# STATE OF MISSISSIPPI
# AIR POLLUTION CONTROL
# TITLE V PERMIT

## TO OPERATE AIR EMISSIONS EQUIPMENT

## THIS CERTIFIES THAT

Leaf River Cellulose, LLC
157 Buck Creek Road
New Augusta, Mississippi 39462
Perry County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

**Permit Issued: _____**

**Effective Date: As specified herein.**

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

_____

**AUTHORIZED SIGNATURE**
**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Expires:** **Permit No.: 2200-00005**

9342 PER2014001

Draft/Proposed – August 2020

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## SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)

1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.

(a) This permit shall be reopened and revised under any of the following circumstances:

(1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.

(2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

(3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

(4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the MDEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

1.5 The permittee shall furnish to the MDEQ within a reasonable time any information the MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the MDEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to MDEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

1.8 The permittee shall pay to the MDEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.

(a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission

factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

(d) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the MDEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)

1.10 Any document required by this permit to be submitted to the MDEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

1.11 The permittee shall allow the MDEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:

(a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

(b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

(d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)

1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)

1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)

1.15 Nothing in this permit shall alter or affect the following:

(a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;

(b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

(c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.

(d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)

1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the MDEQ any additional information identified as being needed to process the application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)

1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:

(a) the changes are not modifications under any provision of Title I of the Act;

(b) the changes do not exceed the emissions allowable under this permit;

(c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:

(1) a brief description of the change(s),

(2) the date on which the change will occur,

(3) any change in emissions, and

(4) any permit term or condition that is no longer applicable as a result of the change;

(d) the permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

(a) routine maintenance, repair, and replacement;

(b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

(c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;

(d) use of an alternative fuel or raw material by a stationary source which:

(1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166; or

(2) the source is approved to use under any permit issued under 40 CFR 52.21 or

under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166;

(e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or

(f) any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)

1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

(a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.

(b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.

(c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

1.24 Except as otherwise specified herein, the permittee shall be subject to the following

provision with respect to emergencies:

(a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.

(c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

(1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;

(2) the permitted facility was at the time being properly operated;

(3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) the permittee submitted notice of the emergency to the MDEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

(e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

(a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)

(1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an

applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:

(i) An upset occurred and that the source can identify the cause(s) of the upset;

(ii) The source was at the time being properly operated;

(iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;

(iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;

(v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.

(2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.

(3) This provision is in addition to any upset provision contained in any applicable requirement.

(4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.

(b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)

(1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.

(2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or

work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

(3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

(Ref.: 11 Miss Admin. Code Pt. 2, R. 1.8.)

# SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

| Emission Point | Description |
|---|---|
| AA-001 | Woodyard (WY). The woodyard contains facilities, processes, and equipment for whole log handling, bark storage and handling, debarking, chipping, chip screening, and chip storage and handling. Whole logs are processed in the woodyard. Purchased chips and bark are also handled in the woodyard. Most wood processing, handling and transfer is conducted within enclosed buildings and results in insignificant emissions (i.e., emissions of < 1 lb/hr of a criteria pollutant).<br><br>The following emission sources at the Woodyard have significant emissions:<br><br>• Debarker (WY-11)<br>• Bark Shredder (WY-8) |
| AA-005 | 190 MMBTU/hr Natural Gas-Fired Package Boiler (UT-19), constructed in 1983 and used to produce steam |
| AA-006 | Kraft Pulp Mill Digester System includes the digestion of wood chips to produce pulp. The significant emission sources associated with the Digester System, or those otherwise regulated by a federal standard, include the following:<br><br>• Chip Bin Vent Scrubber Effluent Tank (PM-6) – emissions vented to LVHC NCG system (AA-025)<br>• Chip Steaming Vessel (PM-7) – emissions controlled by the LVHC NCG system (AA-025)<br>• Chip Bin (PM-7a) – emissions controlled by the HVLC NCG system (AA-043) when not operating on fresh steam<br>• Six (6) Weak Black Liquor Spill Tanks (PM-12, PM-13, PM-14, PM-17, PM-18, and PM-19)<br>• Continuous Digester (PM-40) – emissions vented to LVHC NCG system (AA-025)<br>• No. 1C Flash Tank – pressurized tank that normally vents to the Chip Steaming Vessel (PM-7)<br>• No. 2 Flash Tank – tank normally vents to the Chip Bin (PM-7a)<br><br>*The equipment listed above is part of the Digester System as defined under 40 CFR 60, Subpart BB and 40 CFR 63, Subpart S. Requirements for the LVHC gases are also addressed under Emission Point AA-025.* |

| Emission Point | Description |
|---|---|
| AA-007 | Kraft Pulp Mill Brownstock Washer System separates the spent cooking liquor from the pulp. The significant emission sources associated with the Brownstock Washer System, or those otherwise regulated by a federal standard, include the following:<br>• Weak Black Liquor Spill Sump (PM-15a)<br>• Pulp Mill Sewer Sump (PM-15b)<br>• Atmospheric Diffusion Washer (PM-24a) – complying with Clean Condensate Alternative<br>• No. 1 Atmospheric Diffuser Filtrate Tank (PM-23) – complying with Clean Condensate Alternative<br>• Unscreened HD Storage Tank (PM-24) – emissions vent to the Atmospheric Diffusion Washer (PM-24a)<br>• Knot Drainer (PM-25) – backup to secondary knotter<br>• BL Drum Filter (PM-16)<br>• Filtered Weak BL Tank Vacuum Drum Washer (PM-28) – emissions vent to HVLC NCG system (AA-043)<br>• BSW Filtrate Tank (PM-29) – emissions vent to Vacuum Drum Washer (PM-28)<br>• Knots and Rejects Tank (PM-30)<br>• Brown Stock Decker (PM-31)<br>• Decker Filtrate Seal Tank (PM-32)<br>• Softwood Unbleached HD Storage (PM-33)<br>• Hardwood Unbleached HD Tower (PM-34)<br>• Tertiary Screen Rejects Drainer (PM-35)<br>• Primary Screen Feed Tank (PM-36)<br>• Primary Screen Rejects Tank (PM-37)<br>• Secondary Screen Rejects Chest (PM-38)<br>• Tertiary Screen Accepts Chest (PM-39)<br>• Knotters (two primary and one secondary) – enclosed with no vent to atmosphere<br>• Pressure Diffuser Washer (PM-26) – pressurized, enclosed vessel with no vent to atmosphere<br>• No. 2 Pressure Diffuser Filtrate/Flash Tank (PM-26a) – pressurized, enclosed vessel with no vent to atmosphere<br>• Open Knot Bin (PM-27)<br>• Nos, 1, 2, 3 and 4 Primary Screens<br>• Secondary Screen<br>• Tertiary Screen<br>*The equipment listed above that is part of the Brownstock Washer System, as defined under 40 CFR 60, Subpart BB and 40 CFR 63, Subpart S. Requirements for the HVLC gases are also addressed under Emission Point AA-043.* |

