow rate of the collected condensate (UNOX Feed Tank) and the UNOX outlet (exiting liquid streams) shall be measured and totalized daily. The main UNOX inlet flow from the primary clarifier (i.e., the effluent to the UNOX from other mill sources) shall be calculated by difference.

(3) The owner or operator shall collect daily composited samples from the streams specified in paragraph (2) of this Condition. The composited sample shall be comprised of at least 3 grab samples per day that are taken at approximately equally spaced intervals. The Total HAP or methanol concentration shall be determined by the NCASI methods DI/MEOH-94.03 and NCASI direct injection procedure (NCASI Method DI/HAPS-99.01: Selected HAPS in Condensates by GC/FID).

[40 CFR 63.457(c), Condensate Compliance Plan as amended 3/5/01; EPA NCASI Test Method Approval letter dated 12/11/00]

M.31. Detectable leak procedures. To measure detectable leaks for closed-vent systems as specified in Condition M.11. or for pulping process wastewater collection systems as specified in Condition M.7., the owner or operator shall comply with the following:

(1) Method 21, of Part 60, Appendix A; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

M.32. Negative pressure procedures. To demonstrate negative pressure at process equipment enclosure openings as specified in Condition M.11., the owner or operator shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;
(2) Measure the static pressure across the opening;
(3) Smoke tubes to demonstrate flow into the enclosure opening; or
(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

M.33. UNOX Vents Sampling. For purposes of determining vent gas stream properties at the North, Center, and South UNOX Vents, the following procedures shall be used:

(1) Method 1 or 1A of Part 60, Appendix A, as appropriate, shall be used for selection of the sampling site as follows:

(i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere;

(2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.

(3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.

(5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) NCASI Test Method CI/SG/PULP-94.02 shall be used to determine the acetaldehyde, propionaldehyde, methanol, and methyl ethyl ketone concentration.

(ii) Total HAPs, V_{HAP}, shall be the summation of methanol, acetaldehyde, propionaldehyde, and methyl ethyl ketone determined from (5)(i) and (5)(ii).

(iii) Provided the Total HAPs mass is less than 0.05 lb/ODTP during the annual testing, V_{HAP} shall be assumed to be equal to the test results measured during the vent gas testing, as well as, for subsequent annual performance test and for compliance with daily monitoring requirements for the next 12 months.

(iv) If the Total HAPs mass equals or exceeds 0.05 lb/ODTP during the annual testing, V_{HAP} shall be determined by direct measurement on a quarterly basis.

(6) The minimum sampling time for each of the three runs per method shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

[40 CFR 63.457(b); Condensate Compliance Plan as amended 3/5/01]

M.34. For purposes of complying with the requirements in 40 CFR 63.443, the owner or operator shall measure the total HAP concentration as one of the following:

(1) As the sum of all individual HAPs; or
(2) As methanol.

[40 CFR 63.457(f)]

M.35. UNOX Treatment System Percent Reduction Calculations. To determine compliance with the condensate treatment standards specified in Condition M.9., the owner or operator shall use the following:

(1) Initial/Annual Testing

(i) Total HAP shall be measured as acetaldehyde, methanol, methyl ethyl ketone, and propionaldehyde using the procedures specified in Condition Nos. M.30. and M.33.(5)(i)(ii).

(ii) The HAP percent reduction shall be calculated using the following equations (initial/annual basis):

$$\text{HAP fraction removed (fR)} = ((HAP_{in} + HAP_{cond}) - (V_{HAP} + HAP_{out}))/(HAP_{in} + HAP_{cond})$$

$$\text{HAP percent reduction} = fR * 100\%$$

Where:

fR	= fraction of HAP removed
HAP_{in}	= methanol, acetaldehyde, methyl ethyl ketone, and propionaldehyde measured in UNOX influent from the primary clarifier
HAP_{cond}	= methanol, acetaldehyde, methyl ethyl ketone, and propionaldehyde in the collected condensate (UNOX Feed Tank)
HAP_{out}	= methanol , acetaldehyde, methyl ethyl ketone, and propionaldehyde measured in the UNOX effluent from composited samples.
V_{HAP}	= Mass of methanol, acetaldehyde, methyl ethyl ketone, and propionaldehyde determined by direct measurement using the procedures specified in Condition M.33. of the UNOX vent off-gas.

(2) Quarterly Testing

(i) Methanol shall be measured as a surrogate for total HAP provided the value of H/M, as determined from the initial/annual test, is used instead of measuring methanol, acetaldehyde, methyl ethyl ketone, and propionaldehyde.

(ii) The HAP percent reduction shall be calculated using the following equation :

HAP fraction removed (fR) = $(H/M) * (((MeOH_{in} + MeOH_{cond}) - (V_{HAP} + MeOH_{out}))/(MeOH_{in} + MeOH_{cond}))$

HAP percent reduction = fR * 100%

Where:

fR	= fraction of HAP removed
H/M	= the ratio between the methanol and "Total HAP" demonstrated in the initial/annual test.
$MeOH_{in}$	= methanol measured in UNOX influent from the primary clarifier
$MeOH_{out}$	= methanol measured in the UNOX effluent from composited samples.
$MeOH_{cond}$	= Methanol measured in the collected condensate (UNOX Feed Tank)
V_{HAP}	= Mass of methanol, acetaldehyde, methyl ethyl ketone, and propionaldehyde determined by direct measurement using the procedures specified in Condition M.33. of the UNOX vent off-gas during the most recent test.

[40 CFR 63.457(g) and (l)(1), Condensate Compliance Plan as amended 3/5/01]

Common Conditions

M.36. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection P.

40 CFR 63.443 requirements for HVLC Sources

M.37. Total HAP emissions from the following equipment systems shall be controlled as specified in Condition No. M.38.:

a) Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (1) or (2) or the combined rate specified in paragraph (3) of this section.

(1) Each knotter system with emissions of 0.05 kilograms or more of total HAP per megagram of ODP (0.1 pound per ton).

(2) Each screen system with emissions of 0.10 kilograms or more of total HAP per megagram of ODP (0.2 pound per ton).

(3) Each knotter and screen system with emissions of 0.15 kilograms or more of total HAP per megagram of ODP (0.3 pound per ton).

b) Each pulp washing system;

c) Each decker system that:

(1) Uses any process water other than fresh water or paper machine white water; or

(2) Uses any process water with a total HAP concentration greater than 400 parts per million by weight; and

d) Each oxygen delignification system (N/A to Fernandina Beach Mill).

Knotter system means equipment where knots, oversized material, or pieces of uncooked wood are removed from the pulp slurry after the digester system and prior to the pulp washing system. The knotter system equipment includes the knotter, knot drainer tanks, ancillary tanks, and any other equipment serving the same function as those previously listed.

Pulp washing system means all equipment used to wash pulp and separate spent cooking chemicals following the digester system and prior to the bleaching system, oxygen delignification system, or paper machine system (at unbleached mills). The pulp washing system equipment includes vacuum drum washers, diffusion washers, rotary pressure washers, horizontal belt filters, intermediate stock chests, and their associated vacuum pumps, filtrate tanks, foam breakers or tanks, and any other equipment serving the same function as those previously listed.

Screen system means equipment in which oversized particles are removed from the pulp slurry prior to the bleaching or papermaking system washed stock storage.

Decker system means all equipment used to thicken the pulp slurry or reduce its liquid content after the pulp washing system and prior to high-density pulp storage. The decker system includes decker vents, filtrate tanks, associated vacuum pumps, and any other equipment serving the same function as those previously listed. This includes the Bleach Plant Pre-Washer (Decker).

[40 CFR 63.441 and 40 CFR 63.443(a)(ii)-(v)]

M.38. Each equipment system listed in Condition No. M.37. shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in Condition M.39. for total HAP emission reduction no later than the compliance date specified in Condition M.0. The enclosures and closed-vent system shall meet the requirements specified in Condition No. M.41.

[40 CFR 63.443(c)]

M.39. The control device used to reduce total HAP emissions from each equipment system listed in Condition M.37. shall:

(1) Reduce total HAP emissions by 98 percent or more by weight; or

(2) Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis; or

(3) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 ^{o}C (1600 ^{o}F) and a minimum residence time of 0.75 seconds; or

(4) Reduce total HAP emissions using one of the following:

(i) A boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or

(ii) A boiler or recovery furnace with a heat input capacity greater than or equal to 44 megawatts (150 million British thermal units per hour) by introducing the HAP emission stream with the combustion air.

[40 CFR 63.443(d)]

M.40. Periods of excess emissions reported under §63.455 shall not be a violation of Condition M.38. and M.39. provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:

(1) N/A;

(2) Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and

(3) Four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

[40 CFR 63.443(e)]

Standards for enclosures and closed-vent systems:

M.41. (a) Each enclosure and closed-vent system specified in Condition No. M.38. for capturing and transporting vent streams that contain HAP shall meet the requirements of Condition M.41.(b) – (d):

(b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures stated in Condition M.57. Each enclosure or hood opening closed during the initial performance test specified in 40 CFR 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

(c) Each component of the closed-vent system used to comply with Condition No. M.38. that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures stated in Condition M.56.

(d) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 40 CFR 63.443 shall comply with either of the following requirements:

(1) On each bypass line, the permittee shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line; or

(2) For bypass line valves that are not computer controlled, the permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

[40 CFR 63.450(a), (b), (c), & (d) and 40 CFR 63.454(e)]

Monitoring Requirements

M.42. Each owner or operator subject to the standards specified in Condition M.38. and M.39., 63.447(b) or M.41.(d), shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2) as specified in Conditions M.43. through M.45., except as allowed in Condition M.45. The CMS shall include a continuous recorder.
[40 CFR 63.453(a)]

M.43. A CMS shall be operated to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs for each thermal oxidizer used to comply with the requirements of Condition M.39.(1) through (3). Owners and operators complying with the requirements in Condition M.39.(2) may install a CMS to monitor the thermal oxidizer outlet total HAP or methanol concentration, as an alternative to monitoring thermal oxidizer operating temperature.
[40 CFR 63.453(b)]

M.44. Each enclosure and closed-vent system used to comply with Condition M.41. shall comply with the following requirements:

(1) For each enclosure opening, a visual inspection of the closure mechanism specified in Condition M.41. shall be performed once during each calendar month, with at least 21 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(2) Each closed-vent system shall be visually inspected once during each calendar month, with at least 21 days elapsed time between inspections, and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(3) For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in Condition M.41.(c) measured initially and annually by the procedures in Condition M.56.

(4) Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in Condition M.59

(5) The valve or closure mechanism specified in Condition M.41.(d)(2) shall be inspected at least once during each calendar month, with at least 21 days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.

