

**SUPPORT DOCUMENT**  
(lfpp07sup9fnl.DOC – 2/20/07)

**for the Air Operating Permit No. WA 000007-8 issued to**

**Longview Fibre Paper and Packaging, Inc.**  
**P.O. Box 639**  
**Longview, WA. 98632**

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## INTRODUCTION

This a permit renewal. The expired Air Operating Permit (AOP) was issued to Longview Fibre Company. Since then, Longview Fibre Company transferred the facility to Longview Fibre Paper and Packaging, Inc. (LFPP). The permit renewal reflects the transfer.

This AOP Support Document fulfills the operating permit rule "Statement of Basis" requirement (WAC 173-401-700(8)) and explains particular portions of the AOP for LFPP. Note: A list of acronyms used in this Support Document is included in Appendix A.

This document is not part of the LFPP AOP. Nothing in this document is enforceable against the permittee, unless otherwise made enforceable by permit or order.

The LFPP mill is located along the Columbia River near Longview, WA. The mill produces virgin pulp using the kraft process and the neutral sulfite semi-chemical process, and recycle pulp from old corrugated cardboard (OCC). Production is approximately 2900 air dried unbleached tons per day (ADUT/D). The mill does not bleach on site but does purchase bleached market pulp for use in some products. Principal emission sources at the mill include recovery furnaces 15, 18, 19, & 22; smelt dissolving tanks 15, 18, 19, & 22; lime kilns 1, 2, 3, 4, & 5; power boilers 12, 13, 16, & 22; and cogen 23.

## STATEMENT OF BASIS

A statement is required identifying the legal and factual basis for permit conditions when a draft AOP is issued [WAC 173-401-700(8)]. In the AOP, the applicable statutory or regulatory provisions are identified either in the "applicable requirements" table column or in brackets after a narrative requirement.

### I. Assuring Compliance With All Applicable Federal Requirements

The AOP is a compilation of applicable federal requirements and applicable state-only requirements. State-only requirements are clearly identified in the AOP and are not federally enforceable. Further discussion in the support document is limited to applicable federal requirements.

The AOP includes emission limits, monitoring and reporting requirements, and other applicable requirements. Some emission points have more than one limit and/or applicable requirement for a parameter. The multiple limits are usually based on two or more applicable requirements. Multiple limits are generally listed in order from most stringent to least stringent in a single permit condition in the AOP. Applicable requirements may include federal regulations, state regulations, Regulatory Orders, and Prevention of Significant Deterioration (PSD) Permits. Regulatory Orders and PSD Permits in effect at LFPP include:

- Order No. DE 99AQ-I052,
- No. 01-03, Second Amendment of Final Approval of Prevention of Significant Deterioration Application (PSD 01-03),
- Order No. 2737-AQ05,
- NOC Order No. 3462-AQ07,
- Order No. 3463-AQ07, and
- NOC Order No. 3466-AQ07.

A copy of each Regulatory Order and PSD Permit in effect at LFPP is included in Appendix D of the AOP.

Monitoring requirements are generally specified in Regulatory Orders and PSD Permits. Also, some monitoring and reporting requirements are specified in regulations. In such cases, the applicable monitoring and reporting requirements are included in the AOP. When absent from the applicable requirements, monitoring requirements are assigned in the AOP. Best professional judgment is applied after considering historical performance along with expected frequency and magnitude of potential exceedences. The monitoring program strives to assure compliance with limits as required by the AOP program.

Direct measure is usually the specified monitoring in the absence of regulatory requirements. Direct measure is preferred due to its accuracy. When direct measure is difficult or impossible, such as opacity measurement of wet stacks, an indirect surrogate parameter is specified.

In some cases, frequency of monitoring issues may necessitate relying on periodic direct source testing and frequent indirect monitoring using surrogate parameters. Out-of-compliance surrogate measurements require corrective action. Failure to take proper corrective action constitutes noncompliance with good operation and maintenance requirements [WAC 173-405-040(10)] and possible noncompliance with the underlying requirement.