| Emission Point | Description |
|---|---|
| AA-008 | Kraft Mill Multi-Stage Bleaching Process (BP) and Chlorine Dioxide Generation (ER). Brownstock is bleached by sending it through a multi-stage bleaching sequence utilizing different chemicals and operating conditions in each stage. Emissions are controlled by two (2) packed-tower fume scrubbers. The multi-stage bleaching process area includes the following significant sources of emissions:<br>• Unbleached Stock Blend Chest (BP-1)<br>• First Stage Tower (BP-2) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• First Stage Washer (BP-3) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• First Stage Seal Chest (BP-4) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• First E(op) Tower (BP-5) – emissions vent to the First Stage $ClO_2$ Scrubber (BP-19)<br>• First E(op) Washer (BP-6) - emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• First E(op) Seal Chest (BP-7) - emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• Second $ClO_2$ Tower (BP-8) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• Second $ClO_2$ Washer (BP-9) – emissions vent to $ClO_2$ Gas Scrubber (BP-20)<br>• Second $ClO_2$ Seal Chest (BP-10) – emissions vent to $ClO_2$ Gas Scrubber (BP-20)<br>• Second Ep Tower (BP-11) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• Second Ep Washer (BP-12) – emissions vent to $ClO_2$ Gas Scrubber (BP-20)<br>• Second Ep Seal Chest (BP-13) – emissions vent to $ClO_2$ Gas Scrubber (BP-20)<br>• Third $ClO_2$ Tower (BP-14) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>• Third $ClO_2$ Washer (BP-15) – emissions vent to $ClO_2$ Gas Scrubber (BP-20)<br>• Third $ClO_2$ Seal Chest (BP-16) – emissions vent to $ClO_2$ Gas Scrubber (BP-20)<br>• First Stage $ClO_2$ Scrubber (BP-19)<br>• $ClO_2$ Gas Scrubber (BP-20)<br>• Methanol Storage Tank (ER-1)<br>• $ClO_2$ Tail Gas Scrubber (ER-2) – emissions vent to First Stage $ClO_2$ Scrubber (BP-19)<br>*Some of this equipment is regulated under 40 CFR 63, Subpart S. In that regulation, the Bleaching system means all process equipment after high-density pulp storage prior to the first application of oxidizing chemicals or reducing chemicals following the pulping system, up to and including the final bleaching stage. Bleaching stage, as defined in Subpart S, means all process equipment associated with a discrete step of chemical application and removal in the bleaching process including chemical and steam mixers, bleaching towers, washers, seal (filtrate) tanks, vacuum pumps, and any other equipment serving the same function as those previously listed.* |
| AA-009 | Pulp Drying Process (PD). Bleached pulp from the high density storage towers is dried through a series of slushers, screens and cleaners, the fourdrinier dryer, felt rollers, and the air borne dryer.<br>*Dryer Exhaust Fan No.1 (PD-12)*<br>*Dryer Exhaust Fan No.2 (PD-13)* |

| Emission Point | Description |
|---|---|
| AA-010 | Kraft Pulp Mill Evaporator Area (EV). Weak black liquor ***(BL)*** is concentrated to increase solid contents using multiple-effect evaporators. The Evaporator Area includes the following significant sources of emissions:<br><br>• Soap Collection Foam Breaker Tank (EV-7)<br>• Soap Collection Overflow Tank (EV-7a)<br>• Soap Collection Tank (EV-8)<br>• Nos. 1, 2, and 3 Weak BL Tanks (EV-10, EV-15, EV-16)<br>• Boilout/Spill Tank (EV-16a)<br>• No. 3 Weak BL Soap Overflow Tank (EV-17)<br>• No. 3 Weak BL Foam Breaker Tank (EV-18)<br>• No. 3 Weak BL Soap Tank (EV-19)<br>• Hogging Ejector (EV-27)<br>• Nos. 1 and 2 Heavy BL Tanks (EV-29, EV-30)<br>• BL Loading Racks (EV-34, EV-34a)<br>• Nos. 1 and 2 Multiple-Effect Evaporators (EV-36, EV-36a) routed to the LVHC system for control<br><br>*The equipment listed above that is part of the Evaporator System as defined under 40 CFR 60, Subpart BB and 40 CFR 63, Subpart S is also addressed for the LVHC requirements under Emission Point AA-025.* |
| AA-011 | 1755.3 MMBTU/hr Recovery Furnace constructed in 1983. The Recovery Furnace combusts black liquor and natural gas fuel and is equipped with an electrostatic precipitator (UT-9). |
| AA-012 | Smelt Dissolving Tank equipped with a cyclonic scrubber (UT-7). The smelt dissolving tank is used to dissolve smelt from the Recovery Furnace. |
| AA-013 | 138.6 MMBTU/hr Lime Kiln constructed in 1983 and used to convert lime mud ($CaCO_3$) from the recausticizing process to calcium oxide (CaO) for reuse. The Lime Kiln can also burn petroleum coke, natural gas, No. 6 fuel oil, and used oil. The Lime Kiln is equipped with an electrostatic precipitator that vents to a Venturi scrubber (RC-6).<br><br>*Note: The Lime Kiln is a control device for low volume, high concentration (LVHC) non-condensible gases (NCGs) and stripper off-gases (SOGs).* |

| Emission Point | Description |
|---|---|
| AA-014 | Recausticizing Area (RC). The main function of the recausticizing area is to causticize green liquor with reburned lime to form white liquor ***(WL)*** for the next cooking cycle. The recausticizing area includes the following significant sources of emissions:<br>• #1 Lime Slaker Scrubber Vent (RC-1)<br>• #2 Lime Slaker Scrubber Vent (RC-2)<br>• Lime Mud Pressure Filter Vent (RC-3)<br>• WL Pressure Filter Vent (RC-4)<br>• Lime Mud Filter Hood (RC-5)<br>• Hot Lime Emergency Dump to Ground (RC-9)<br>• Green Liquor Clarifier (RC-10a)<br>• Dreg Filter Exhaust (RC-14)<br>• No. 1, 2, and 3 WL Storage Tanks (RC-15a, RC-15b, RC-15c)<br>• Precoat Filter Vacuum Exhaust (RC-16)<br>• Precoat Filtrate Level Tank (RC-17)<br>• Swing Tank/Weak Wash Tank (RC-19)<br>• Scrubber Re-circulating Tank (RC-20)<br>• Kiln NCG Bypass Vent (RC-21)<br>• Kiln SOG Bypass Vent (RC-21a)<br>• Kiln Chip Bin Gases Bypass Vent (RC-21b)<br>• White Liquor Unloading (RC-25)<br>• Polymer Storage Tank (RC-30)<br>• Used Oil Tank (RC-31)<br>• Causticizers (five) (RC-32) |
| AA-015 | 846 MMBTU/hr Power Boiler constructed in 1983 and used for steam production. The boiler is equipped with an electrostatic precipitator (UT-3).<br>*Note: The Power Boiler is a designated control device for the salt cake mix tank, black liquor sluice tank, and the black liquor stabilization tank.* |
| AA-016 | 31.5 MMBTU/hr Incinerator constructed in 1994 and used to incinerate NCGs. The incinerator is equipped with an $SO_2$ absorption tower (RC-22).<br>*Note: The incinerator is a control device for the LVHC NCGs (digester system, turpentine recovery system, evaporator system, and steam stripper system), the vacuum drum washer, and the chip bin (when not using fresh steam) The vacuum drum washer is part of the HVLC NCG system. While the MACT Subpart S rule includes the chip bin in the definition of digester system, which is part of the LVHC collection system, the gases from the chip bin at this Mill are actually considered to be HVLC since the concentration of explosive gases is below the lower explosive limit (LEL).* |
| AA-021 | Oxygen Delignification Process<br>• No. 2 Oxygen Reactor Blowtube (02D-4), venting emissions from the No. 1 and No. 2 Oxygen Reactors.<br>• Filtrate Storage Tank (O2D-5)<br>For the Oxygen Delignification System, the Mill complies with 40 CFR 63, Subpart S requirements through use of the Clean Condensate Alternative. |
| AA-023 | Oxygen Delignification Process Atmospheric Diffusion Washer (No. 02D-6).<br>For the Oxygen Delignification System, the Mill complies with the 40 CFR 63, Subpart S requirements through use of the Clean Condensate Alternative. |

| Emission Point | Description |
|---|---|
| AA-025 | Kraft Pulping Process Low Volume High Concentration (LVHC) System. At this Mill, the Kraft Pulping Process LVHC system includes the following equipment:<br>Digester System:<br>• Continuous Digester (PM-40)<br>• Chip Steaming Vessel (PM-7)<br>• No. 1C Flash Tank<br>• No. 2 Flash Tank<br>Evaporator System:<br>• Nos. 1 and 2 Multiple-Effect Evaporators (EV-36, EV-36a)<br>Turpentine Recovery System:<br>• Turpentine Decanter Underflow Tank (PM-20)<br>• Turpentine Condenser<br>Steam Stripper System:<br>• No. 1 Foul Condensate Storage Tank (EV-31)<br>• No. 2 Foul Condensate Storage Tank (EV-31a)<br>• Methanol Condenser<br>• Methanol Storage Tank<br>• Methanol Rectification Column<br>• Methanol Partial Condenser<br>• Red Oil Decanter |
| AA-028 | Kraft Pulping System Process Condensates. For this mill, condensates are collected from the following equipment:<br>• No. 1 Evaporator Surface Condenser<br>• No. 1 Evaporator Fifth Effect<br>• No. 1 Evaporator Surface Condenser<br>• No. 2 Evaporator Fifth Effect<br>• No. 2 Evaporator Surface Condenser<br>• Digester System Condensates<br>• Primary Turpentine Condenser<br>• Secondary Turpentine Condenser<br>• Turpentine Gas Cooler<br>• Turpentine Decanter Underflow Tank<br>• LVHC Collection System Condensates (including the Nos. 1 and 2 Condensate Recovery Pots)<br>• Digester System Condensates - conveyed to Turpentine Recovery System Decanter<br>• Red Oil Decanter Condensates |
| AA-031 | Parts Cleaning (MS-6) |
| AA-033 | Paint Distilling Operation (MS-5) |
| AA-034 | Painting Operations (MS-11) |
| AA-035 | Wastewater Collection and Treatment Operations (WW-1 through WW-30). Wastewater generated from the mill is treated using an activated sludge process. Treated water is discharged through the NPDES permitted outfall and includes various clarifiers, lift stations, ponds/basins, wastewater tanks, reactors, filters, lime dust collector (WW-16), and chemical treatment tanks (e.g., caustic, acid, anhydrous ammonia, alum, and polymer). |
| AA-036 | Petroleum Coke Operation. The two (2) petroleum coke silos are each equipped with a baghouse to control particulate matter emissions during unloading. |