(6) If an inspection required by Conditions M.44.(1) through (5) identifies visible defects in ductwork, piping, enclosures or connections to covers required in Condition M.41., or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

(i) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

(ii) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

[40 CFR 63.453(k)]

M.45. Each owner or operator using a control device, technique or an alternative parameter other than those specified in Conditions M.43. and M.44. shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.
[40 CFR 63.453(m)]

M.46. To establish or reestablish, the value for each operating parameter required to be monitored under Conditions M.43., and M.45. or to establish appropriate parameters for Condition M.45., each owner or operator shall use the following procedures:

(1) During the initial performance test required in Condition M.53. or any subsequent performance test, continuously record the operating parameter;

(2) Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;

(3) The owner or operator shall provide for the Administrator’s approval the rationale for selecting the monitoring parameters necessary to comply with Condition M.45.; and

(4) Provide for the Administrator's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

[40 CFR 63.453(n)]

M.47. Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under Conditions M.42. through M.46. and established under 40 CFR 63 Subpart S. Except as provided in Condition M.40., operation of the control device below minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions. [40 CFR 63.453(o)]

Recordkeeping Requirements

M.48. The Permittee shall comply with the recordkeeping requirements of 40 CFR 63.10, as shown in Table 1 of 40 CFR 63, Subpart S, and the requirements stated in Condition M.49.

[40 CFR 63.454(a)]

M.49. For each applicable enclosure opening, closed-vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

(1) Date of inspection;
(2) The equipment type and identification;
(3) Results of negative pressure tests for enclosures;
(4) Results of leak detection tests;
(5) The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
(6) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
(7) Repair methods applied in each attempt to repair the defect or leak;
(8) The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
(9) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
(10) The date of successful repair of the defect or leak;

(11) The position and duration of opening of bypass line valves and the condition of any valve seals; and
(12) The duration of the use of bypass valves on computer controlled valves.

[40 CFR 63.454(b)]

M.50. The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in Condition M.48. for any new affected process equipment or pulping process condensate stream that becomes subject to the standards of 40 CFR 63 Subpart S due to a process change or modification.
[40 CFR 63.454(d)]

Reporting Requirements

M.51. The Permittee shall comply with the reporting requirements of 40 CFR 63, Subpart A, as shown in Table 1 of 40 CFR 63, Subpart S, and the requirements stated in Condition M.52.

[40 CFR 63.455(a)]

M.52. The Permittee shall submit on a 2-year basis from April 14, 2003, an updated non-binding control strategy report. The report shall contain, at a minimum, the information specified below, in addition to the information required in 40 CFR 63.9(b)(2) of 40 CFR 63, Subpart A.

(1) A description of the emission controls or process modifications selected for compliance with the control requirements in this standard.

(2) A compliance schedule, including the dates by which each step toward compliance will be reached for each emission point or sets of emission points. At a minimum, the list of dates shall include:

(i) The date by which the major study(s) for determining the compliance strategy will be completed;
(ii) The date by which contracts for emission controls or process modifications will be awarded, or the date by which orders will be issued for the purchase of major components to accomplish emission controls or process changes;
(iii) The date by which on-site construction, installation of emission control equipment, or a process change is to be initiated;
(iv) The date by which on-site construction, installation of emissions control equipment, or a process change is to be completed;
(v) The date by which final compliance is to be achieved;

(vi) For compliance with paragraph 40 CFR 63.440(d)(3)(ii), the tentative dates by which compliance with effluent limitation guidelines and standards intermediate pollutant load effluent reductions and as available, all the dates for the best available technology's milestones reported in the National Pollutant Discharge Elimination System authorized under section 402 of the Clean Water Act and for the best professional milestones in the Voluntary Advanced Technology Incentives Program under 40 CFR 430.24(b)(2); and

(vii) The date by which the final compliance tests will be performed.

(3) Until compliance is achieved, revisions or updates shall be made to the control strategy report required by this condition indicating the progress made towards completing the installation of the emission controls or process modifications during the 2-year period.

[40 CFR 63.455(b)]

Test Methods and Procedures

M.53. Initial performance test. An initial and annual performance test is required for all emission sources subject to the limitations in §§63.443 and 63.447, except those controlled by a combustion device that is designed and operated as specified in Condition M.39.(3) or (4).

[40 CFR 63.457(a); Rule 62-297.310(7)(a)4.c., F.A.C.]

M.54. Vent sampling port locations and gas stream properties. For purposes of selecting vent sampling port locations and determining vent gas stream properties, required in 40 CFR 63.443, the permittee shall comply with the applicable procedures in paragraphs (1) through (6) of this condition.

(1) Method 1 or 1A of part 60, appendix A, as appropriate, shall be used for selection of the sampling site as follows:

(i) To sample for vent gas concentrations and volumetric flow rates, the sampling site shall be located prior to dilution of the vent gas stream and prior to release to the atmosphere;

(ii) For determining compliance with percent reduction requirements, sampling sites shall be located prior to the inlet of the control device and at the outlet of the control device; measurements shall be performed simultaneously at the two sampling sites; and

(iii) For determining compliance with concentration limits or mass emission rate limits, the sampling site shall be located at the outlet of the control device.

(2) No traverse site selection method is needed for vents smaller than 0.10 meter (4.0 inches) in diameter.

(3) The vent gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of part 60, appendix A, as appropriate.

(4) The moisture content of the vent gas shall be measured using Method 4 of part 60, appendix A.

(5) To determine vent gas concentrations, the owner or operator shall collect a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations using the following procedures.

(i) Method 308 in Appendix A of this part shall be used to determine the methanol concentration.

(ii) Except for the modifications specified in paragraphs (5)(ii)(A) through (5)(ii)(K) of this section, Method 26A of part 60, appendix A shall be used to determine chlorine concentration in the vent stream.

(A) *Probe/Sampling Line*. A separate probe is not required. The sampling line shall be an appropriate length of 0.64 cm (0.25 in) OD Teflon® tubing. The sample inlet end of the sampling line shall be inserted into the stack in such a way as to not entrain liquid condensation from the vent gases. The other end shall be connected to the impingers. The length of the tubing may vary from one sampling site to another, but shall be as short as possible in each situation. If sampling is conducted in sunlight, opaque tubing shall be used. Alternatively, if transparent tubing is used, it shall be covered with opaque tape.

(B) *Impinger Train*. Three 30 milliliter (ml) capacity midget impingers shall be connected in series to the sampling line. The impingers shall have regular tapered stems. Silica gel shall be placed in the third impinger as a desiccant. All impinger train connectors shall be glass and/or Teflon®.

(C) *Critical Orifice*. The critical orifice shall have a flow rate of 200 to 250 ml/min and shall be followed by a vacuum pump capable of providing a vacuum of 640 millimeters of mercury (mm Hg). A 45 millimeter diameter in-line Teflon® 0.8 micrometer filter shall follow the impingers to project the critical orifice and vacuum pump.

(D) The following are necessary for the analysis apparatus:

(*1*) Wash bottle filled with deionized water;

(*2*) 25 or 50 ml graduated burette and stand;

(*3*) Magnetic stirring apparatus and stir bar;

(*4*) Calibrated pH Meter;

(*5*) 150-250 ml beaker or flask; and

(*6*) A 5 ml pipette.

(E) The procedures listed in paragraphs (5)(ii)(E)(*1*) through (5)(ii)(E)(*7*) of this section shall be used to prepare the reagents.

(*1*) To prepare the 1 molarity (M) potassium dihydrogen phosphate solution, dissolve 13.61 grams (g) of potassium dihydrogen phosphate in water and dilute to 100 ml.

(*2*) To prepare the 1 M sodium hydroxide solution (NaOH), dissolve 4.0 g of sodium hydroxide in water and dilute to 100 ml.

(*3*) To prepare the buffered 2 percent potassium iodide solution, dissolve 20 g of potassium iodide in 900 ml water. Add 50 ml of the 1 M potassium dihydrogen phosphate solution and 30 ml of the 1 M sodium hydroxide solution. While stirring solution, measure the pH of solution electrometrically and add the 1 M sodium hydroxide solution to bring pH to between 6.95 and 7.05.

(*4*) To prepare the 0.1 normality (N) sodium thiosulfate solution, dissolve 25 g of sodium thiosulfate, pentahydrate, in 800 ml of freshly boiled and cooled distilled water in a 1-liter volumetric flask. Dilute to volume. To prepare the 0.01 N sodium thiosulfate solution, add 10.0 ml standardized 0.1 N sodium thiosulfate solution to a 100 ml volumetric flask, and dilute to volume with water.

(*5*) To standardize the 0.1 N sodium thiosulfate solution, dissolve 3.249 g of anhydrous potassium bi-iodate, primary standard quality, or 3.567 g potassium iodate dried at 103 +/- 2 degrees Centigrade for 1 hour, in distilled water and dilute to 1000 ml to yield a 0.1000 N solution. Store in a glass-stoppered bottle. To 80 ml distilled water, add, with constant stirring, 1 ml concentrated sulfuric acid, 10.00 ml 0.1000 N anhydrous potassium bi-iodate, and 1 g potassium iodide. Titrate immediately with 0.1 n sodium thiosulfate titrant until the yellow color of the liberated iodine is almost discharged. Add 1 ml starch indicator solution and continue titrating until the blue color disappears. The normality of the sodium thiosulfate solution is inversely proportional to the ml of sodium thiosulfate solution consumed:

$$\text{Normality of Sodium Thiosulfate} = \frac{1}{\text{ml Sodium Thiosulfate Consumed}}$$

(*6*) To prepare the starch indicator solution, add a small amount of cold water to 5 g starch and grind in a mortar to obtain a thin paste. Pour paste into 1 L of boiling distilled water, stir, and let settle overnight. Use clear supernate for starch indicator solution.

(*7*) To prepare the 10 percent sulfuric acid solution, add 10 ml of concentrated sulfuric acid to 80 ml water in an 100 ml volumetric flask. Dilute to volume.

(F) The procedures specified in paragraphs (5)(ii)(F)(*1*) through (5)(ii)(F)(*5*) of this section shall be used to perform the sampling.

(*1*) Preparation of Collection Train. Measure 20 ml buffered potassium iodide solution into each of the first two impingers and connect probe, impingers, filter, critical orifice, and pump. The sampling line and the impingers shall be shielded from sunlight.