The draft AOP is a renewal of an existing permit. Since the previous AOP was issued LFPP applied for and was issued a PSD Permit (PSD No. 01-03) and companion Notice of Construction (NOC) Order (No. DE 01AQIS-3294) to allow increased production at the mill. The new PSD and Order requirements were phased in and replaced numerous older orders which were superseded and rescinded. The PSD and several Orders were updated and/or replaced prior to incorporation into this AOP, including replacement of Order No. DE 01AQIS-3294. The updates reflect mill changes, eliminate interim and fulfilled requirements, align some general and Maximum Achievable Control Technology (MACT) monitoring requirements, and make administrative corrections. As a result, this renewal reflects numerous changes. Major items added to the AOP as part of the renewal include:

- No. 01-03, Second Amendment of Final Approval of Prevention of Significant Deterioration Application (PSD 01-03),
- Order No. 2737-AQ05,
- NOC Order No. 3462-AQ07,
- Order No. 3463-AQ07, and
- NOC Order No. 3466-AQ07.
- MACT I requirements [40 CFR Part 63, Subpart S],
- Compliance Assurance Monitoring (CAM) requirements [40 CFR Part 64],
- MACT II requirements [40 CFR Part 63, Subpart MM], and
- Power Boiler MACT requirements [40 CFR Part 63, Subpart DDDDD].

Major items deleted from the AOP that were included in the previous AOP include:

- Order No. DE 01AQIS-2038, NOC Order No. DE 00AQIS-1627, Order No. DE 00AQIS-704, and Final 2000 Revision of No. PSD-X81-10A, and
- References to power boiler 17 which was removed from service.

Specific monitoring requirements for federally enforceable limits of principal emission sources at LFPP are discussed in this Support Document. Limits and applicable requirements are included in the AOP.

### **A1. Recovery furnace 15 - federally enforceable limits**

Emission controls at recovery furnace 15 include an electrostatic precipitator (ESP) and scrubber for particulate matter and particulate matter <10 microns (PM&PM10) control, and operational practices to control other emissions. The stack is equipped with continuous emission monitoring system (CEMS) units to measure total reduced sulfides (TRS) emissions and percent oxygen (O<sub>2</sub>). Also, a continuous opacity monitoring system (COMS) on the stack measures opacity prior to the scrubber. Monitoring to assure compliance with specific limits includes:

- A1.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. Compliance assurance monitoring (CAM) is required by 40 CFR Part 64 for particulate at this unit. Compliance with the hazardous air pollutants (HAPS) monitoring requirement discussed in section A1.9 of this Support Document satisfies the CAM requirement.
- A1.2 Opacity is continuously monitored with a COMS. Scrubber flow is also continuously monitored as a performance indicator parameter. Additionally, visual tests using RM 9 can be run.
- A1.3 Sulfur dioxide (SO<sub>2</sub>) limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- A1.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- A1.5 Carbon Monoxide (CO) limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- A1.6 Nitrogen oxides (NO<sub>x</sub>) limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- A1.7 O<sub>2</sub> monitoring requirement - no limit.

A1.8 Operating limit compliance is monitored using mill production records.

A1.9 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Opacity monitoring with a COMS to demonstrate compliant particulate emissions, as required by 40 CFR Part 63, is included in the AOP. Scrubber flow rate is also monitored and allowance is made for additional treatment.

## **A2. Recovery furnace 18 - federally enforceable limits**

Emission controls at recovery furnace 18 include an ESP for PM&PM10 control and operational practices to control other emissions. The stack is equipped with CEMS units to measure SO<sub>2</sub> and TRS emissions, and percent O<sub>2</sub>. Also, a COMS on the stack measures opacity. Monitoring to assure compliance with specific limits includes:

A2.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section A2.9 of this Support Document satisfies the CAM requirement.

A2.2 Opacity is continuously monitored with a COMS. Additionally, visual tests using RM 9 can be run.

A2.3 SO<sub>2</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.

A2.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.

A2.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

A2.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

A2.7 O<sub>2</sub> monitoring requirement - no limit.

A2.8 Operating limit compliance is monitored using mill production records.

A2.9 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Opacity monitoring with a COMS to demonstrate compliant particulate emissions, as required by 40 CFR Part 63, is included in the AOP.