| Emission Point | Description |
|---|---|
| AA-037 | 340 hp Diesel Powered Fire Pump (MS-9); 61 hp Lime Kiln Back-Up CI Diesel Engine (RC-34); 53 hp Back-Up Dump Tank Agitator Drive CI Diesel Engine (RC-35); and 210 hp Diesel Powered Fire Pump (RC-36) |
| AA-038 | 250 hp Effluent Waste Lift Diesel-fired Compression Ignition (CI) Emergency Engine (WW-17) |
| AA-039 | Road Fugitive Emissions |
| AA-040 | Turpentine Recovery System. The turpentine recovery system consists of condenser(s), decanter(s), and storage tank(s) used to recover turpentine from digester system gases. The turpentine recovery system includes the following significant sources of emissions:<br>• Turpentine Decanter Underflow Tank (PM-20) – vents to gas cooler, then to LVHC System for control<br>• Turpentine Condenser – vents to gas cooler, then to LVHC System for control<br>• Turpentine Storage Tank (PM-21) – vents to LVHC System for control<br>• Turpentine Loading System (PM-22) – vents to LVHC System for control |
| AA-041 | Steam Strippers and Methanol Rectification System. Two steam strippers use steam to strip methanol from the foul condensates (AA-028). The stripper off-gases are routed to a methanol rectification system where the vapors are condensed into rectified into liquid methanol. The steam strippers and methanol rectification system include the following significant sources of emissions:<br>• No. 1 Steam Stripper (EV-STR)<br>• No. 1 Foul Condensate Storage Tank (EV-31)<br>• No. 2 Steam Stripper (EV-STRa)<br>• No. 2 Foul Condensate Storage Tank (EV-31a)<br>• Methanol Condenser<br>• Methanol Storage Tank<br>• Methanol Rectification Column<br>• Methanol Partial Condenser<br>• Red Oil Decanter<br>*Under normal operations, the stripper off-gases from the two steam strippers are sent to the methanol rectification system and not vented to atmosphere. If the methanol rectification system is not operating, the strippers are shutdown; the methanol condenser, partial condenser and rectification column are collected and are sent to the LVHC NCG system and incinerated in the NCG Incinerator or the Lime Kiln; the gases from the red oil decanter and the methanol storage tank combine and are also sent to the LVHC NCG system and are combusted in the NCG Incinerator or the Lime Kiln.* |
| AA-042 | Tall Oil Plant. Soap that is skimmed from the surface of black liquor. The soap can be acidulated into crude tall oil and sold to outside markets. The Tall Oil Plant includes the following significant sources of emissions:<br>• Tall Oil Reactor (EV-2) with emissions controlled by a Scrubber (EV-1)<br>• Brine Neutralization Tanks (EV-20)<br>• Brine Receivers (EV-21)<br>• Nos. 1, 2, 3, and 4 Decanters (EV-22, EV-23, EV-22a and EV-23a)<br>• Soap Skimmer Tank (EV-25)<br>• Soap Skimmer Standpipe (EV-26)<br>• Tall Oil Soap Loading (EV-35) |

| Emission Point | Description |
|---|---|
| AA-043 | Kraft Pulping Process High Volume Low Concentration (HVLC) System. The HVLC System include emissions from the following sources:<br><br>Pulp Washing System:<br>• Atmospheric Diffusion Washer (PM-24a)<br>• No. 1 Atmospheric Diffuser Filtrate Tank (PM-23)<br>• Unscreened HD Storage Tank (PM-24)<br>• Vacuum Drum Washer (PM-28)<br>• BSW Filtrate Tank (PM-29)<br><br>Knotter System:<br>• Knot Drainer (PM-25)<br>• Open Knot Bin (PM-27)<br>• Knots and Rejects Tank (PM-30)<br>• Knotters (two primary and one secondary)<br><br>Screen System:<br>• Tertiary Screen Rejects Drainer (PM-35)<br>• Primary Screen Feed Tank (PM-36)<br>• Primary Screen Rejects Tank (PM-37)<br>• Secondary Screen Rejects Chest (PM-38)<br>• Tertiary Screen Accepts Chest (PM-39)<br>• Nos, 1, 2, 3 and 4 Primary Screens<br>• Secondary Screen<br>• Tertiary Screen<br><br>Decker System:<br>• Brown Stock Decker (PM-31)<br>• Decker Filtrate Seal Tank (PM-32)<br><br>Oxygen Delignification System:<br>• No. 1 Oxygen Reactor<br>• No. 2 Oxygen Reactor<br>• No. 2 Oxygen Reactor Blowtube (No. 02D-4)<br>• Filtrate Storage Tank (O2D-5)<br>• Atmospheric Diffusion Washer (No. 02D-6)<br><br>Weak Liquor Storage Tanks:<br>• Filtered Weak BL Tank (PM-18)<br>• Weak Black Liquor (BL) Spill Tank (PM-12)<br>• Nos. 1, 2, and 3 Weak BL Tanks (EV-10, EV-15, EV-16)<br>• Boilout/Spill Tank (EV-16a)<br><br>Chip Bin (PM-7a) (when not using fresh steam) |

# SECTION 3. EMISSION LIMITATIONS & STANDARDS

## A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) and (b).

(a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.

(b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.A.)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.B.)

3.A.3 The permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.