(*2*) Leak and Flow Check Procedure. Plug sampling line inlet tip and turn on pump. If a flow of bubbles is visible in either of the liquid impingers, tighten fittings and adjust connections and impingers. A leakage rate not in excess of 2 percent of the sampling rate is acceptable. Carefully remove the plug from the end of the probe. Check the flow rate at the probe inlet with a bubble tube flow meter. The flow should be comparable or slightly less than the flow rate of the critical orifice with the impingers off-line. Record the flow and turn off the pump.

(*3*) Sample Collection. Insert the sampling line into the stack and secure it with the tip slightly lower than the port height. Start the pump, recording the time. End the sampling after 60 minutes, or after yellow color is observed in the second in-line impinger. Record time and remove the tubing from the vent. Recheck flow rate at sampling line inlet and turn off pump. If the flow rate has changed significantly, redo sampling with fresh capture solution. A slight variation (less than 5 percent) in flow may be averaged. With the inlet end of the line elevated above the impingers, add about 5 ml water into the inlet tip to rinse the line into the first impinger.

(*4*) Sample Analysis. Fill the burette with 0.01 N sodium thiosulfate solution to the zero mark. Combine the contents of the impingers in the beaker or flask. Stir the solution and titrate with thiosulfate until the solution is colorless. Record the volume of the first endpoint (TN, ml). Add 5 ml of the 10 percent sulfuric acid solution, and continue the titration until the contents of the flask are again colorless. Record the total volume of titrant required to go through the first and to the second endpoint (TA, ml). If the volume of neutral titer is less than 0.5 ml, repeat the testing for a longer period of time. It is important that sufficient lighting be present to clearly see the endpoints, which are determined when the solution turns from pale yellow to colorless. A lighted stirring plate and a white background are useful for this purpose.

(*5*) Interferences. Known interfering agents of this method are sulfur dioxide and hydrogen peroxide. Sulfur dioxide, which is used to reduce oxidant residuals in some bleaching systems, reduces formed iodine to iodide in the capture solution. It is therefore a negative interference for chlorine, and in some cases could result in erroneous negative chlorine concentrations. Any agent capable of reducing iodine to iodide could interfere in this manner. A chromium trioxide impregnated filter will capture sulfur dioxide and pass chlorine and chlorine dioxide. Hydrogen peroxide, which is commonly used as a bleaching agent in modern bleaching systems, reacts with iodide to form iodine and thus can cause a positive interference in the chlorine measurement. Due to the chemistry involved, the precision of the chlorine analysis will decrease as the ratio of chlorine dioxide to chlorine increases. Slightly negative calculated concentrations of chlorine may occur when sampling a vent gas with high concentrations of chlorine dioxide and very low concentrations of chlorine.

(6) The minimum sampling time for each of the three test runs shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the test run.

(G) The following calculation shall be performed to determine the corrected sampling flow rate:

$$S_c = \frac{S_u(BP - PW)(293)}{(760)(273 + t)}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute;
S_U = Uncorrected sampling flow rate, L/min;
BP = Barometric pressure at time of sampling;
PW = Saturated partial pressure of water vapor, mm Hg at temperature; and
t = Ambient temperature, °C.

(H) The following calculation shall be performed to determine the moles of chlorine in the sample:

Cl_2 Moles = 1/8000 (5 T_N - T_A) x N_{Thio}

where:

T_N = Volume neutral titer, ml;
T_A = Volume acid titer (total), ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(I) The following calculation shall be performed to determine the concentration of chlorine in the sample:

$$ClO_2\ Moles = 1/4000\,(T_A - T_N) \times N_{Thio}$$

where:

T_A = Volume acid titer (total), ml;
T_N = Volume neutral titer, ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(K) The following calculation shall be performed to determine the concentration of chlorine dioxide in the sample:

$$ClO_2\ ppmv = \frac{6010(T_A - T_N) \times N_{Thio}}{S_c \times t_s}$$

where:

S_C = Corrected (dry standard) sampling flow rate, liters per minute;
t_S = Time sampled, minutes;
T_A = Volume acid titer (total), ml;
T_N = Volume neutral titer, ml; and
N_{Thio} = Normality of sodium thiosulfate titrant.

(iii) Any other method that measures the total HAP or methanol concentration that has been demonstrated to the Administrator's satisfaction.

(6) The minimum sampling time for each of the three runs per method shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15 minute intervals during the run.

[40 CFR 63.457(b)]

M.55. Liquid sampling locations and properties. For purposes of selecting liquid sampling locations and for determining properties of liquid streams such as wastewaters, process waters, and condensates required in 40 CFR 63.447, the permittee shall comply with the following procedures:

(1) Samples shall be collected using the sampling procedures of the test method listed in paragraph (3) of this condition selected to determine liquid stream HAP concentrations;

(i) Where feasible, samples shall be taken from an enclosed pipe prior to the liquid stream being exposed to the atmosphere; and

(ii) When sampling from an enclosed pipe is not feasible, samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of HAP compounds prior to sampling.

(2) The volumetric flow rate of the entering and exiting liquid streams shall be determined using the inlet and outlet flow meters or other methods demonstrated to the Administrator's satisfaction. The volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements.

(3) The owner or operator shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations The minimum sampling time for each test run shall be 1 hour and the grab or composite samples shall be taken at approximately equally spaced intervals over the 1-hour test run period. The owner or operator shall use one of the following procedures to determine total HAP or methanol concentration:

(i) Method 305 in Appendix A of this part, adjusted using the following equation:

$$\overline{C} = \sum_{i=1}^{n} \frac{C_i}{fm_i}$$

where:

$\overline{C}$ = Pollutant concentration for the liquid stream, parts per million by weight.
C_i = Measured concentration of pollutant i in the liquid stream sample determined using Method 305, parts per million by weight.
fm_i = Pollutant-specific constant that adjusts concentration measured by Method 305 to actual liquid concentration; the fm for methanol is 0.85. Additional pollutant fm values can be found in table 34, subpart G of this part.
n = Number of individual pollutants, i, summed to calculate total HAP.

(ii) For determining methanol concentrations, NCASI Method DI/MEOH-94.02, Methanol in Process Liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC. This test method is incorporated by reference in Sec. 63.14(f) of subpart A of this part.

(iii) Any other method that measures total HAP concentration that has been demonstrated to the Administrator's satisfaction.

(4) To determine soluble BOD_5 in the effluent stream from an open biological treatment unit used to comply with §63.446(e)(2) and §63.453(j), the owner or operator shall use Method 405.1, of part 136, with the following modifications:

(i) Filter the sample through the filter paper, into Erlenmeyer flask by applying a vacuum to the flask sidearm. Minimize the time for which vacuum is applied to prevent stripping of volatile organics from the sample. Replace filter paper as often as needed in order to maintain filter times of less than approximately 30 seconds per filter paper. No rinsing of sample container or filter bowl into the Erlenmeyer flask is allowed.

(ii) Perform Method 405.1 on the filtrate obtained in paragraph (4) of this condition. Dilution water shall be seeded with 1 milliliter of final effluent per liter of dilution water. Dilution ratios may require adjustment to reflect the lower oxygen demand of the filtered sample in comparison to the total BOD_5. Three BOD bottles and different dilutions shall be used for each sample.

(5) If the test method used to determine HAP concentration indicates that a specific HAP is not detectable, the value determined as the minimum measurement level (MML) of the selected test method for the specific HAP shall be used in the compliance demonstration calculations. To determine the MML for a specific HAP using one of the test methods specified in paragraph (c)(3) of this section, one of the procedures specified in paragraphs (5)(i) and (ii)

of this condition shall be performed. The MML for a particular HAP must be determined only if the HAP is not detected in the normal working range of the method.

(i) To determine the MML for a specific HAP, the following procedures shall be performed each time the method is set up. Set up is defined as the first time the analytical apparatus is placed in operation, after any shut down of 6 months or more, or any time a major component of the analytical apparatus is replaced.

(A) Select a concentration value for the specific HAP in question to represent the MML. The value of the MML selected shall not be below the calibration standard of the selected test method.

(B) Measure the concentration of the specific HAP in a minimum of three replicate samples using the selected test method. All replicate samples shall be run through the entire analytical procedure. The samples must contain the specific HAP at the selected MML concentration and should be representative of the liquid streams to be analyzed in the compliance demonstration. Spiking of the liquid samples with a known concentration of the target HAP may be necessary to ensure that the HAP concentration in the three replicate samples is at the selected MML. The concentration of the HAP in the spiked sample must be within 50 percent of the proposed MML for the demonstration to be valid. As an alternative to spiking, a field sample above the MML may be diluted to produce a HAP concentration at the MML. To be a valid demonstration, the diluted sample must have a HAP concentration within 20 percent of the
proposed MML, and the field sample must not be diluted by more than a factor of five.

(C) Calculate the relative standard deviation (RSD) and the upper confidence limit at the 95 percent confidence level using the measured HAP concentrations determined in paragraph (5)(i)(B) of this condition. If the upper confidence limit of the RSD is less than 30 percent, then the selected MML is acceptable. If the upper confidence limit of the RSD is greater than or equal to 30 percent, then the selected MML is too low, and the procedures specified in paragraphs (5)(i)(A) through (C) of this condition must be repeated.

(ii) Provide for the Administrator's approval the selected value of the MML for a specific HAP and the rationale for selecting the MML including all data and calculations used to determine the MML. The approved MML must be used in all applicable compliance demonstration calculations.

(6) When using the MML determined using the procedures in paragraph (5)(ii) of this condition or when using the MML determined using the procedures in paragraph (5)(i), except during set up, the analytical laboratory conducting the analysis must perform and meet the following quality assurance procedures each time a set of samples is analyzed to determine compliance.

(i) Using the selected test method, analyze in triplicate the concentration of the specific HAP in a representative sample. The sample must contain the specific HAP at a concentration that is within a factor of two of the MML. If there are no samples in the set being analyzed that contain the specific HAP at an appropriate concentration, then a sample below the MML may be spiked to produce the appropriate concentration, or a sample at a higher level may be diluted. After spiking, the sample must contain the specific HAP within 50 percent of the MML. If dilution is used instead, the diluted sample must contain the specific HAP within 20 percent of the MML and must not be diluted by more than a factor of five.