### **A3. Recovery furnace 19 - federally enforceable limits**

Emission controls at recovery furnace 19 include an ESP for PM&PM10 control and operational practices to control other emissions. The stack is equipped with CEMS units to measure SO<sub>2</sub> and TRS emissions, and percent O<sub>2</sub>. Also, a COMS on the stack measures opacity. Monitoring to assure compliance with specific limits includes:

A3.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section A3.9 of this Support Document satisfies the CAM requirement.

A3.2 Opacity is continuously monitored with a COMS. Additionally, visual tests using RM 9 can be run.

A3.3 SO<sub>2</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.

A3.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.

A3.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

A3.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

A3.7 O<sub>2</sub> monitoring requirement - no limit.

A3.8 Operating limit compliance is monitored using mill production records.

A3.9 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Opacity monitoring with a COMS to demonstrate compliant particulate emissions, as required by 40 CFR Part 63, is included in the AOP.



#### **A4. Recovery furnace 22 - federally enforceable limits**

This unit must meet New Source Performance Standards (NSPS) requirements including 40 CFR Part 60 Subpart BB and the general requirements of 40 CFR Part 60.

Emission controls at recovery furnace 22 include an ESP for PM&PM10 control and operational practices to control other emissions. The stack is equipped with CEMS units to measure SO<sub>2</sub>, TRS, CO, and NO<sub>x</sub> emissions, and percent O<sub>2</sub>. Also, a COMS on the stack measures opacity. Monitoring to assure compliance with specific limits includes:

- A4.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section A4.9 of this Support Document satisfies the CAM requirement.
- A4.2 Opacity is continuously monitored with a COMS. Additionally, visual tests using RM 9 can be run.
- A4.3 SO<sub>2</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- A4.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- A4.5 CO limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- A4.6 NO<sub>x</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- A4.7 O<sub>2</sub> monitoring requirement - no limit.
- A4.8 Operating limit compliance is monitored using mill production records.
- A4.9 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Opacity monitoring with a COMS to demonstrate compliant particulate emissions, as required by 40 CFR Part 63, is included in the AOP.

#### **B1. Smelt Dissolving Tanks 15 - federally enforceable limits**

Emission controls at smelt dissolving tanks 15 include a venturi/packed tower scrubber system for PM&PM10 control and operational practices to control other emissions. Monitoring to assure compliance with specific limits includes:

- B1.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section B1.8 of this Support Document satisfies the CAM requirement.
- B1.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- B1.3 SO<sub>2</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B1.4 TRS limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B1.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B1.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B1.7 Operating limit compliance is monitored using mill production records.
- B1.8 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

## **B2. Smelt Dissolving Tanks 18 - federally enforceable limits**

Emission controls at smelt dissolving tanks 18 include a venturi/packed tower scrubber system for PM&PM10 control and operational practices to control other emissions. Monitoring to assure compliance with specific limits includes:

- B2.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section B2.8 of this Support Document satisfies the CAM requirement.
- B2.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- B2.3 SO<sub>2</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B2.4 TRS limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B2.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B2.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B2.7 Operating limit compliance is monitored using mill production records.
- B2.8 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

### **B3. Smelt Dissolving Tanks 19 - federally enforceable limits**

Emission controls at smelt dissolving tanks 19 include a venturi/packed tower scrubber system for PM&PM10 control and operational practices to control other emissions. Monitoring to assure compliance with specific limits includes:

- B3.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section B3.8 of this Support Document satisfies the CAM requirement.
- B3.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- B3.3 SO<sub>2</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B3.4 TRS limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B3.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B3.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B3.7 Operating limit compliance is monitored using mill production records.
- B3.8 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

#### **B4. Smelt Dissolving Tank 22 - federally enforceable limits**

This unit must meet NSPS requirements including 40 CFR Part 60 Subpart BB and the general requirements of 40 CFR Part 60.