(a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

(b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

B. Emission Point Specific Emission Limitations & Standards

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-008<br>AA-025<br>AA-028<br>AA-041<br>AA-043 | 40 CFR Part 63, Subpart S<br>NESHAP from the Pulp and Paper Industry<br>40 CFR 63.440, 63.453(q), and Table 1 to Subpart S | 3.B.1 | HAP | General Applicability |
| AA-011<br>AA-012<br>AA-013 | 40 CFR Part 63, Subpart MM<br>NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mills<br>40 CFR 63.860 and Table 1 to Subpart MM | 3.B.2 | HAP Metals | General Applicability |
| AA-006<br>AA-007<br>AA-010<br>AA-011<br>AA-012<br>AA-013<br>AA-016<br>AA-041 | 40 CFR Part 60, Subpart BB<br>Standards of Performance for Kraft Pulp Mills<br>40 CFR 60.280, Subpart BB | 3.B.3 | TRS<br>PM | General Applicability |
| AA-015 | 40 CFR Part 60, Subpart D<br>Standards of Performance for Fossil-Fuel-Fired Steam Generators<br>40 CFR 60.40, Subpart D | 3.B.4 | PM<br>$NO_X$ | General Applicability |
| AA-037<br>AA-038 | 40 CFR Part 63, Subpart ZZZZ<br>NESHAP for Stationary Reciprocating Internal Combustion Engines<br>40 CFR 63.6580, 63.6585, 63.6590, 63.6665, and Table 8 to Subpart ZZZZ | 3.B.5 | HAP | General Applicability |
| AA-038 | 40 CFR Part 60, Subpart IIII<br>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines<br>40 CFR 60.4200(a)(2)(i), 60.4218, and Table 8 to Subpart IIII | 3.B.6 | VOC / NOx / CO / PM | General Applicability |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-005<br>AA-015 | 40 CFR Part 63, Subpart DDDDD<br>NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters<br>40 CFR 63.7480, 63.7485, 63.7490, 63.7565, and Table 10 to Subpart DDDDD | 3.B.7 | HAP | General Applicability |
| Facility-Wide | 11 Miss. Admin. Code Pt. 2, R. 1.3.F(1). | 3.B.8 | PM (filterable only) | $E = 4.1(p)^{0.67}$ |
| AA-005 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). | 3.B.9 | PM (filterable only) | $E = 0.8808 * I^{-0.1667}$ |
| AA-005 | 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1). | 3.B.10 | $SO_2$ | 4.8 lbs/MMBTU |
| AA-005 | Permit to Construct issued November 23, 1993 | 3.B.11 | PM (filterable only) | 0.92 lb/hr |
| | | | $SO_2$ | 0.11 lb/hr |
| | | | CO | 7.2 lb/hr |
| | | | VOC | 0.53 lb/hr |
| | | | Hours of Operation | The permittee shall not operate Emission Point AA-005 simultaneously with AA-011 and AA-015 for more than 1,000 hours per year (on a 365-day rolling total). |
| | | | Fuel Restriction | Fuels other than natural gas are prohibited. |
| | PSD Permit to Construct issued February 1, 2018 | 3.B.11 | $NO_x$ | 15.0 lb/hr (NAAQS Limit) |
| AA-006<br>AA-007<br>AA-010 | 40 CFR 60.283(a)(1), Subpart BB | 3.B.12 | TRS | Total reduced sulfur (TRS) is limited to 5 ppm by volume on a dry basis corrected to 10% oxygen unless:<br>1. Exhaust gases are combusted in the Lime Kiln (AA-013) in accordance with 40 CFR 60.283(a)(5); or<br>2. Exhaust gases are combusted in the incinerator (AA-016) and subjected to a minimum temperature of 1200° F for at least 0.5 second. |
| AA-008 | 40 CFR 63.450, Subpart S | 3.B.45 | HAP | Each enclosure and closed-vent system shall meet the requirements specified by 40 CFR 63.450. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-008 | 40 CFR 63.445(b) and (c), Subpart S | 3.B.46 | HAP | Bleaching system equipment, where chlorinated compounds are introduced, shall be enclosed and routed (as specified in 40 CFR 63.450) to a control device in accordance with 40 CFR 63.445(c) |
| AA-008 | 40 CFR 63.445(d)(1)(ii), Subpart S | 3.B.47 | HAP | Reduce chloroform air emissions to the atmosphere by compliance with the applicable effluent limitation guidelines and standards specified in 40 CFR Part 430, Subpart B |
| AA-010 | 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2). | 3.B.13 | $H_2S$ | 1 grain per 100 standard cubic feet |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). | 3.B.9 | PM (filterable only) | $E = 0.8808 * I^{-0.1667}$ |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1). | 3.B.10 | $SO_2$ | 4.8 lbs/MMBTU |
| AA-011 | 40 CFR 60.282(a)(1)(i) and (ii), 60.283(a)(2) and 60.284(e)(1), Subpart BB | 3.B.14 | Opacity | ≤ 35%<br>Periods of excess emissions (excluding SSM periods) shall not exceed 35% for more than 6% of the operating time within any quarterly period. |
| | | | PM (filterable only) | 0.044 gr/dscf (0.10 g/dscm) corrected to 8% oxygen. |
| | | | TRS | 5 ppm by volume on a dry basis corrected to 8% oxygen; and periods of excess emissions (excluding SSM periods) shall not exceed 1% of the operating time within any quarterly period. |
| AA-011 | 40 CFR 63.864(k)(2)(i), Subpart MM | 3.B.15 | Opacity | Periods of excess emissions shall not exceed 35% for 2% or more of the operating time within any semiannual period, when spent pulping liquor is being fed. |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 1.3.E. | 3.B.16 | PM (filterable only) | 4 lbs/ton of equivalent air-dried Kraft pulp |
| AA-011 | PSD Permit to Construct issued January 12, 1982 | 3.B.17 | $SO_2$ | 300 ppm corrected to 8% oxygen |
| AA-011 | PSD Permit to Construct issued April 9, 1991 | 3.B.18 | CO | 300 ppm corrected to 8% oxygen (8-hr average) |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-011 | PSD Permit to Construct issued February 1, 2018 | 3.B.19 | $NO_X$ | 80 ppm corrected to 8% oxygen (8-hr average) (BACT Limit) |
| | | | | 227.5 lb/hr and 996.3 ton/yr (NAAQS Limit) |
| | | | | Operate equipment using a fourth level of combustion air (BACT Limit) |
| | | | GHG | 208.1 lb/MMBTU (BACT Limit) |
| | | | | 365,318 lb/hr and 1,600,092 ton/yr |
| | | | $CO_2e$ | 208.5 lb/MMBTU (BACT Limit) |
| | | | | 365,977 lb/hr and 1,602,979 ton/yr |
| | | | Fuel Restriction | Black liquor is the primary fuel, but natural gas and ultra-low sulfur diesel fuel can be used as auxiliary fuel. |
| | | | Fuel Restriction | The fossil fuel annual capacity factor shall be 10% or less. |
| AA-011 | 40 CFR 63.862(a)(1)(i)(A), Subpart MM | 3.B.20 | HAP Metals (as PM) | 0.044 gr/dscf corrected to 8% oxygen |
| AA-012 | 40 CFR 63.862(a)(1)(i)(B), Subpart MM | 3.B.20 | HAP Metals (as PM) | 0.20 lb/ton Black Liquor Solids fired |
| AA-012 | 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1). | 3.B.21 | $SO_2$ | 500 ppmv |
| AA-012 | 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2). | 3.B.22 | $H_2S$ | 1 grain per 100 standard cubic feet |
| AA-012 | 40 CFR 60.282(a)(2) and 60.283(a)(4), Subpart BB | 3.B.23 | PM (filterable only) | 0.2 lb/ton Black Liquor Solids (dry weight) |
| | | | TRS | 0.033 lb/ton Black Liquor Solids (measured as $H_2S$) |
| AA-012 | PSD Permit to Construct issued April 9, 1991 | 3.B.24 | $SO_2$ | 36 ppm in the stack gas |
| AA-012 | 40 CFR 63.864(j)(3) and (k)(2)(iv), Subpart MM | 3.B.25 | Parametric Monitoring | Limited to less than 6 parametric monitoring values based on a 3-hour block average that are outside of the parameters established according to 63.864(j) within any 6-month reporting period, when spent pulping liquor is being fed, with the exception of pressure drop during periods of startup and shutdown. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-013 | 40 CFR 63.862(a)(1)(i)(C), Subpart MM | 3.B.20 | HAP Metals (as PM) | 0.064 gr/dscf corrected to 10% oxygen |
| AA-013 | 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1). | 3.B.21 | $SO_2$ | 500 ppmv |
| AA-013 | 40 CFR 63.864(j)(3) and (k)(2)(v), Subpart MM | 3.B.25 | Parametric Monitoring | Limited to less than 6 parametric monitoring values based on a 3-hour block average that are outside of the parameters established according to 63.864(j) within any 6-month reporting period, when lime mud is being fed, with the exception of pressure drop during periods of startup and shutdown. |
| AA-013 | 40 CFR 60.282(a)(3)(i) and (ii), Subpart BB | 3.B.26 | PM (filterable only) | 0.066 gr/dscf corrected to 8% oxygen, when *gaseous* fossil fuel is burned.<br>0.13 gr/dscf corrected to 10% oxygen, when *liquid* fossil fuel is burned. |
| | 40 CFR 60.283(a)(5), Subpart BB and Permit to Construct issued May 3, 2002 | | TRS | 8 ppm corrected to 10% oxygen, not to exceed 2.81 lbs/hr and 12.3 tons/yr |
| AA-013 | PSD Permit to Construct issued January 28, 2005 | 3.B.27 | $SO_2$ | 17.5 lbs/hr and 76.9 tons/yr |
| AA-013 | PSD Permit to Construct issued February 1, 2018 | 3.B.28 | $NO_X$ | 100 lbs/hr and 438 tons/yr (NAAQS Limit) |
| AA-013 | PSD Permit to Construct issued January 28, 2005 | 3.B.29 | CO | 50.0 lbs/hr and 220.0 tons/yr |
| AA-013 | PSD Permit to Construct issued January 28, 2005, and modified September 29, 2005 | 3.B.30 | Fuel Restriction | Natural gas, No. 6 fuel oil, on-site generated used oil, petroleum coke, rectified methanol, and tall oil is authorized for use as fuel. LVHC/HVLC NCGs and SOGs are controlled by the Lime Kiln and also have a fuel value. |
| AA-013 | Permit to Construct issued May 3, 2002 | 3.B.31 | Fuel Restriction | Maximum annual fuel oil usage rate of 10,000 gallons per year of on-site generated used oil. |
| | | | Control Device | The Lime Kiln shall not operate while feeding/firing lime mud without the use of the scrubber. |