(ii) Calculate the RSD using the measured HAP concentrations determined in paragraph (6)(i) of this condition. If the RSD is less than 20 percent, then the laboratory is performing acceptably
[40 CFR 63.457(c)]

M.56. Detectable leak procedures. To measure detectable leaks for closed-vent systems as required in Condition M.41., the permittee shall comply with the following:

(1) Method 21, of Part 60, Appendix A; and

(2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used:

(i) Zero air (less than 10 parts per million by volume of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

[40 CFR 63.457(d)]

M.57. Negative pressure procedures. To demonstrate negative pressure as required in Condition M.41.(b) at process equipment enclosure openings, the permittee shall use one of the following procedures:

(1) An anemometer to demonstrate flow into the enclosure opening;

(2) Measure the static pressure across the opening;

(3) Smoke tubes to demonstrate flow into the enclosure opening; or

(4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

[40 CFR 63.457(e)]

M.58. HAP concentration measurements. For purposes of complying with the requirements in 40 CFR 63.443 and 63.447, the owner or operator shall measure the total HAP concentration as one of the following:

(1) As the sum of all individual HAPs; or

(2) As methanol.

[40 CFR 63.457(f)]

M.59. Vent gas stream calculations. To demonstrate compliance with the mass emission rate, mass emission rate per megagram of ODP, and percent reduction requirements for vent gas streams specified in 40 CFR 63.443 and 63.447, the Permittee shall use the following:

(1) The total HAP mass emission rate shall be calculated using the following equation:

$$E = K_2\left(\sum_{j=1}^{n} C_j M_j\right) Q_s$$

where:

E = Mass emission rate of total HAP from the sampled vent, kilograms per hour.

K_2 = Constant, 2.494 x 10^{-6} (parts per million by volume)-1 (gram-mole per standard cubic meter) (kilogram/gram) (minutes/hour), where standard temperature for (gram-mole per standard cubic meter) is 20 ^{o}C.

C_j = Concentration on a dry basis of pollutant j in parts per million by volume as measured by the test methods specified in paragraph (b) of this section.

M_j = Molecular weight of pollutant j, gram/gram-mole.

Q_s = Vent gas stream flow rate (dry standard cubic meter per minute) at a temperature of 20 ^{o}C as indicated in paragraph (b) of this section.

n = Number of individual pollutants, i, summed to calculate total HAP.

(2) The total HAP mass emission rate per megagram of ODP shall be calculated using the following equation:

$$F = \frac{E}{P}$$

where:

F = Mass emission rate of total HAP from the sampled vent, in kilograms per megagram of ODP.

E = Mass emission rate of total HAP from the sampled vent, in kilograms per hour determined as specified in paragraph (i)(1) of this section.

P = The production rate of pulp during the sampling period, in megagrams of ODP per hour.

(3) The total HAP percent reduction shall be calculated using the following equation:

$$R = \frac{E_i - E_o(100)}{E_i}$$

where:

R = Efficiency of control device, percent.

E_i = Inlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (1) of this condition.

E_o = Outlet mass emission rate of total HAP from the sampled vent, in kilograms of pollutant per hour, determined as specified in paragraph (1) of this condition.

[40 CFR 63.457(i)]

M.60. Oxygen concentration correction procedures. To demonstrate compliance with the total HAP concentration limit specified in Condition M.39.(2), the concentration measured using the methods specified in Condition M.54.(5) of this section shall be corrected to 10 percent oxygen using the following procedures:

(1) The emission rate correction factor and excess air integrated sampling and analysis procedures of Methods 3A or 3B of part 60, appendix A shall be used to determine the oxygen concentration. The samples shall be taken at the same time that the HAP samples are taken.

(2) The concentration corrected to 10 percent oxygen shall be computed using the following equation:

$$C_c = C_m\left(\frac{10.9}{20.9 - \%O_{2d}}\right)$$

where:

Cc = Concentration of total HAP corrected to 10 percent oxygen, dry basis, parts per million by volume.

C_m = Concentration of total HAP dry basis, parts per million by volume, as specified in paragraph (b) of this section.

$\%0_{2d}$ = Concentration of oxygen, dry basis, percent by volume.

[40 CFR 63.457(k)]

40 CFR 63.447 Clean condensate alternative.

As an alternative to the requirements specified in Condition M.37.(a) through (d) for the control of HAP emissions from pulping systems using the kraft process, an owner or operator must demonstrate to the satisfaction of the Administrator, by meeting all the requirements below, that the total HAP emissions reductions achieved by this clean condensate alternative technology are equal to or greater than the total HAP emission reductions that would have been achieved by compliance with Condition M.37.(a) through (d).

M.61. For the purposes of this section only the following additional definitions apply.

(1) *Clean condensate alternative affected source* means the total of all HAP emission points in the pulping, bleaching, causticizing, and papermaking systems (exclusive of HAP emissions attributable to additives to paper machines and HAP emission points in the LVHC system).

(2) *Causticizing system* means all equipment associated with converting sodium carbonate into active sodium hydroxide. The equipment includes smelt dissolving tanks, lime mud washers and storage tanks, white and mud liquor clarifiers and storage tanks, slakers, slaker grit washers, lime kilns, green liquor clarifiers and storage tanks, and dreg washers ending with the white liquor storage tanks prior to the digester system, and any other equipment serving the same function as those previously listed.

(3) *Papermaking system* means all equipment used to convert pulp into paper, paperboard, or market pulp, including the stock storage and preparation systems, the paper or paperboard machines, and the paper machine white water system, broke recovery systems, and the systems involved in calendering, drying, on-machine coating, slitting, winding, and cutting.

[40 CFR 63.447(a)]

M.62. Each owner or operator shall install and operate a clean condensate alternative technology with a continuous monitoring system to reduce total HAP emissions by treating and reducing HAP concentrations in the pulping process water used within the clean condensate alternative affected source.
[40 CFR 63.447(b)]

M.63. Each owner or operator shall calculate HAP emissions on a kilogram per megagram of ODP basis and measure HAP emissions according to the appropriate procedures contained in 40 CFR 63.457.
[40 CFR 63.447(c)]

M.64. Each owner or operator shall determine the baseline HAP emissions for each equipment system and the total of all equipment systems in the clean condensate alternative affected source based on the following:

(1) Process and air pollution control equipment installed and operating on December 17, 1993, and;

(2) Compliance with the following requirements that affect the level of HAP emissions from the clean condensate alternative affected source:
   (i) The pulping process condensates requirements in 40 CFR 63.446;

   (ii) The applicable effluent limitation guidelines and standards in 40 CFR Part 430, subparts A, B, D, and E; and

   (iii) All other applicable requirements of local, State, or Federal agencies or statutes.

[40 CFR 63.447(d)]

M.65. Each owner or operator shall determine the following HAP emission reductions from the baseline HAP emissions determined in Condition M.64. for each equipment system and the total of all equipment systems in the clean condensate alternative affected source:

(1) The HAP emission reduction occurring by complying with the requirements of Condition M.37.(a) through (d), and

(2) The HAP emissions reduction occurring by complying with the clean condensate alternative technology.

[40 CFR 63.447(e)]

M.66. For the purposes of all requirements in this section, each owner or operator may use as an alternative, individual equipment systems (instead of total of all equipment systems) within the clean condensate alternative affected source to determine emissions and reductions to demonstrate equal or greater than the reductions that would have been achieved by compliance with Condition M.37.(a) through (d).

[40 CFR 63.447(f)]

M.67. The initial and updates to the control strategy report specified in §63.455(b) shall include to the extent possible the following information:

(1) A detailed description of:

(i) The equipment systems and emission points that comprise the clean condensate alternative affected source;

(ii) The air pollution control technologies that would be used to meet the requirements of §63.443(a)(1)(ii) through (a)(1)(v); and

(iii) The clean condensate alternative technology to be used.

(2) Estimates and basis for the estimates of total HAP emissions and emission reductions to fulfill the requirements of Conditions M.64., M.65., and M.66.

[40 CFR 63.447(g)]

M.68. Each owner or operator shall report to the Administrator by the applicable compliance date specified in 40 CFR 63.440(d) or (e) the rationale, calculations, test procedures, and data documentation used to demonstrate compliance with all the requirements of this section.
[40 CFR 63.447(h)]

Subsection N. 40 CFR Part 63, Applicable Subpart RR Common Conditions.

E.U. ID No.	Brief Description
033	Pulping System MACT I

The following conditions apply to the emissions unit(s) listed above:

N.1. Applicability. The provisions of this subpart apply to the control of air emissions from individual drain systems for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. These air emission standards for individual drain systems are placed here for administrative convenience and only apply to those owners and operators of facilities subject to the other subparts that reference this subpart. The provisions of 40 CFR 63 subpart A - General Provisions do not apply to this subpart except as noted in the subpart that references this subpart.
[40 CFR 63.960]

N.2. Definitions. All terms used in this subpart shall have the meaning given to them in the Act and in this section. If a term is defined in both this section and in another subpart that references the use of this subpart, then the definition in this subpart shall take precedence when implementing this subpart.

Closure device means a cap, cover, hatch, lid, plug, seal, valve, or other type of fitting that, when the device is secured in the closed position, prevents or reduces air emissions to the atmosphere by blocking an opening to the individual drain system. Closure devices include devices that are detachable (e.g., a plug or manhole cover), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

Hard-piping means pipe or tubing that is manufactured and properly installed in accordance with relevant standards (e.g., ANSI B31-3) and good engineering practices.

Individual drain system means a stationary system used to convey regulated-material to a waste management unit or to discharge or disposal. The term includes hard-piping, all drains and junction boxes, together with their associated sewer lines and other junction boxes (e.g., manholes, sumps, and lift stations) conveying regulated material. For the purpose of this subpart, an individual drain system is not a drain and collection system that is designed and operated for the sole purpose of collecting rainfall runoff (e.g., stormwater sewer system) and is segregated from all other individual drain systems.

Junction box means a sump, manhole, or access point to a sewer line or a lift station.

Regulated-material means the wastewater streams, residuals, and any other materials specified by the referencing subpart to be managed in accordance with the standards under this subpart.

Sewer line means a lateral, trunk line, branch line, or other conduit used to convey regulated-material to a downstream waste management unit. Sewer lines include pipes, grates, and trenches.

Waste management unit means the equipment, structure, or device used to convey, store, treat, or dispose of regulated-material. Examples of waste management units include: wastewater tanks, surface impoundments, individual drain systems, and biological wastewater treatment units. Examples of equipment that may be waste management units include containers, air flotation units, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units.