Emission controls at smelt dissolving tank 22 include a venturi/packed tower scrubber system for PM&PM10 control and operational practices to control other emissions. Monitoring to assure compliance with specific limits includes:

- B4.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section B4.8 of this Support Document satisfies the CAM requirement.
- B4.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- B4.3 SO<sub>2</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B4.4 TRS limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B4.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B4.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- B4.7 Operating limit compliance is monitored using mill production records.
- B4.8 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

## **C1. Lime Kiln 1 - federally enforceable limits**

Emission controls at lime kiln 1 include a venturi scrubber for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when operational conditions vary from established standards. The stack is equipped with CEMS units to measure TRS emissions and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- C1.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section C1.10 of this Support Document satisfies the CAM requirement.
- C1.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- C1.3 SO<sub>2</sub> limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. Compliance with CAM using operational parameters is addressed with the SO<sub>2</sub> monitoring requirements in the AOP.
- C1.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- C1.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- C1.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- C1.7 O<sub>2</sub> monitoring requirement - no limit.
- C1.8 Operating limit compliance is monitored using mill production records.
- C1.9 Stack dimensions have been certified. Any stack dimension changes must be reported.

C1.10 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

## **C2. Lime Kiln 2 - federally enforceable limits**

Emission controls at lime kiln 2 include a venturi scrubber for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when operational conditions vary from established standards. The stack is equipped with CEMS units to measure TRS emissions and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- C2.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section C2.10 of this Support Document satisfies the CAM requirement.
- C2.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- C2.3 SO<sub>2</sub> limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. Compliance with CAM using operational parameters is addressed with the SO<sub>2</sub> monitoring requirements in the AOP.
- C2.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- C2.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- C2.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- C2.7 O<sub>2</sub> monitoring requirement - no limit.
- C2.8 Operating limit compliance is monitored using mill production records.

C2.9 Stack dimensions have been certified. Any stack dimension changes must be reported.

C2.10 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

### **C3. Lime Kiln 3 - federally enforceable limits**

Emission controls at lime kiln 3 include a venturi scrubber for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when operational conditions vary from established standards. The stack is equipped with CEMS units to measure TRS emissions and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

C3.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source test results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section C3.10 of this Support Document satisfies the CAM requirement.

C3.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.

C3.3 SO<sub>2</sub> limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source test results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. Compliance with CAM using operational parameters is addressed with the SO<sub>2</sub> monitoring requirements in the AOP.

C3.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.

C3.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

C3.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

C3.7 O<sub>2</sub> monitoring requirement - no limit.



- C3.8 Operating limit compliance is monitored using mill production records.
- C3.9 Stack dimensions have been certified. Any stack dimension changes must be reported.
- C3.10 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

#### **C4. Lime Kiln 4 - federally enforceable limits**

Emission controls at lime kiln 4 include a modified pressure scrubber for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when operational conditions vary from established standards. The stack is equipped with CEMS units to measure TRS emissions and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- C4.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section C4.10 of this Support Document satisfies the CAM requirement.
- C4.2 Opacity compliance is monitored by monitoring scrubber water flow and pressure drop as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- C4.3 SO<sub>2</sub> limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. Compliance with CAM using operational parameters is addressed with the SO<sub>2</sub> monitoring requirements in the AOP.
- C4.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- C4.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- C4.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

- C4.7 O<sub>2</sub> monitoring requirement - no limit.
- C4.8 Operating limit compliance is monitored using mill production records.
- C4.9 Stack dimensions have been certified. Any stack dimension changes must be reported.
- C4.10 HAPS compliance is demonstrated by using particulate as a surrogate for HAPS. Scrubber flow and pressure drop monitoring, as required by 40 CFR Part 63, is included in the AOP.

### **C5. Lime Kiln 5 - federally enforceable limits**

This unit must meet NSPS requirements including 40 CFR Part 60 Subpart BB and the general requirements of 40 CFR Part 60.

Emission controls at lime kiln 5 include an ESP for PM&PM<sub>10</sub> control and operational practices to control other emissions. The stack is equipped with CEMS units to measure TRS and CO emissions, and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- C5.1 PM&PM<sub>10</sub> limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section C5.9 of this Support Document satisfies the CAM requirement.
- C5.2 Opacity is continuously monitored with a COMS. Additionally, visual tests using RM 9 can be run.
- C5.3 SO<sub>2</sub> limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- C5.4 TRS limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- C5.5 CO limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- C5.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

- C5.7 O<sub>2</sub> monitoring requirement - no limit.
- C5.8 Operating limit compliance is monitored using mill production records.
- C5.9 Hazardous air pollutants (HAPS) compliance is demonstrated by using particulate as a surrogate for HAPS. Opacity monitoring with a COMS to demonstrate compliant particulate emissions, as required by 40 CFR Part 63, is included in the AOP.