| AA-013 | 40 CFR Part 64<br>Compliance Assurance Monitoring<br>40 CFR 64.2(a) | 3.B.61 | $SO_2$ | Applicability |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b). | 3.B.9 | PM (filterable only) | $E = 0.8808 * I^{-0.1667}$, when burning fossil fuels |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R.1.4.A(1). | 3.B.10 | $SO_2$ | 4.8 lbs/MMBTU |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-015 | 40 CFR 60.42(a)(1) and (2), Subpart D | 3.B.32 | PM (filterable only) | 0.10 lb/MMBTU heat input from *fossil fuel and/or wood residue.* |
| | | | Opacity | ≤ 20% except for one 6-minute period per hour of not > 27%. |
| AA-015 | 40 CFR 60.44(a)(2), Subpart D<br>PSD Permit to Construct issued January 12, 1982, and modified February 22, 1983 | 3.B.33 | $NO_X$ | 0.30 lb/MMBTU heat input derived from *gaseous fossil fuel, liquid fossil fuel, and wood residue*. |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(2). | 3.B.34 | PM (filterable only) | 0.30 gr/dscf |
| AA-015 | PSD Permit to Construct issued March 28 1995 | 3.B.35 | CO | 338.4 lbs/hr |
| AA-015 | 40 CFR 63.7500(a) and Table 2, Items 1 and 7 and Table 4, Item 4 to Subpart DDDDD | 3.B.36 | Emission Limits | The permittee must not exceed the following emission limits or alternative output-based limits, except during startup and shutdown: |
| | | | HCl | 2.2E-02 lb per MMBtu of heat input |
| | | | Hg | 5.7E-06 lb/MMBtu of heat input |
| | | | CO | 720 ppmv at 3% oxygen using a 30-day rolling average using a CEM |
| | | | Filterable PM (or TSM) | Filterable PM is limited to 3.7E-02 lb/MMBtu of heat input |
| | | | Opacity | 10% daily block average |
| AA-015 | 40 CFR Part 64<br>Compliance Assurance Monitoring<br>40 CFR 64.2(a) | 3.B.61 | PM | Applicability |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 1.4.B(1). | 3.B.21 | $SO_2$ | 500 ppmv |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 1.3.H(1). | 3.B.37 | PM (filterable only) | 0.2 gr/dscf corrected to 12% $CO_2$ |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-016 | Permit to Construct issued August 9, 1994 | 3.B.38 | $SO_2$ | 9.0 lbs/hr and 39.42 tons/year |
| | | | CO | 22.0 lbs/hr and 96.36 tons/year |
| | | | TRS | 2.1 lbs/hr and 9.2 tons/year |
| | | | Fuel Restriction | The only permitted fuels are natural gas, rectified methanol, or NCGs/SOGs. NCGs/SOGs controlled by the Incinerator also have a fuel value. |
| | PSD Permit to Construct issued February 1, 2018 | | $NO_X$ | 6.0 lbs/hr and 26.3 tons/year (NAAQS Limit) |
| AA-016 | 40 CFR 60.283(a)(1), Subpart BB | 3.B.39 | TRS | 5 ppm by volume on a dry basis corrected to 10% oxygen unless subjected to a minimum temperature of 1200° F for at least 0.5 second. |
| AA-016 | 40 CFR Part 64<br>Compliance Assurance Monitoring<br>40 CFR 64.2(a) | 3.B.61 | $SO_2$ | Applicability |
| AA-021 | Permit to Construct issued September 26, 1995 | 3.B.40 | CO | 19.3 lbs/hr and 84.5 tons/year |
| | | | VOC as carbon | 37.8 lbs/hr and 165.4 tons/year |
| AA-023 | Permit to Construct issued September 26, 1995 | 3.B.41 | VOC as carbon | 8.1 lbs/hr and 35.5 tons/year |
| AA-025 | 40 CFR 63.443(a)-(c), Subpart S | 3.B.42 | HAP | All equipment shall be enclosed, vented into a closed vent system, and routed to a control device. |
| AA-025 | 40 CFR 63.443(d), Subpart S | 3.B.43 | HAP | Control HAP emissions as stated in 40 CFR 63.443(d) |
| AA-025 | 40 CFR 63.443(e), Subpart S | 3.B.44 | HAP | Periods of excess emissions shall not be a violation of the limits provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:<br>1. 1% for control devices used to reduce the total HAP emissions from the LVHC system; and<br>2. 4% for control devices used to reduce the total HAP emissions from the HVLC system; and<br>3. 4% for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-025 | 40 CFR 63.450, Subpart S | 3.B.45 | HAP | Each enclosure and closed-vent system shall meet the requirements specified in 40 CFR 63.450. |
| AA-028 | 40 CFR 63.446(b) and (c)(3), Subpart S | 3.B.48 | HAP | Collect a total HAP mass of 11.1 lbs/ton of Oven-Dried Pulp (ODP) from 85% of the total HAP in the condensate streams being collected on a 15-day rolling average to be collected and treated in accordance with 40 CFR 63.446(d) and (e). |
| AA-028 | 40 CFR 63.446(d), Subpart S | 3.B.49 | HAP | The pulping process condensates shall be conveyed in a closed collection system as specified in 40 CFR 63.446(d)(1) and (2). |
| AA-028 | 40 CFR 63.446(e)(5), Subpart S | 3.B.50 | HAP | Treat a total of at least 10.2 lbs/ton ODP of total HAP on a 15-day rolling average. |
| AA-028 | 40 CFR 63.446(f), 63.443(c) and (d), Subpart S. | 3.B.51 | HAP | Control HAP emissions as stated in 40 CFR 63.443(c) and (d). |
| AA-028 | 40 CFR 63.446(g), Subpart S | 3.B.52 | HAP | Periods of excess emissions shall not be considered violations provided that the time of excess emissions does not exceed 10% of the total process operating time. |
| AA-036 | Permit to Construct issued January 28, 2005, and modified September 29, 2005 | 3.B.55 | $PM/PM_{10}$ (filterable only) | 0.21 lbs/hr and 0.9 TPY |
| | | | Operational Limitation | The baghouse must be operated at all times the ground petroleum coke silo is operated. |
| AA-037 | 11 Miss. Admin. Code Pt. 2, R.1.4.A(1). | 3.B.10 | $SO_2$ | 4.8 lbs/MMBTU |
| AA-037 | 11 Miss. Admin. Code Pt.2, R. 1.3. D(1)(a) | 3.B.56 | PM (filterable only) | 0.6 lb/MMBTU |
| AA-037 | 40 CFR 63.6640(f)(1)-(3), Subpart ZZZZ | 3.B.57 | Operating Requirements | Emergency RICE can be operated up to 50 hours per year in non-emergency situations and a total of 100 hours for maintenance checks and readiness testing; there is no time limit on the use of an emergency stationary RICE in emergency situations. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-037 | 40 CFR 63.6602, 63.6625(h) and (i), and Table 2c, Subpart ZZZZ | 3.B.58 | Maintenance Requirements | Comply with the following requirements:<br>1. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil analysis program;<br>2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;<br>3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |
| | | | Operating Requirements | During periods of startup, the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. |
| AA-038 | 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a). | 3.B.56 | PM (filterable only) | 0.6 lb/MMBTU |
| AA-038 | 40 CFR 60. 4211(f), Subpart IIII | 3.B.57 | Operating Requirements | Emergency ICE can be operated up to 50 hours per year in non-emergency situations and a total of 100 hours for maintenance checks and readiness testing; there is no time limit on the use of an emergency stationary ICE in emergency situations. |
| AA-038 | 40 CFR 60.4205(b) and 60.4206, Subpart IIII | 3.B.59 | Emission Standards | Emission standards for new non-road CI engines for the same model year and maximum engine power in 40 CFR 60.4202 as outlined in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for the entire life of the engine. |
| AA-038 | 40 CFR 60.4207(b), Subpart IIII | 3.B.60 | Fuel Requirement | Meet the diesel fuel requirements of 40 CFR 80.510(b) for non-road diesel fuel. |
| AA-042 | 11 Miss. Admin. Code Pt. 2, R.1.4.B(2). | 3.B.22 | $H_2S$ | 1 grain per 100 standard cubic feet |
| AA-042 | 40 CFR Part 64<br>Compliance Assurance Monitoring<br>40 CFR 64.2(a) | 3.B.61 | $H_2S$ | Applicability |
| AA-043 | 40 CFR 63.443(a)-(c), Subpart S | 3.B.42 | HAP | All equipment shall be enclosed, vented into a closed vent system, and routed to a control device. Only the vacuum drum washer, its associated filtrate tank, and the chip bin gases when not using fresh steam, are collected and controlled. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| AA-043 | 40 CFR 63.443(d), Subpart S | 3.B.43 | HAP | Control HAP emissions as stated in 40 CFR 63.443(d). Only the vacuum drum washer, its associated filtrate tank, and the chip bin gases when not using fresh steam, are collected and controlled. |
| AA-043 | 40 CFR 63.443(e), Subpart S | 3.B.44 | HAP | Periods of excess emissions shall not be a violation of the limits provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:<br>1. 1% for control devices used to reduce the total HAP emissions from the LVHC system; and<br>2. 4% for control devices used to reduce the total HAP emissions from the HVLC system; and<br>3. 4% for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems. |
| AA-043 (selected HVLC sources, see note in Limit/Standard column) | 40 CFR 63.443(a)(1)(iii) and (v), 63.447, Subpart S | 3.B.53 | HAP | Collect a total HAP mass of at least 2.0 lbs/ton ODP from 15% of the total HAP in the condensate streams being collected on a 15-day rolling average. Only the oxygen delignification system, atmospheric diffusion washer and associated filtrate tank comply with the HVLC requirements of Subpart S using the Clean Condensate Alternative. |
| AA-043 (selected HVLC sources, see note in Limit/ Standard column) | 40 CFR 63.443(a)(1)(iii) and (v), 63.447, Subpart S | 3.B.54 | HAP | Treat a total of at least 1.8 lbs/ton ODP of total HAP on a 15-day rolling average. Only the oxygen delignification system, atmospheric diffusion washer and associated filtrate tank comply with the HVLC requirements of Subpart S using the Clean Condensate Alternative. |