Water seal means a seal pot, p-leg trap, or other type of trap filled with water (e.g., flooded sewers that maintain liquid levels adequate to prevent air flow through the system) that creates a liquid barrier between the sewer line and the atmosphere. The liquid level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal. [40 CFR 63.961]

N.3. (a) The permittee subject to this subpart shall control air emissions from the individual drain system using one or a combination of the following:

(1) Covers, water seals, and other air emission control equipment as specified in paragraph (b) of this section.
(2) Hard-piping.
(3) Venting of the individual drain system through a closed vent system to a control device in accordance with the following requirements:
  (i) The individual drain system is designed and operated such that an internal pressure in the vapor headspace in the system is maintained at a level less than atmospheric pressure when the control device is operating, and
  (ii) The closed vent system and control device are designed and operated in accordance with Condition M.2. and M.11. [*the requirements of 40 CFR 63.693 are N/A pursuant to 40 CFR 63.446(d)(1)*]

(b) Owners and operators controlling air emissions from an individual drain system in accordance with paragraph (a)(1) of this section shall meet the following requirements:

(1) The individual drain system shall be designed to segregate the organic vapors from regulated material managed in the controlled individual drain system from entering any other individual drain system that is not controlled for air emissions in accordance with the standards specified in this subpart.
(2) Drain control requirements. Each drain shall be equipped with either a water seal or a closure device in accordance with the following requirements:
  (i) When a water seal is used, the water seal shall be designed such that either:
    (A) The outlet to the pipe discharging the regulated-material extends below the liquid surface in the water seal of the drain; or
    (B) A flexible shield or other device is installed which restricts wind motion across the open space between the outlet of the pipe discharging the regulated material and the drain.
  (ii) When a closure device is used (e.g., securing a cap or plug on a drain that is not receiving regulated-material), the closure device shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the drain opening and the closure device.
(3) Junction box control requirements. Each junction box shall be equipped with controls as follows:

(i) The junction box shall be equipped with a closure device (e.g., manhole cover, access hatch) that is designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the junction box opening and the closure device.

(ii) If the junction box is vented, the junction box shall be vented in accordance with the following requirements:

(A) The junction box shall be vented through a closed vent system to a control device except as provided for in paragraph (b)(3)(ii)(B) of this section. The closed vent system and control device shall be designed and operated in accordance with Condition M.2. and M.11. [*the standards specified in 40 CFR 63.693 are N/A pursuant to 40 CFR 63.446(d)(1)*].

(B) As an alternative to paragraph (b)(3)(ii)(A) of this section, the owner or operator may vent the junction box directly to the atmosphere when all of the following conditions are met:

(1) The junction box is filled and emptied by gravity flow (i.e., there is no pump) or is operated with no more than slight fluctuations in the liquid level. Large changes in the size of the junction box vapor headspace created by using a pump to repeatedly empty and then refill the junction box do not meet this condition.

(2) The vent pipe installed on the junction box shall be at least 90 centimeters in length and no greater than 10 centimeters in nominal inside diameter.

(3) Water seals are installed at the liquid entrance(s) to or exit from the junction box to restrict ventilation in the individual drain system and between components in the individual drain system. The owner or operator shall demonstrate (e.g., by visual inspection or smoke test) upon request by the Administrator that the junction box water seal is properly designed and restricts ventilation.

(4) Sewer line control requirements. Each sewer line shall not be open to the atmosphere and shall be covered or closed in a manner such that there are no visible cracks, holes, gaps, or other open spaces in the sewer line joints, seals, or other emission interfaces.

5) Operating requirements. The owner or operator shall operate the air emission controls required by paragraphs (b)(2) through (b)(4) of this section in accordance with the following requirements:

(i) Each closure device shall be maintained in a closed position whenever regulated-material is in the individual drain system except when it is necessary to remove or open the closure device for sampling or removing material in the individual drain system, or for equipment inspection, maintenance, or repair.

(ii) Each drain equipped with a water seal and open to the atmosphere shall be operated to ensure that the liquid in the water seal is maintained at the appropriate level. Examples of acceptable means for complying with this provision include but are not limited to using a flow-monitoring device indicating positive flow from a main to a branch water line supplying a trap; continuously dripping water into the trap using a hose; or regular visual observations.

(iii) Each closed-vent system and the control device used to comply with paragraph (b)(3)(ii)(A) of this section shall be operated in accordance with Condition M.2. and M.11. [*the standards specified in 40 CFR 63.693 are N/A pursuant to 40 CFR 63.446(d)(1)*].

[40 CFR 63.962]

N.4. Inspection and monitoring requirements.

(a) The permittee shall inspect the individual drain system in accordance with the following requirements:

(1) The individual drain system shall be visually inspected by the permittee as follows to check for defects that could result in air emissions to the atmosphere.

(i) The permittee shall visually inspect each drain as follows:

(A) In the case when the drain is using a water seal to control air emissions, the permittee shall verify appropriate liquid levels are being maintained and identify any other defects that could reduce water seal control effectiveness.

(B) In the case when the drain is using a closure device to control air emissions, the permittee shall visually inspect each drain to verify that the closure device is in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, or gaps in the closure devices; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing plugs, caps, or other closure devices.

(ii) The permittee shall visually inspect each junction box to verify that closure devices are in place and there are no defects. Defects include, but are not limited to, visible cracks, holes, or gaps in the closure devices; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(iii) The permittee shall visually inspect the unburied portion of each sewer line to verify that all closure devices are in place and there are no defects.
Defects include, but are not limited to, visible cracks, holes, gaps, or other open spaces in the sewer line joints, seals, or other emission interfaces.

(iv) The permittee shall perform the inspections initially at the time of installation of the water seals and closure devices for the individual drain system and, thereafter, at least once every year.

(v) In the event that a defect is detected, the permittee shall repair the defect in accordance with the requirements of paragraph (b) of this section.

(vi) The permittee shall comply with the recordkeeping requirements of Conditions M.20. through M.22. *[the requirements specified in 40 CFR 63.965(a) are N/A pursuant to 40 CFR 63.453(l)(1)(i)]*.

(2) The permittee shall inspect and monitor the closed-vent system and the control device in accordance with the requirements specified in Conditions M.12. and M.18. *[the requirements in 40 CFR 63.693 is N/A pursuant to 40 CFR 63.453(1)(2)]*.

(b) The permittee shall repair all detected defects as follows:

(1) The permittee shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 15 calendar days after detection except as provided in paragraph (b)(2) of this section.

(2) Repair of a defect may be delayed beyond 15 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the individual drain system and no alternative capacity is available at the facility site to accept the regulated-material normally managed in the individual drain system. In this case, the owner or operator shall repair the defect at the next time the process or unit that is generating the regulated-material managed in the individual drain system stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(3) The permittee shall maintain a record of the defect repair in accordance with the requirements specified in Condition M.20. through M.22. *[the requirements in40 CFR 63.965(a)(3) is N/A pursuant to 63.453(l)(1)(i)]*.
[40 CFR 63.964]

Subsection O. Common Conditions – 40 CFR 63 Subpart DDDDD

E.U. ID No.	Brief Description
006	No. 5. Power Boiler (805 MMBtu/hr combination boiler fired with carbonaceous fuel, No. 6 fuel oil, and No. 2 fuel oil. NCGs are burned in this boiler as the backup to the No. 4 Lime Kiln)
015	No. 7 Power Boiler (1021 MMBtu/hr boiler fired with coal, No. 6 fuel oil, No. 2 fuel oil, and bark ash)
034	Package Boiler (190 MMBtu/hr package boiler fired with No. 2 fuel oil)
---	Boxplant Package Boiler (10.46 MMBtu/hr package boiler fired with propane and No. 2 fuel oil.

The following specific conditions apply to the emissions unit(s) listed above:

O.0. The permittee shall comply with the following requirements of 40 CFR Part 63, Subpart DDDDD no later than the compliance deadline established in the Subpart, i.e. no later than September 13, 2007. The Permittee shall apply for and obtain air construction permits as needed, in order to meet these requirements.
[40 CFR 63.7495(b)]

O.1. The permittee shall comply with the notification requirements in Conditions O.62. through O.66. according to the schedule stated in these conditions and also in 40 CFR 63 Subpart A.

Some of the notifications are required to be submitted before the requirement to comply with the emission limits and work practice standards in this subpart.

[40 CFR 63.7495(d)]

40 CFR 63.7500 - Emission limits, work practice standards, and operating limits

O.2. The Permittee shall comply with the following requirements in paragraphs (1) and (2) of this condition.

(1) Each emission limit and work practice standard in Table 1 to 40 CFR 63 Subpart DDDDD that applies to your boiler or process heater shall be met, except as provided under Conditions O.8 and O.9.

(2) Each operating limit in Tables 2 through 4 to 40 CFR 63 Subpart DDDDD that applies to your boiler or process heater. If a control device or combination of control devices not covered in Tables 2 through 4 to this subpart are used, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under 40 CFR 63.8(f).

[40 CFR 63.7500(a)]

40 CFR 63.7505 - General requirements for complying with 40 CFR 63 Subpart DDDDD

O.3. The Permittee shall be in compliance with the emission limits (including operating limits) and the work practice standards in 40 CFR 63 Subpart DDDDD at all times, except during periods of startup, shutdown, and malfunction.

[40 CFR 63.7505(a)]

O.4. The Permittee shall always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i).

[40 CFR 63.7505(b)]

O.5. The Permittee may demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to Condition O.51. is less than the applicable emission limit. Otherwise, the Permittee shall demonstrate compliance using performance testing.

[40 CFR 63.7505(c)]

O.6. If performance testing is used to demonstrate compliance with any applicable emission limit, a site-specific monitoring plan according to the requirements in paragraphs (1) through (4) of this condition must be developed. This requirement also applies if the EPA Administrator is petitioned for alternative monitoring parameters under 40 CFR 63.8(f).

(1) For each continuous monitoring system (CMS) required in this condition, a site-specific monitoring plan that addresses paragraphs (1)(i) through (iii) of this condition must be developed and submitted to the EPA Administrator for approval. This site-specific monitoring plan must be submitted at least 60 days before your initial performance evaluation of your CMS.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) Paragraphs (2)(i) through (iii) of this condition must also be addressed in your site-specific monitoring plan.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i).

(3) A performance evaluation of each CMS shall be conducted in accordance with your site-specific monitoring plan.

(4) The CMS shall be operated and maintained in continuous operation according to the site-specific monitoring plan.

[40 CFR 63.7505(d)]

O.7. Startup, shutdown, and malfunction plan (SSMP). If you have an applicable emission limit or work practice standard, a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR 63.6(e)(3). Shall be developed and implemented.
[40 CFR 63.7505(e)]

40 CFR 63.7507- Health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards

O.8. Health-based compliance alternatives for the hydrogen chloride (HCl) standards. As an alternative to the requirement for large solid fuel boilers located at a single facility to demonstrate compliance with the HCl emission limit in Table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in Appendix A to this subpart.
[40 CFR 63.7507(a)]

O.9. Health-based compliance alternatives for the total selected metals (TSM). In lieu of complying with the TSM emission standards in Table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for complying with the TSM emission standards in Table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions) under the procedures prescribed in Appendix A to this subpart.