**D1. Power Boiler 12 - federally enforceable limits**

Emission controls at power boiler 12 include a scrubber and wet ESP for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when concentrations approach the permit limit. The stack is equipped with CEMS units to measure SO<sub>2</sub> emissions and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- D1.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section D1.10 of this Support Document satisfies the CAM requirement.
- D1.2 Opacity compliance is monitored by monitoring wet ESP and scrubber operation as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- D1.3 TRS - no limit - operational requirement to assure proper non-condensable gases (NCG) destruction.
- D1.4 SO<sub>2</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. The CEMS satisfies the CAM requirement.
- D1.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- D1.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- D1.7 O<sub>2</sub> monitoring requirement - no limit.
- D1.8 Operating limit compliance is monitored using mill production records.

D1.9 Stack dimensions have been certified. Any stack dimension changes must be reported.

D1.10 HAPS compliance is demonstrated by doing the testing and monitoring described in Section N of the AOP. Scrubber flow and pressure drop, and wet ESP power use monitoring, as required by 40 CFR Part 63, are included in the AOP.

## **D2. Power Boiler 13 - federally enforceable limits**

Emission controls at power boiler 13 include a scrubber and wet ESP for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when concentrations approach the permit limit. The stack is equipped with CEMS units to measure SO<sub>2</sub> emissions and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

D2.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source test results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section D2.10 of this Support Document satisfies the CAM requirement.

D2.2 Opacity compliance is monitored by monitoring wet ESP and scrubber operation as performance indicator parameters. Additionally, visual tests using RM 9 can be run.

D2.3 TRS - no limit - operational requirement to assure proper NCG destruction.

D2.4 SO<sub>2</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. The CEMS satisfies the CAM requirement.

D2.5 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

D2.6 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.

D2.7 O<sub>2</sub> monitoring requirement - no limit.

D2.8 Operating limit compliance is monitored using mill production records.

D2.9 Stack dimensions have been certified. Any stack dimension changes must be reported.

D2.10 HAPS compliance is demonstrated by doing the testing and monitoring described in Section N of the AOP. Scrubber flow and pressure drop, and wet ESP power use monitoring, as required by 40 CFR Part 63, are included in the AOP.

### **D3. Power Boiler 16 - federally enforceable limits**

Emission controls at power boiler 16 include operational practices to control emissions. Monitoring to assure compliance with specific limits includes:

- D3.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- D3.2 Opacity is continuously monitored with a COMS. Additionally, visual tests using RM 9 can be run.
- D3.3 SO<sub>2</sub> limit compliance is demonstrated with calculations based on the sulfur content of the fuel. Mass emissions are calculated using the fuel data to assure compliance with the 12 month rolling average mass limit.
- D3.4 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- D3.5 NO<sub>x</sub> limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- D3.6 Operating limit compliance is monitored using mill production records.
- D3.7 Stack dimensions have been certified. Any stack dimension changes must be reported.

#### **D4. Power Boiler 20 - federally enforceable limits**

This unit must meet NSPS requirements including 40 CFR Part 60 Subpart D and the general requirements of 40 CFR Part 60.