3.B.1 For Emission Points AA-008, AA-025, AA-028, AA-041 and AA-043, the facility is subject to and shall comply with all applicable requirements of 40 CFR 63, Subpart S – NESHAP from the Pulp and Paper Industry, including the requirements of 40 CFR Part 63, Subpart A – General Provisions, as noted in Table 1.

At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not

limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.440, 63.453(q), and Table 1 to Subpart S)

3.B.2 For Emission Points AA-011, AA-012, and AA-013, the facility is subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart MM – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills including the requirements of 40 CFR Part 63, Subpart A – General Provisions, as noted in Table 1.

At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.860 and Table 1 to Subpart MM)

3.B.3 For Emission Points AA-006, AA-007, AA-010, AA-011, AA-012, AA-013, AA-016 and AA-041, the facility is subject to and shall comply with all applicable requirements and limitations of 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills, including the applicable requirements of 40 CFR 60, Subpart A – General Provisions.

(Ref.: 40 CFR 60.280, Subpart BB)

3.B.4 For Emission Point AA-015, the facility is subject to and shall comply with all applicable requirements of 40 CFR Part 60, Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam for which construction commenced after August 17, 1971, including the applicable requirements of 40 CFR Part 60, Subpart A – General Provisions.

(Ref.: 40 CFR 60.40, Subpart D)

3.B.5 For Emission Points AA-037 and AA-038, the facility is subject to and shall comply with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), including the requiremetns of 40 CFR Part 63, Subpart A - General Provisions, as noted in Table 8 to Subpart ZZZZ.

Emission Point AA-037 consists of existing emergency compression ignition (CI) stationary RICE with site ratings less than or equal to 500 brake HP located at a major source of HAP emissions.

Emission Point AA-038 is a new emergency CI stationary RICE with a site rating less than or equal to 500 brake HP located at a major source of HAP emissions. As such, the engine is required to meet the requirements of this subpart by meeting the requirements of 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. No further requirements under this subpart apply.

(Ref.: 40 CFR 63.6580, 63.6585, 63.6590, 63.6665, and Table 8 to Subpart ZZZZ)

3.B.6 For Emission Point AA-038 the facility is subject to and shall comply with all applicable requirements of 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), including the requirements of 40 CFR Part 60, Subpart A – General Provisions, as specified in Table 8 of Subpart IIII.

(Ref.: 40 CFR 60.4200(a)(2)(i), 60.4218, and Table 8 to Subpart IIII)

3.B.7 For Emission Points AA-005 and AA-015, the facility is subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, including the applicable requirements of 40 CFR Part 63, Subpart A – General Provisions, as noted in Table 10 to Subpart DDDDD.

Emission Point AA-005 is an existing boiler in the "units designed to burn gas 1 fuels" subcategory as listed in 40 CFR 63.7499(l) and as defined in 63.7575. Emission Point AA-015 is an existing boiler in the "stokers/sloped grate/other units designed to burn wet biomass/bio-based solids" subcategory as listed in 40 CFR 63.7499(i) and as defined in 63.7575.

(Ref.: 40 CFR 63.7480, 63.7485, 63.7490, 63.7565, and Table 10 to Subpart DDDDD)

3.B.8 For the entire facility, the permittee shall not cause, permit, or allow the emission of particulate matter (PM) in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship:

$$\boldsymbol{E} = 4.1\,\boldsymbol{p}^{\,0.67}$$

where $\boldsymbol{E}$ is the emission rate in pounds per hour and $\boldsymbol{p}$ is the process weight input rate in tons per hour. Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.F(1).)

3.B.9 For Emission Points AA-005, AA-011, and AA-015, the maximum permissible emission of ash and/or PM when burning fossil fuels shall not exceed an emission rate as determined by the relationship:

$$\boldsymbol{E} = 0.8808\boldsymbol{I}^{\,-0.1667}$$

where ***E*** is the emission rate in pounds per million BTU per hour heat input, and ***I*** is the heat input in millions of BTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(b).)

3.B.10 For Emission Points AA-005, AA-011, and AA-015, the maximum discharge of sulfur oxides ($SO_2$) from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input or as otherwise specified herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.4.A(1).)

3.B.11 For Emission Point AA-005, the permittee shall be limited to the emissions limitations specified in Table 3.B, which were established in the Federally Enforceable Permit to Construct issued November 23, 1993 and the PSD Permit to Construct issued February 1, 2018.

The permittee shall not operate Emission Point AA-005 simultaneously with Emission Points AA-011 and AA-015 for more than 1,000 hours per year based on a 365-day rolling total. Non-simultaneous operation means that either Emission Point AA-011 or AA-015 must be completely inoperable during the applicable time period.

For Emission Point AA-005, fuels other than natural gas are prohibited.

(Ref.: Permit to Construct issued November 23, 1993; PSD Permit to Construct issued February 1, 2018)

3.B.12 For Emission Points AA-006, AA-007, and AA-010, discharge of total reduced sulfur (TRS) gases produced from the digester system, the brown stock washer system, or the multiple-effect evaporator system must not exceed 5 parts per million (ppm) by volume on a dry gas basis, corrected to 10 percent (10%) oxygen unless:

(a) The gases are combusted in the Lime Kiln (AA-013) while operated in accordance with 40 CFR 60.283(a)(5); or

(b) The gases are combusted in the incinerator (AA-016) and subjected to a minimum temperature of 1200 °F for at least 0.5 second.

(Ref.: 40 CFR 60.283(a)(1), Subpart BB)

3.B.13 For Emission Point AA-010, the permittee shall not allow the emission of any gas stream which contains hydrogen sulfide in excess of one grain per 100 standard cubic feet.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.4.B(2).)

3.B.14 For Emission Point AA-011, the permittee shall not discharge into the atmosphere any gases that exhibit 35 percent (35%) opacity (6-minute average) or greater. In addition,

periods of excess opacity emissions (excluding SSM periods) shall not exceed 35% for more than 6 percent (6%) or more of the operating time within any quarterly period.