[40 CFR 63.7507(b)]

40 CFR 63.7510- Initial compliance requirements

O.10. For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to Conditions O.21. through O.26. and Table 5 to 40 CFR 63 Subpart DDDDD, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to Conditions O.28 through O.31. and Table 6 to 40 CFR 63 Subpart DDDDD, establishing operating limits according to Conditions O.48. through O.52. and Table 7 to 40 CFR 63 Subpart DDDDD, and conducting CMS performance evaluations according to Conditions O.39 through O.47.

[40 CFR 63.7510(a)]

O.11. For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to Conditions O.28 through O.31. and Table 6 to this subpart and establish operating limits according to Conditions O.48. through O.52. and Table 8 to 40 CFR 63 Subpart DDDDD.

[40 CFR 63.7510(b)]

O.12. For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to 40 CFR 63 Subpart DDDDD. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to Condition O.39.

[40 CFR 63.7510(c)]

O.13. For existing affected sources, you must demonstrate initial compliance no later than 180 days after the compliance date that is specified for your source in Condition O.0. and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 to 40 CFR 63 Subpart DDDDD.

[40 CFR 63.7510(d)]

40 CFR 63.7515 - Subsequent performance tests or fuel analyses requirements

O.14. You must conduct all applicable performance tests according to Conditions O.21. through O.26. on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous performance test, unless you follow the requirements listed in Conditions O.11. through O.13.

[40 CFR 63.7515(a)]

O.15. You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant (particulate matter, HCl, mercury, or TSM) for at least 3 consecutive years show
that you comply with the emission limit. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 36 months after the previous performance test.

[40 CFR 63.7515(b)]

O.16. If your boiler or process heater continues to meet the emission limit for particulate matter, HCl, mercury, or TSM, you may choose to conduct performance tests for these pollutants every third year, but each such performance test must be conducted no more than 36 months after the previous performance test.

[40 CFR 63.7515(c)]

O.17. If a performance test shows noncompliance with an emission limit for particulate matter, HCl, mercury, or TSM, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 3-year period show compliance.

[40 CFR 63.7515(d)]

O.18. If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, you must conduct annual performance tests for carbon monoxide according to Conditions O.21. through O.26. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

[40 CFR 63.7515(e)]

O.19. You must conduct a fuel analysis according to Conditions O.28 through O.31. for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in Condition O.56. through O.59.

[40 CFR 63.7515(f)]

O.20. You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to Conditions O.48. through O.52. and Table 7 to this 40 CFR 63 Subpart DDDDD, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in Conditions O.67. through O.73.

[40 CFR 63.7515(g)]

40 CFR 63.7520 - Performance tests and procedures

O.21. You must conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in 40 CFR 63.7(c) if you elect to demonstrate compliance through performance testing.

[40 CFR 63.7520(a)]

O.22. You must conduct each performance test according to the requirements in Table 5 to 40 CFR 63 Subpart DDDDD.

[40 CFR 63.7520(b)]

O.23. You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to 40 CFR 63 Subpart DDDDD. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

[40 CFR 63.7520(d)]

O.24. Performance tests shall not be conducted during periods of startup, shutdown, or malfunction.

[40 CFR 63.7520(e)]

O.25. Three separate test runs shall be conducted for each performance test required in Conditions O.21. through O.26., as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour.

[40 CFR 63.7520(f)]

O.26. To determine compliance with the emission limits, you must use the F-Factor methodology and equations in Sections 12.2 and 12.3 of EPA Method 19 of Appendix A to 40 CFR Part 60 to convert the measured particulate matter concentrations, the measured HCl concentrations, the measured TSM concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

[40 CFR 63.7520(g)]

40 CFR 63.7521- Fuel analyses and procedures

O.27. Fuel Analysis Procedures. Fuel analyses shall be conducted according to the procedures in Conditions O.28 through O.31. and Table 6 to 40 CFR 63 Subpart DDDDD, as applicable.

[40 CFR 63.7521(a)]

O.28. Site-Specific Fuel Analysis Plant. A site-specific fuel analysis plan shall be developed and submitted to the EPA Administrator for review and approval according to the following procedures and requirements in (1) and (2) of this condition.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to demonstrate compliance.

(2) You must include the information contained in paragraphs (2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each fuel type, the analytical methods, with the expected minimum detection levels, to be used for the measurement of selected total metals, chlorine, or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that will be used.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

[40 CFR 63.7521(b)]

O.29. At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. Collect all the material (fines and coarse) in the full cross-section. Transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.

(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) Transfer all samples to a clean plastic bag for further processing.

[40 CFR 63.7521(c)]

O.30. Prepare each composite sample according to the procedures in paragraphs (1) through (7) of this condition.

(1) Thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) Break sample pieces larger than 3 inches into smaller sizes.

(3) Make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) Separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, repeat the procedure in paragraph (3) of this condition with the quarter sample and obtain a one-quarter subset from this sample.

(6) Grind the sample in a mill.

(7) Use the procedure in paragraph (3) of this condition to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

[40 CFR 63.7521(d)]

O.31. Determine the concentration of pollutants in the fuel (mercury, chlorine, and/or total selected metals) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to 40 CFR 63 Subpart DDDDD.

[40 CFR 63.7521(e)]

40 CFR 63.7522- Emission averaging

O.32. As an alternative to meeting the requirements of Condition O.2., if you have more than one existing large solid fuel boiler located at your facility, you may demonstrate compliance by emission averaging according to the procedures in Conditions O.32. through O.38. in a State that does not choose to exclude emission averaging.

[40 CFR 63.7522(a)]

O.33. For each existing large solid fuel boiler in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on November 12, 2004 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on November 12, 2004.

[40 CFR 63.7522(b)]

O.34. You may average particulate matter or TSM, HCl, and mercury emissions from existing large solid fuel boilers to demonstrate compliance with the limits in Table 1 to this subpart if you satisfy the requirements in Conditions O.35., O.36. and O.37.

[40 CFR 63.7522(c)]

O.35. The weighted average emissions from the existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to 40 CFR 63 Subpart DDDDD at all times following the compliance date specified in Condition O.0.

[40 CFR 63.7522(d)]

O.36. You must demonstrate initial compliance according to paragraphs (1) or (2) of this condition.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

$$\text{AveWeighted Emissions} = \sum_{i=1}^{n}(\text{Er} \times \text{Hm}) \div \sum_{i=1}^{n}\text{Hm} \qquad \text{(Eq. 1)}$$

Where:
AveWeighted = Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Er = Emission rate (as calculated according to Table 5 to this subpart) or fuel analysis (as calculated by the applicable equation in Condition O.51.) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Hm = Maximum rated heat input capacity of boiler, i, in units of million Btu per hour.
n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use Equation 2 of this section as an alternative to using equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.

$$\text{AveWeighted Emissions} = \sum_{i=1}^{n}(\text{Er} \times \text{Sm} \times \text{Cf}) \div \sum_{i=1}^{n}\text{Sm} \times \text{Cf} \qquad \text{(Eq. 2)}$$

Where:

AveWeighted = Average weighted emission level for PM or TSM, HCl, or mercury, in units of
pounds per million Btu of heat input.
Er = Emission rate (as calculated according to Table 5 to 40 CFR 63 Subpart DDDDD) or fuel analysis (as calculated by the applicable equation in Condition O.5. for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Sm = Maximum steam generation by boiler, i, in units of pounds.
Cf = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

[40 CFR 63.7522(e)]

O.37. You must demonstrate continuous compliance on a 12-month rolling average basis determined at the end of every month (12 times per year) according to paragraphs (1) and (2). The first 12-month rolling-average period begins on the compliance date specified in Condition O.0.

(1) For each calendar month, you must use Equation 3 of this section to calculate the 12-month rolling average weighted emission limit using the actual heat capacity for each existing large solid fuel boiler participating in the emissions averaging option.

$$\text{AveWeighted Emissions} = \sum_{i=1}^{n}(\text{Er} \times \text{Hb}) \div \sum_{i=1}^{n}\text{Hb} \qquad \text{(Eq. 3)}$$

Where:

AveWeighted Emissions = 12-month rolling average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Er = Emission rate, calculated during the most recent compliance test, (as calculated according to Table 5 to 40 CFR 63 Subpart DDDDD) or fuel analysis (as calculated by the applicable equation in Condition O.51. for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Hb = The average heat input for each calendar month of boiler, i, in units of million Btu.
n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use Equation 4 of this condition as an alternative to using Equation 3 of this condition to calculate the 12-month rolling average weighted emission limit using the actual steam generation from the large solid fuel boilers participating in the emissions averaging option.

$$\text{AveWeighted Emissions} = \sum_{i=1}^{n}(\text{Er} \times \text{Sa} \times \text{Cf}) \div \sum_{i=1}^{n}\text{Sa} \times \text{Cf} \qquad \text{(Eq. 4)}$$

Where:

AveWeighted Emissions = 12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Er = Emission rate, calculated during the most recent compliance test (as calculated according to Table 5 to 40 CFR 63 Subpart DDDDD) or fuel analysis (as calculated by the applicable equation in Condition O.51. for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
Sa = Actual steam generation for each calendar month by boiler, i, in units of pounds.
Cf = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

[40 CFR 63.7522(f)]

O.38. You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (1) through (4).

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;

(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or mercury emissions in accordance with the requirements in Conditions O.21. through O.26.;

(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to Conditions O.39. through O.47., you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.

(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing large solid fuel boiler.

[40 CFR 63.7522(g)]

40 CFR 63.7525 - Monitoring, installation, operation, and maintenance requirements.

O.39. If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (1) through (6) of this condition by the compliance date specified in Condition O.0.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR Part 60, Appendix B, and according to the site-specific monitoring plan developed according to Conditions O.3. through O.7.

(2) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to PS 4A of 40 CFR Part 60, Appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in 40 CFR 63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

[40 CFR 63.7525(a)]

O.40. If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (1) through (7) of this condition by the compliance date specified in Condition O.0.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR Part 60, Appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in 40 CFR 63.8 and according to PS 1 of 40 CFR Part 60, Appendix B.

(3) As specified in 40 CFR 63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in 40 CFR 63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in 40 CFR 63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of 40 CFR 63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

[40 CFR 63.7525(b)]

O.41. If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (1) through (5) of this condition by the compliance date specified in Condition O.0.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (3) of this condition.

(5) Record the results of each inspection, calibration, and validation check.

[40 CFR 63.7525(c)]

O.42. If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in Condition O.41. and paragraphs (1) through (4) of this condition.

(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semiannually.