Emission controls at power boiler 20 include a scrubber and wet ESP for PM&PM10 control and operational practices to control other emissions with the exception of SO<sub>2</sub>. SO<sub>2</sub> is typically controlled using operational practices, but caustic addition to the scrubber water is used when concentrations approach the permit limit. The stack is equipped with CEMS units to measure SO<sub>2</sub> and NO<sub>x</sub> emissions, and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- D4.1 PM&PM10 limit compliance is monitored monthly with a source test. Provision for frequency reduction to quarterly is made if emissions are <75% of the limit for six consecutive months. Less frequent source testing continues only as long as source tests results are not >75% of the limit. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for particulate at this unit. Compliance with the HAPS monitoring requirement discussed in section D2.10 of this Support Document satisfies the CAM requirement.
- D4.2 Opacity compliance is monitored by monitoring wet ESP and scrubber operation as performance indicator parameters. Additionally, visual tests using RM 9 can be run.
- D4.3 SO<sub>2</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit. CAM is required by 40 CFR Part 64 for SO<sub>2</sub> at this unit. The CEMS satisfies the CAM requirement.
- D4.4 CO limit compliance is monitored annually with a source test. Frequency increases to monthly if a source test result is >75% of the limit. Frequency returns to annually if emissions are <75% of the limit for six consecutive months. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- D4.5 NO<sub>x</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 12 month rolling average mass limit.
- D4.6 O<sub>2</sub> monitoring requirement - no limit.
- D4.7 Operating limit compliance is monitored using mill production records.
- D4.8 Stack dimensions have been certified. Any stack dimension changes must be reported.
- D4.9 HAPS compliance is demonstrated by doing the testing and monitoring described in Section N of the AOP. Scrubber flow and pressure drop, and wet ESP power use monitoring, as required by 40 CFR Part 63, are included in the AOP.

### **E1. Cogen 23 - federally enforceable limits**

This unit must meet NSPS requirements including 40 CFR Part 60 Subpart GG and the general requirements of 40 CFR Part 60.

Emission controls at cogen 23 include steam injection followed by selective catalytic reduction (SCR) with ammonia (NH<sub>3</sub>) injection to control NO<sub>x</sub> and operational practices to control other emissions including only burning pipeline quality natural gas. The stack is equipped with CEMS units to measure CO, NO<sub>x</sub>, and NH<sub>3</sub> emissions, and percent O<sub>2</sub>. Monitoring to assure compliance with specific limits includes:

- E1.1 PM&PM10 limit compliance is monitored once per three years with a source test. Mass emissions are calculated using the source test data to assure compliance with the 12 month rolling average mass limit.
- E1.2 Opacity limit compliance is demonstrated by burning only pipeline quality natural gas. Additionally, visual tests using RM 9 can be run.
- E1.3 SO<sub>2</sub> limit compliance is demonstrated by burning only pipeline quality natural gas.
- E1.4 CO limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 24 hour mass limit.
- E1.5 NO<sub>x</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 24 hour mass limit.
- E1.6 NH<sub>3</sub> limit compliance is continuously monitored with a CEMS. Mass emissions are calculated with CEMS data to assure compliance with the 24 hour mass limit.
- E1.7 O<sub>2</sub> monitoring requirement - no limit.
- E1.8 VOC limit compliance is monitored once per three years with a source test.
- E1.9 Operating limit compliance is monitored using mill production records.

### **F1. Neutral Sulfite Semi-Chemical Plant (NSSC) - federally enforceable limits**

- F1.1 VOC limit compliance is calculated annually with emission factors and monitored at least once per five years with a source test. Source test data are used to update emission factors.

### **F2. NSSC Sulfur Burner (SCMS) - federally enforceable limits**

- F2.1-3 The sulfur burner and lime kiln 3 share a common stack. Compliance with regulatory requirements applicable to the sulfur burner (PM – condition F2.1, Opacity – condition F2.2, and SO<sub>2</sub> – condition F2.3) is monitored by monitoring the lime kiln 3 stack (see section C3. of AOP).

### **G1. Digesters, Multiple-effect Evaporators, Brownstock Washers, and Condensate Stripper Systems - federally enforceable limits**

G1.1 Kamyr Digester and Washer No. 1; Kamyr Digester and Washer No. 2; and Multiple-effect Evaporator Set 10 must meet NSPS requirements including 40 CFR Part 60 Subpart BB and the general requirements of 40 CFR Part 60.

The TRS limit for these units is monitored by monitoring unit operation, flame safety interlocks, and interlock connections to NCG valves at the units burning NCGs. Units burning NCGs include lime kilns 1, 2, 3, and 4; and power boilers 12 and 13.

Note: TRS emissions from units not covered by NSPS are not federally enforceable because the applicable portions of the state regulations are not part of the federally approved State Implementation Plan (SIP) (see condition G1.3a - a state only requirement that is not federally enforceable under the federal Clean Air Act).