For Emission Point AA-011, the permittee shall not discharge into the atmosphere any gases which contain PM in excess of 0.044 gr/dscf (0.10 g/dscm) corrected to 8 percent (8%) oxygen.

For Emission Point AA-011, the permittee shall not cause to be discharged into the atmosphere from any straight Kraft recovery furnace gases which contain TRS in excess of 5 parts per million (ppm) by volume on a dry basis, corrected to 8% oxygen. In addition, periods of excess TRS emissions shall not exceed 1% of the operating time within any quarterly period.

(Ref.: 40 CFR 60.282(a)(1)(i) and (ii), 60.283(a)(2) and 60.284(e)(1), Subpart BB)

3.B.15 For Emission Point AA-011, periods of excess opacity emissions shall not exceed 35% for 2% or more of the operating time within any semiannual period when spent pulping liquor is being fed.

(Ref.: 40 CFR 63.864(k)(2)(i), Subpart MM)

3.B.16 For Emission Point AA-011, the emissions of PM from a Recovery Furnace stack shall not exceed four (4) pounds per ton of equivalent air-dried Kraft pulp produced at any given time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.E.)

3.B.17 For Emission Point AA-011, $SO_2$ emissions shall not exceed 300 ppm corrected to 8% oxygen as established in the PSD Permit to Construct issued January 12, 1982.

(Ref.: PSD Permit to Construct issued January 12, 1982)

3.B.18 For Emission Point AA-011, carbon monoxide (CO) emissions shall not exceed 300 ppm corrected to 8% oxygen based on an 8-hour average as established in the PSD Permit to Construct issued on April 9, 1991.

(Ref.: PSD Permit to Construct issued April 9, 1991)

3.B.19 For Emission Point AA-011, the permittee shall be limited to the emission limitations specified in Table 3.B, as established in the PSD Permit to Construct issued February 1, 2018. As BACT, the permittee is required to operate the Recovery Furnace (AA-011) and associated equipment using a fourth level of combustion air to meet the NOx emission limitation as established in the PSD Permit to Construct issued February 1, 2018. The Recovery Furnace primarily burns black liquor; however, the permittee is authorized to burn natural gas as auxiliary fuel, as well as ultra-low sulfur diesel fuel.

For Emission Point AA-011, the natural gas and fuel oil annual capacity factor shall be 10% or less per calendar year. Note, the criteria for calculation of the annual capacity

factor are set forth in 40 CFR 60.44b(d). The annual capacity factor shall be defined as the ratio between the actual heat input to the boiler from coal, oil, or natural gas during a calendar year, and the potential heat input to the boiler had it been operated 8760 hours at the maximum steady state design heat input.

(Ref.: PSD Permit to Construct issued February 1, 2018)

3.B.20 The permittee shall not discharge into the atmosphere any gases from the existing Kraft Recovery Furnace (AA-011), which contain a concentration of PM in excess of 0.044 gr/dscf (0.10 g/dscm) corrected to 8% oxygen.

The permittee shall not discharge into the atmosphere any gases from the existing smelt dissolving tank (AA-012), which contain a concentration of PM in the exhaust gases discharged to the atmosphere in excess of 0.20 lbs/ton (0.10 kg/Mg) of black liquor solids fired.

The permittee shall not discharge into the atmosphere any gases from the existing Kraft Lime Kiln (Emission Point AA-013) which contain a concentration of PM in excess of 0.064 gr/dscf (0.15 g/dscm) corrected to 10% oxygen.

(Ref.: 40 CFR 63.862(a)(1)(i), Subpart MM)

3.B.21 For Emission Points AA-012, AA-013, and AA-016, the permittee shall not cause or permit the emission of gas containing sulfur oxides, measured as $SO_2$, in excess of 500 ppm (volume).

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.4.B(1).)

3.B.22 For Emission Points AA-012 and AA-042, the permittee shall not cause or permit the emission of any gas stream that contains hydrogen sulfide ($H_2S$) in excess of one (1) grain per 100 standard cubic feet.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.4.B(2).)

3.B.23 For Emission Point AA-012, the permittee shall not discharge into the atmosphere any gases, which contain PM in excess of 0.2 lbs/ton (0.1 g/kg) black liquor solids by dry weight.

For Emission Point AA-012, the permittee shall not cause to be discharged into the atmosphere from any smelt dissolving tank any gases which contain TRS in excess of 0.033 lb/ton (0.016 g/kg) black liquor solids measured as $H_2S$.

(Ref.: 40 CFR 60.282(a)(2) and 60.283(a)(4), Subpart BB)

3.B.24 For Emission Point AA-012, $SO_2$ emissions shall not exceed 36 ppm in the stack gas as established in the PSD Permit to Construct issued on April 9, 1991.

(Ref.: PSD Permit to Construct issued on April 9, 1991)

3.B.25 For Emission Points AA-012 and AA-013, there shall not be 6 or more recorded parametric monitoring values based on a 3-hour block average that are outside of the parametric ranges established during the initial compliance demonstration as required by 40 CFR 63.865 and 63.864(j) within any 6-month reporting period when spent pulping liquor or lime mud is being fed, with the exception of pressure drop during periods of startup and shutdown. The established parametric ranges may be revised during any subsequent compliance testing.

(Ref.: 40 CFR 63.864(j)(3) and 63.864(k)(2)(iv) and (v), Subpart MM)

3.B.26 For Emission Point AA-013, the permittee shall not cause to be discharged into the atmosphere from any Lime Kiln any gases which contain PM in excess of 0.066 gr/dscf (0.15 g/dscm) corrected to 10% oxygen when gaseous fossil fuel is burned and 0.13 gr/dscf )0.30 g/dscm) corrected to 10% oxygen when liquid fossil fuel is burned.

(Ref.: 40 CFR 60.282(a)(3)(i) and (ii), Subpart BB)

For Emission Point AA-013, the permittee shall not cause to be discharged into the atmosphere from any Lime Kiln gases which contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10% oxygen, not to exceed 2.81pounds per hour and 12.3 tons per year. The Lime Kiln is a control device for low volume, high concentration and high volume, low concentration (LVHC/HVLC) process non-condensable gases.

(Ref.: 40 CFR 60.283(a)(5), Subpart BB; Permit to Construct issued May 3, 2002)

3.B.27 For Emission Point AA-013, $SO_2$ emissions shall not exceed 17.5 pounds per hour and 76.9 tons per year, as established in the PSD Permit to Construct issued January 28, 2005.

(Ref.: PSD Permit to Construct issued January 28, 2005)

3.B.28 For Emission Point AA-013, $NO_X$ emissions shall not exceed 100 pounds per hour and 438 tons per year as established in the PSD Permit to Construct issued February 1, 2018.

(Ref.: PSD Permit to Construct issued February 1, 2018)

3.B.29 For Emission Point AA-013, CO emissions shall not exceed 50.0 pounds per hour and 220.0 tons per year as established in the PSD Permit to Construct issued on January 28, 2005.

(Ref.: PSD Permit to Construct issued January 28, 2005)

3.B.30 For Emission Point AA-013, the permittee is authorized to burn natural gas, No. 6 fuel oil, on-site generated used oil, petroleum coke, rectified methanol, and tall oil as fuel. NCGs and SOGs are controlled by the Lime Kiln and also have a fuel value.

(Ref.: PSD Permit to Construct issued January 28, 2005, and modified September 29, 2005)

3.B.31 For Emission Point AA-013, the permittee shall be limited to a maximum annual fuel usage rate of 10,000 gallons per year of on-site generated used oil as fuel. The on-site generated used oil combusted in the kiln must not contain hazardous waste.

The Lime Kiln shall not operate without use of the scrubber as the control device. If the scrubber malfunctions, the Mill will execute an orderly shutdown of the Lime Kiln.

(Ref.: Permit to Construct issued May 3, 2002)

3.B.32 For Emission Point AA-015, the permittee shall not discharge into the atmosphere any gases, which contain PM in excess of 0.10 pound per million BTU heat input derived from *fossil fuel and/or wood residue*. Wood residue shall be defined as bark, sawdust, slabs, chips, mill trim, and other wood products derived from wood processing and forest management operations.

For Emission Point AA-015, the permittee shall not discharge into the atmosphere any gases that exhibit greater than 20% opacity except for one 6-minute period per hour of not more than 27% opacity.