[40 CFR 63.7525(d)]

O.43. If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in Condition O.41. and (1) through (6) of this condition.

(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

[40 CFR 63.7525(e)]

O.44. If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in Condition O.41. and (1) through (3) of this condition.

(1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

[40 CFR 63.7525(f)]

O.45. If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.

[40 CFR 63.7525(g)]

O.46. If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in Condition O.41. and (1) through (3) of this condition.

(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

[40 CFR 63.7525(h)]

O.47. If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (1) through (8) of this condition.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

[40 CFR 63.7525(i)]

40 CFR 63.7530 – Demonstration of initial compliance with the emission limits and work practice standards.

O.48. You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to Conditions O.21. through O.26., Condition O.50., and Tables 5 and 7 to 40 CFR 63 Subpart DDDDD OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Conditions O.27. through O.31., Condition O.51., and Tables 6 and 8 to 40 CFR 63 Subpart DDDDD.

[40 CFR 63.7530(a)]

O.49. New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to 40 CFR 63.7506(a).

[40 CFR 63.7530(b)]

O.50. If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to 40 CFR 63 Subpart DDDDD that applies to you according to the requirements in Conditions O.21. through O.26., Table 7 to 40 CFR 63 Subpart DDDDD, and paragraph (4) of this condition, as applicable. You must also conduct fuel analyses according to Conditions O.27 through O.31. and establish maximum fuel pollutant input levels according to paragraphs (1) through (3) of this condition, as applicable.

(1) You must establish the maximum chlorine fuel input (Cinput) during the initial performance testing according to the procedures in paragraphs (1)(i) through (iii) of this condition.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci).

(iii) You must establish a maximum chlorine input level using Equation 5 of this condition.

$$Cl_{input} = \sum_{i=1}^{n}\left[(C_i)(Q_i)\right] \qquad \text{(Eq. 5)}$$

Where:

Cl_{input} = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.
C_i = Arithmetic average concentration of chlorine in fuel type, i, analyzed according to Sec. 63.7521, in units of pounds per million Btu.
Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of ``1'' for Qi.
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level (TSMinput) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of TSM.

(ii) During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned (Qi) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned (Mi).

(iii) You must establish a baseline TSM input level using Equation 6 of this section.

$$TSM_{input} = \sum_{i=1}^{n}\left[(M_i)(Q_i)\right] \qquad \text{(Eq. 6)}$$

Where:

TSM_{input} = Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.
M_i = Arithmetic average concentration of TSM in fuel type, i, analyzed according to Sec. 63.7521, in units of pounds per million Btu.
Q_i = Fraction of total heat input from based fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of ``1'' for Qi.
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(3) You must establish the maximum mercury fuel input level (Mercury input) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HGi).

(iii) You must establish a maximum mercury input level using Equation 7 of this section.

$$\text{Mercury}_{\text{input}} = \sum_{i=1}^{n}\left[(HG_i)(Q_i)\right] \qquad \text{(Eq. 7)}$$

Where:

$Mercury_{input}$ = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.
HG_i = Arithmetic average concentration of mercury in fuel type, i, analyzed according to Sec. 63.7521, in units of pounds per million Btu.
Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of ``1'' for Qi.
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(4) You must establish parameter operating limits according to paragraphs (c)(4)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in Sec. 63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in Sec. 63.7575, as your operating limits during the three-run performance test.

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in Sec. 63.7575, as your operating limit during the three-run performance test.

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in Conditions O.39 through O.47., and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

[40 CFR 63.7530(c)]

O.51. If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to Conditions O.27. through O.31. and follow the procedures in paragraphs (1) through (5) of this condition.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

$$P_{90} = \text{mean} + (SD \times t) \qquad \text{(Eq. 8)}$$

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.
mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to Sec. 63.7521, in units of pounds per million Btu.
SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to Sec. 63.7521, in units of pounds per million Btu.
t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

$$HCl = \sum_{i=1}^{n}\left[(C_{i90})(Q_i)(1.028)\right] \qquad \text{(Eq. 9)}$$

Where:

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.
Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.
Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of ``1'' for Qi.
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.
1.028 = Molecular weight ratio of HCl to chlorine.

(4) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.

$$TSM = \sum_{i=1}^{n}\left[(M_{i90})(Q_i)\right] \qquad \text{(Eq. 10)}$$

Where:

TSM = TSM emission rate from the boiler or process heater in units of pounds per million Btu.
Mi90 = 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.
Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of ``1'' for
Qi.
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.

(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.

$$Mercury = \sum_{i=1}^{n}\left[(HG_{i90})(Q_i)\right] \qquad \text{(Eq. 11)}$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.
HGi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of ``1'' for Qi.
n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

[40 CFR 63.7530(d)]

O.52. You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in Condition O.66.

[40 CFR 63.7530(e)]

40 CFR 63.7535 - Monitoring and collecting data to demonstrate continuous compliance

O.53. You must monitor and collect data according to Conditions O.53. through O.55. and the site-specific monitoring plan required by Condition O.6.

[40 CFR 63.7535(a)]

O.54. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

[40 CFR 63.7535(b)]

O.55. You may not use data recorded during monitoring malfunctions, associated repairs, or required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. Boilers and process heaters that have an applicable carbon monoxide work practice standard and are required to install and operate a CEMS, may not use data recorded during periods when the boiler or process heater is operating at less than 50 percent of its rated capacity.

[40 CFR 63.7535(c)]

40 CFR 63.7540 - Continuous compliance demonstration with the emission limits and work practice standards

O.56. You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under Sec. Sec. 63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

(2) You must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of TSM, HCl, and mercury, than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of TSM, chlorine, and mercury than the maximum values calculated during the last performance tests (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable HCl emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the HCl emission rate using Equation 9 of Sec. 63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Sec. 63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 9 of Sec. 63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of Sec. 63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of Sec. 63.7530 are higher than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Conditions O.21. through O.26. to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Condition O.50.

(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of Sec. 63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Condition O.28.

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of Condition O.51. The recalculated TSM emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of Condition O.50. If the results of recalculating the maximum total selected metals input using Equation 6 of Condition O.50. are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Conditions O.21. through O.26. to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Condition O.50.

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of Condition O.51. according to the procedures specified in paragraphs (7)(i) through (iii) of this condition.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to Condition O.28.

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of Condition O.51. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of Condition O.50.. If the results of recalculating the maximum mercury input using Equation 7 of Condition O.50. are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in Conditions O.21. through O.26. to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in Condition O.50.

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions according to your SSMP, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(10) If you have an applicable work practice standard for carbon monoxide, and you are required to install a CEMS according to Condition O.39., then you must meet the requirements in paragraphs (10)(i) through (iii) of this condition.

(i) You must continuously monitor carbon monoxide according to Condition O.39 and Conditions O.53. through O.55.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to 40 CFR 63 Subpart DDDDD at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to Condition O.75.

[40 CFR 63.7540(a)]

O.57. You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to 40 CFR 63 Subpart DDDDD that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in Conditions O.67. through O.73.

[40 CFR 63.7540(b)]

O.58. During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP as required in Condition O.7.

[40 CFR 63.7540(c)]

O.59. Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with your SSMP. The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 CFR 63.6(e).

[40 CFR 63.7540(d)]

40 CFR 63.7541 - Continuous compliance demonstration under the emission averaging provision

O.60. Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (4) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in Sec. 63.7522(f) and (g);

(2) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;

(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and

(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

[40 CFR 63.7541(a)]

O.61. Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (1) through (4) of Condition O.60., except during periods of startup, shutdown, and malfunction, is a deviation.

[40 CFR 63.7541(b)]

40 CFR 63.7545 - Notification submittals

O.62. You must submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8 (e), (f)(4) and (6), and 40 CFR 63.9 (b) through (h) that apply to you by the dates specified.

[40 CFR 63.7545(a)]

O.63. As specified in 40 CFR 63.9(b)(2), if you startup your affected source before November 12, 2004, you must submit an Initial Notification not later than 120 days after November 12, 2004. The Initial Notification must include the information required in paragraphs (1) and (2) of this condition, as applicable.

(1) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by 40 CFR 63.9(b)(2).

(2) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by 40 CFR 63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

[40 CFR 63.7545(b)]

O.64. As specified in 40 CFR 63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

[40 CFR 63.7545(c)]

O.65. If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

[40 CFR 63.7545(d)]

O.66. If you are required to conduct an initial compliance demonstration as specified in Sec. Condition O.48., you must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (1) through (9) of this condition, as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to 40 CFR 63 Subpart DDDDD.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

[40 CFR 63.7545(e)]

40 CFR 63.7550 – Reports and Submittals.

O.67. You must submit each report in Table 9 to 40 CFR 63 Subpart DDDDD that applies to you.

[40 CFR 63.7550(a)]

O.68. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date in Table 9 to 40 CFR 63 Subpart DDDDD and according to the requirements in paragraphs (1) through (5) of this condition.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in Condition O.0. and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in Condition O.0..

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in Condition O.0.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or 40 CFR Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (1) through (4) of this condition.

[40 CFR 63.7550(b)]

O.69. The compliance report must contain the information required in paragraphs (1) through (11) of this condition.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of Condition O.50., that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of Condition O.51. that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of Condition O.50., that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for

sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of Condition O.51. that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of Condition O.50., that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of Condition O.51. that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of Condition O.50., the maximum TSM input operating limit using Equation 6 of Condition O.50., or the maximum mercury input operating limit using Equation 7 of Condition O.50., you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in 40 CFR 63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

[40 CFR 63.7550(c)]

O.70. For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (1) through (10) of Condition O.69. and the information required in paragraphs (1) through (4) of this condition. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

[40 CFR 63.7550(d)]

O.71. For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (1) through (10) of Condition O.69. and the information required in paragraphs (1) through (12) of this condition. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in Condition O.6.

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

[40 CFR 63.7550(e)]

O.72. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to 40 CFR 63 Subpart DDDDD along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 CFR 63.7550(f)]

O.73. If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in Sec. 63.7575. The notification must include the information specified in paragraphs (1) through (5) of this condition.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

[40 CFR 63.7550(g)]

40 CFR 63.7555 - Recordkeeping

O.74. You must keep records according to paragraphs (1) through (3) of this condition.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

(2) The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in 40 CFR 63.10(b)(2)(viii).

[40 CFR 63.7555(a)]

O.75. For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this condition.

(1) Records described in 40 CFR 63.10(b)(2) (vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in 40 CFR 63.6(h)(7)(i) and (ii).