## **G2. Paper Machines - federally enforceable limits**

G2.1 "Low VOC" additive compliance is monitored annually by requiring submission of a list of additives used in the paper-making process on paper machines.

## **G3. Box Plant Production Lines - federally enforceable limits**

G3.1 HAPS compliance is calculated monthly based on materials usage.

## **H1. Millwide Limits - federally enforceable limits**

H1.1-9 Millwide limit compliance is calculated monthly, using methods specified in appendix ApA.5 of the AOP.

## **I. Compliance Assurance Monitoring (CAM) - federally enforceable limits**

CAM requirements, per 40 CFR Part 64, for specific parameters and units are identified in Section I of the AOP. Specific monitoring requirements are included with the appropriate unit specific section of the AOP. Section I notes the specific section in the AOP where each CAM requirement is addressed.

## **J - N. MACT Requirements - federally enforceable limits**

MACT requirements per 40 CFR Part 63 are addressed in these sections.

General requirements are addressed primarily in Section J, including the MACT SSM Plan, recordkeeping, and reporting.

Sections K, L, and M address 40 CFR Part 63 Subpart S requirements which include non-condensable gas collection systems and pulping process condensates.

40 CFR Part 63 Subpart MM requirements are addressed with the individual recovery furnaces, smelt dissolving tanks, and lime kilns to which they apply.

40 CFR Part 63 Subpart DDDDD numeric requirements are addressed with the individual power boilers to which they apply. Compliance demonstration is addressed in Section N.



## **Facility-Wide General Requirements**

The Environmental Protection Agency (EPA) requested some changes to the facility wide general requirements included in the previous AOP. Changes varied in degree from eliminating some conditions or parts of conditions to minor changes in wording. The general conditions in the current version of the AOP reflect those changes.

### **II. Insignificant Emission Units**

The facility-wide general requirements apply to the whole facility, including insignificant emission units and activities (IEUs), as required by the operating permit rule. The rule states, however, that IEUs are not subject to monitoring requirements unless the generally applicable requirements in the State Implementation Plan (SIP) impose them. [WAC 173-401-530(2)(c)]. The Washington SIP does not impose any specific monitoring-related requirements for the facility-wide requirements for IEUs at this source. The permit, therefore, does not require any testing, monitoring, reporting, or recordkeeping for insignificant emission units or activities.

### **III. Regulatory Orders**

The permittee is currently subject to several regulatory orders. Copies of the orders are included in Appendix F of the AOP.

## **APPENDIX A - ACRONYMS USED IN THE SUPPORT DOCUMENT**

ADUT/D - air dried unbleached tons per day

AOP - air operating permit

CFR - code of federal regulations

CAM - compliance assurance monitoring

CEMS - continuous emission monitoring system

CO - carbon monoxide

COMS - continuous opacity monitoring system

EPA - Environmental Protection Agency

ESP - electrostatic precipitator

HAPS - hazardous air pollutants

IEUs - insignificant emission units and activities

LFPP - Longview Fibre Paper and Packaging, Inc.

MACT - maximum achievable control technology

NCG - non-condensable gases

NH<sub>3</sub> - ammonia

NOC - notice of construction

NO<sub>x</sub> - nitrogen oxides

NSPS - New Source Performance Standards

OCC - old corrugated cardboard

O<sub>2</sub> - oxygen

PM - particulate matter

PM&PM10 - particulate matter and particulate matter less than 10 microns

PM10 - particulate matter less than 10 microns

PSD - prevention of significant deterioration

RM - reference method (see 40 CFR Part 60 - Appendix A)

SCR - selective catalytic reduction

SIP - state implementation plan

SO<sub>2</sub> - sulfur dioxide

SSM - start-up, shut-down, and malfunction

TRS - total reduced sulfur

VOC - volatile organic compound

WAC - Washington Administrative Code

## **APPENDIX B - RESPONSE TO COMMENTS**

No comments were received during the public comment period.

One item was added to the draft to correct an oversight. Several other pulp and paper AOPs include a statement that monitoring is required only when the emission unit is operating. For clarity, the statement was added to the LFPP AOP Emission Unit Specific Requirements introductory comments.