(3) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

[40 CFR 63.7555(b)]

O.76. You must keep the records required in Table 8 to 40 CFR 63 Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

[40 CFR 63.7555(c)]

O.77. For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (1) through (5) of this condition.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 5 of Condition O.50., that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of Condition O.51., that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 6 of Condition O.50., that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of Condition O.51., that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from

one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rates, for each boiler and
process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of Condition O.50., that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of Condition O.51., that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of
maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

[40 CFR 63.7555(d)]

O.78. If your boiler or process heater is subject to an emission limit or work practice standard in Table 1 to 40 CFR 63 Subpart DDDDD and has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories, you must keep the records in paragraphs (1) and (2) of this condition.

(1) A copy of the federally enforceable permit that limits the annual capacity factor of the source to less than or equal to 10 percent.

(2) Fuel use records for the days the boiler or process heater was operating.

[40 CFR 63.7555(e)]

40 CFR 63.7560 – Record format and length of time to maintain

O.79. Your records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).

[40 CFR 63.7560(a)]

O.80. As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.7560(b)]

O.81. You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 CFR 63.7560(c)]

40 CFR 63.7565 - General Provisions applicability

O.82. The Permittee shall comply with the applicable parts of the General Provisions in 40 CFR 63.1 through 63.15 as stated in Appendix B.

[40 CFR 63.7565]

40 CFR 63.7575 - Definitions

Terms used in this subpart are defined in the CAA, in Sec. 63.2 (the General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year, and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Bag leak detection system means an instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biomass fuel means unadulterated wood as defined in this subpart, wood residue, and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal litter; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total heat input (based on an annual average) from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Waste heat boilers are excluded from this definition.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388-991 .\1\, ``Standard Specification for Classification of Coals by Rank \1\" (incorporated by reference, see Sec. 63.14(b)), coal refuse, and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures, for the purposes of this subpart. Coal derived gases are excluded from this definition.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

Construction/demolition material means waste building material that result from the construction or demolition operations on houses and commercial and industrial buildings.

Deviation. (1) Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(iii) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless or whether or not such failure is permitted by this subpart.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-02a, ``Standard Specifications for Fuel Oils [1]'' (incorporated by reference, see Sec. 63.14(b)).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

Electrostatic precipitator means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles collecting surface, and transporting the particles into a hopper.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Firetube boiler means a boiler in which hot gases of combustion pass through the tubes and water contacts the outside surfaces of the tubes.

Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, subbituminous coal, lignite, anthracite, biomass, construction/demolition material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210[deg]F (99[deg]C).

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent. Large gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Large solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent.

Limited use gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any liquid or solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Limited use liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Limited use solid fuel subcategory includes any watertube boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable annual average capacity factor of equal to or less than 10 percent.

Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum voltage or amperage means 90 percent of the lowest test-run average voltage or amperage to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835-03a, ``Standard Specification for Liquid Petroleum Gases'' (incorporated by reference, see Sec. 63.14(b)).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396-02a, ``Standard Specifications for Fuel Oils [1]'' (incorporated by reference, see Sec. 63.14(b)).

Responsible official means responsible official as defined in 40 CFR 70.2.

Small gaseous fuel subcategory includes any firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.

Watertube boiler means a boiler in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Subsection P. Common Conditions - F.A.C. Test Requirements/ VE Observation Standards

E.U. ID No.	Brief Description
006	#5 Power Boiler
006	#4 Recovery Boiler
011	#5 Recovery Boiler
013	#4 Smelt Dissolving Tank
014	#5 Smelt Dissolving Tank
015	#7 Power Boiler
020	Tall Oil Plant
021	#4 Lime Kiln
024	C-line Brownstock Washer System
034	Package Boiler

The following specific conditions may apply to the emissions unit(s) listed above:

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections listed above for applicability.}

62-297.310 General Compliance Test Requirements.
The focal point of a compliance test is the stack or duct which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

(1) Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard.

(2) Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no

more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

(a) Combustion Turbines. (Reserved)

(b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

(3) Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

(4) Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1 CALIBRATION SCHEDULE			
ITEM	**MINIMUM CALIBRATION FREQUENCY**	**REFERENCE INSTRUMENT**	**TOLERANCE**
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded Max. deviation between readings	Micrometer	+/-0.001" men of at least three readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter Comparison check	2% 5%

(5) Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

(6) Required Stack Sampling Facilities. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d). Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e). Access to Work Platform.

1 Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f). Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g). Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

(7) Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to Rule 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to Rule 62-213.300(2)(a)1., F.A.C., or Rule 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in Rule 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

(8) Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.

9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

10. The number of points sampled and configuration and location of the sampling plane.

11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

12. The type, manufacturer and configuration of the sampling equipment used.

13. Data related to the required calibration of the test equipment.

14. Data on the identification, processing and weights of all filters used.

15. Data on the types and amounts of any chemical solutions used.

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18. All measured and calculated data required to be determined by each applicable test procedure for each run.

19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

Specific Authority: 403.061, FS.
Law Implemented: 403.031, 403.061, 403.087, FS.
History: Formerly 17-2.700(1)(b); Formerly 17-297.310; Amended 11-23-94, 3-13-96, 10-28-97, 3-2-99.

62-297.320 Standards for Persons Engaged in Visible Emissions Observations.

(1) Training and Certification Required. All persons engaged in determining the opacity of visible emissions in Florida shall attend training and be certified by a training provider in accordance with the procedures and requirements set forth below.

(a) Certification shall consist of satisfactory attendance and completion of a classroom lecture and a field qualification. For certification purposes, the classroom lecture and field qualification are separate and independent requirements.

(b) Attendance at the classroom lecture is required no less frequently than every three years. Successful completion of the field qualification is required no less frequently than every six months.

(c) Proof of certification shall be made by including copies of the signed and dated certificates or cards issued by the training providers with documentation of visible emissions observations submitted to the department, or otherwise upon request of the department.

(2) Requirements for Training Providers. All persons providing training leading to the certification of persons engaged in determining the opacity of visible emissions in Florida shall meet the requirements of subsections 62-297.320(2)-(8), F.A.C.
(a) For certification purposes, the classroom lecture and field certification are separate and independent requirements. For each course scheduled, each training provider shall offer a classroom lecture and one or more days of field qualification.
(b) Copies of quality assurance documentation, attendance records and field data sheets shall be maintained for a period of no less than three years after the conclusion of each course and shall be made available to the department upon request.
(c) Each training provider shall arrange for suitable locations for the classroom lecture and field qualification sessions that facilitate learning and reduce the impact of the smoke on passersby.
(d) To assure that cigar, pipe or cigarette smoke does not interfere with the observations of the trainees, each training provider shall enforce a policy of no smoking within the field qualification area.
(3) Classroom Lecture.
(a) The classroom lecture shall include the following topics and exercises:
1. Sources and causes of visible emissions.
2. Common types of emission control equipment and their effects on visible emissions observations.
3. History of opacity measurement.
4. Principles and theory of opacity.
5. Plume types and characteristics.
6. Legal aspects of visible emissions observations and legal defensibility of Method 9.
7. Basic meteorological conditions that influence plume behavior.
8. Proper procedures for conducting field observations under a variety of conditions.
9. A demonstration of commonly used measurement devices including a compass, a wind speed measurement device, and an inclinometer.
10. A written exercise demonstrating the proper procedure for documentation of observations.
(b) Training providers shall issue a signed and dated certificate or card to all persons attending the classroom lecture.
(4) Field Qualification.
(a) The field qualification shall be conducted in accordance with the requirements set forth in 40 CFR Part 60, Subpart A, EPA Method 9, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; EPA Quality Assurance Handbook for Air Pollution Measurement Systems: Volume III, Section 3.12, hereby adopted and incorporated by reference; and EPA Guidelines for Evaluation of Visible Emissions (EPA 340/1-75-007, April 1975), hereby adopted and incorporated by reference.
(b) Each training provider shall meet requirements for quality assurance at least as stringent as those outlined in EPA Method 9.
(c) Each training provider shall monitor the attendees so that conferring or copying results during field qualification does not occur.
(d) Each training provider shall not provide hints of any kind or demonstrate the smoke standards during the field qualification sessions, except during familiarization runs prior to each test.
(e) Training providers shall issue a signed and dated certificate or card to all persons who successfully complete the field qualification.

(5) Notification to Department of Training Course Offerings. Each training provider shall notify the Department of all visible emissions training courses such provider offers in Florida at least 30 days prior to the start of each course.
(6) Notification to Department of Persons Receiving Certification. Each training provider shall provide a list of the names of attendees receiving certification at its courses to the department no later than 30 days after the conclusion of each course.
(7) Audit by the Department. For auditing purposes, each training provider shall allow one or more persons from the Department or a local air pollution control agency to observe each visible emissions training course offered in Florida without advance notice to the training provider. The training provider shall not issue a certificate or card to the observers, and shall not charge a fee for their attendance.
(8) Invalidation of Certificates. After investigation by the department, should any training provider's course be found by the department to not meet the requirements of this section, the certificates or cards offered by such provider for such course shall not be considered valid for visible emissions observations in Florida.
Specific Authority 403.061 FS. Law Implemented 403.031, 403.061 FS. History–New 2-12-04.

62-297.520 EPA Continuous Monitor Performance Specifications.

This rule lists the continuous monitor performance specifications to be used where required by Department air pollution rule or air permit. The EPA performance specifications listed in this rule and contained in 40 CFR 60, Appendix B, are adopted and incorporated by reference in Rule 62-204.800, F.A.C. The EPA performance specifications that are adopted by reference at Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.
(1) Performance Specification 1 – Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.
(2) Performance Specification 2 – Specifications and Test Procedures for SO2 and NOx Continuous Emission Monitoring Systems in Stationary Sources.
(3) Performance Specification 3 – Specifications and Test Procedures for O2 and CO2 Continuous Emission Monitoring Systems in Stationary Sources.
(4) Performance Specification 4 – Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources.
(5) Performance Specification 4A – Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources.
(6) Performance Specification 5 – Specifications and Test Procedures for TRS Continuous Emission Monitoring Systems in Stationary Sources.
(7) Performance Specifications 6 – Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources.
(8) Performance Specifications 7 – Specifications and Test Procedures for Hydrogen Sulfide Continuous Emission Monitoring Systems in Stationary Sources.
(9) Performance Specification 8 – Performance Specifications for Volatile Organic Compound Continuous Emission Monitoring Systems in Stationary Sources.
(10) Performance Specification 9 – Specifications and Test Procedures for Gas Chromatographic Continuous Emission Monitoring Systems in Stationary Sources.

Specific Authority 403.061 FS. Law Implemented 403.031, 403.061, 403.087 FS. History–New 6-29-93, Formerly 17-297.520, Amended 11-23-94, 3-13-96, 3-2-99.