(Ref.: 40 CFR 60.42(a)(1) and (2), Subpart D)

3.B.33 For Emission Point AA-015, the permittee shall not discharge into the atmosphere any gases which contain $NO_x$ in excess of 0.30 pound per million BTU heat input derived from *gaseous fossil fuel and wood residue*.

(Ref.: 40 CFR 60.44(a)(2) and the PSD Permit to Construct issued January 12, 1982 and revised February 22, 1983)

3.B.34 For Emission Point AA-015, the permittee shall for combination fuel boilers be allowed to emit up to 0.30 grains per standard dry cubic feet of PM.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.D(2).)

3.B.35 For Emission Point AA-015, CO emissions shall not exceed 338.4 pounds per hour as established in the PSD Permit to Construct issued on March 28, 1995.

(Ref.: PSD Permit to Construct issued March 28, 1995)

3.B.36 For Emission Point AA-015, an existing boiler capable of burning wet biomass as fuel, the permittee must not exceed the following emission limits or alternative output-based limits, except during startup and shutdown:

(a) HCl is limited to 2.2E-02 lb per MMBtu of heat input; For M26A, collect a minimum of 1 dscm per run, and for M26, collect a minimum of 120 liters per run.

(b) Mercury is limited to 5.7E-06 lb per MMBtu of heat input; For M29, collect a minimum of 3 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; and for ASTM D6784[b], collect a minimum of 3 dscm.

(c) CO is limited to 720 ppm by volume on a dry basis corrected to 3 percent oxygen using a 30-day rolling average based on a CO CEM.

(d) Filterable PM (or TSM) is limited to 3.7E-02 lb per MMBtu of heat input by collecting a minimum of 2 dscm per run.

(e) Opacity is limited to 10% opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM (or TSM) emission limitation (daily block average)

(Ref.: 40 CFR 63.7500(a), Table 2, and Table 4, Subpart DDDDD)

3.B.37 For Emission Point AA-016, PM emissions shall not exceed 0.2 grains per standard dry cubic foot of flue gas calculated to 12% carbon dioxide ($CO_2$) by volume for products of combustion. $CO_2$ produced by combustion of any auxiliary fuels shall be excluded from the calculation. This limitation shall apply when the incinerator is operating at design capacity.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.H.(1).)

3.B.38 For Emission Point AA-016, emissions are limited as described below by the Federally Enforceable Permit to Construct issued August 9, 1994, except as otherwise specified.

(a) $NO_X$ emissions shall not exceed 6.0 pounds per hour and 26.3 tons per year, established in the PSD Permit to Construct issued February 1, 2018 to demonstrate compliance with the NAAQS

(b) CO emissions shall not exceed 22.0 pounds per hour and 96.36 tons per year

(c) $SO_2$ emissions shall not exceed 9.0 pounds per hour and 39.42 tons per year

(d) TRS emissions shall not exceed 2.1 pounds per hour and 9.2 tons per year

(e) Only natural gas, rectified methanol, or NCGs/SOGs are permitted as fuels. NCGs/SOGs controlled by the Incinerator also have a fuel value.

(Ref.: Federally Enforceable Permit to Construct issued August 9, 1994 and PSD Permit to Construct issued February 1, 2018)

3.B.39 For Emission Point AA-016, TRS emissions in excess of 5 ppm by volume on a dry basis, corrected to 10% oxygen are prohibited unless the gases are combusted with other waste gases in an incinerator or other device, or combusted in a Lime Kiln or Recovery Furnace not subject to the provisions of NSPS Subpart BB, and are subjected to a minimum temperature of 650°C (1200°F) for at least 0.5 second. Note that the incinerator is a control device for HVLC and LVHC NCGs and SOGs.

(Ref.: 40 CFR 60.283(a)(1), Subpart BB)

3.B.40 For Emission Point AA-021, CO emissions shall not exceed 19.3 pounds per hour and 84.5 tons per year, and VOC emissions shall not exceed 37.8 pounds per hour and 165.4 tons per year on an "as carbon" basis.

(Ref.: Federally Enforceable Permit to Construct issued September 26, 1995)

3.B.41 For Emission Point AA-023, VOC emissions shall not exceed 8.1 pounds per hour and 35.5 tons per year on an "as carbon" basis.

(Ref.: Federally Enforceable Permit to Construct issued September 26, 1995)

3.B.42 For Emission Points AA-025 and AA-043, each equipment system shall be enclosed and vented into a closed-vent system and routed to a qualified control device. The enclosures and closed-vent system shall meet the requirements specified in 40 CFR 63.450.

(Ref.: 40 CFR 63.443(a), (b), and (c), Subpart S)

3.B.43 For Emission Points AA-025 and AA-043, the control device used to reduce total HAP emissions from each equipment system listed in 40 CFR 63.443(a) and 63.443(b) shall:

(a) Reduce total HAP emissions by 98 percent or more by weight; or

(b) 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

(c) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 °C (1600 °F) and a minimum residence time of 0.75 seconds; or

(d) Reduce total HAP emissions using one of the following:

(1) A boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or

(2) 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.

(Ref.: 40 CFR 63.443(d), Subpart S)

3.B.44 For Emission Points AA-025 and AA-043, periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of the above limits and requirements provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:

(a) 1% for control devices used to reduce the total HAP emissions from the LVHC system; and

(b) 4% for control devices used to reduce the total HAP emissions from the HVLC system; and

(c) 4% for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

(Ref.: 40 CFR 63.443(e), Subpart S)

3.B.45 For Emission Points AA-008 and AA-025 and each enclosure and closed vent system referenced in 40 CFR 63.443(c) and 63.445(b), the permittee shall meet the following requirements for capturing and transporting vent streams that contain HAPs:

(a) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 40 CFR 63.457(e). In addition, each enclosure or hood opening closed during the initial performance test specified in Section 5 of this document and detailed 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.

(b) Each component of the closed-vent system used to comply with 40 CFR 63.443(c) and 63.445(b) 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 ppm by volume above background, as measured by the procedures specified in 40 CFR 63.457(d).

(c) Each bypass line in the closed vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations specified in 40 CFR 63.443(c) and 63.445(b) shall comply with the following:

(1) On each bypass line, the permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least 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 lines that are not computer controlled, the permittee shall maintain the bypass valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that the valve or closure mechanism cannot be opened without breaking the seal.

(Ref.: 40 CFR 63.450, Subpart S)

3.B.46 For Emission Point AA-008, the bleaching system equipment, where chlorinated compounds are introduced, shall be enclosed and vented into a closed-vent system and routed (as specified in 40 CFR 63.450) to a control device in accordance with 40 CFR 63.445(c):

(a) Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;

(b) Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or

(c) Achieve a treatment device outlet mass emission rate of 0.002 pounds of total chlorinated HAP mass per ton of ODP.

(Ref.: 40 CFR 63.445(b) and (c), Subpart S)

3.B.47 For Emission Point AA-008, the permittee shall reduce chloroform air emissions to the atmosphere by compliance with the applicable effluent limitation guidelines and standards specified in 40 CFR 430, Subpart B - Bleached Papergrade Kraft and Soda Subcategory, 40 CFR 430.24(a)(1) and (e), and 40 CFR 430.26 (a) and (c).

(Ref.: 40 CFR 63.445(d)(1)(ii), Subpart S)

3.B.48 For Emission Point AA-028, the pulping process condensates generated, produced, or associated with the equipment systems that contain a total HAP mass of at least 11.1 pounds per ton of Oven-Dried Pulp (ODP) of the total HAP in the condensate streams being collected on a 15-day rolling average shall be subject to the requirements specifically stated in 40 CFR 63.446(d) and (e) (Conditions 3.B.49 and 3.B.50).

(Ref.: 40 CFR 63.446(b) and (c)(3), Subpart S)

3.B.49 For Emission Point AA-028, the pulping process condensates shall be conveyed in a closed collection system that is designed and operated to meet the following requirements:

(a) Closed vent systems and control devices shall be designed and operated to meet the individual drain system requirements as specified in 40 CFR 63.960, 63.961, and 63.962 of 40 CFR Part 63 Subpart RR - National Emission Standards for Individual Drain Systems, except that closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.450 and 63.443(d) instead of in accordance with 40 CFR 63.693 as specified in 40 CFR 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii); and

(b) If a condensate tank used in the closed collection system, the tank shall meet the following requirements:

(1) The fixed roof and all openings shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 ppm above background, and vented into a closed-vent system that meets the requirements in 40 CFR 63.450, and routed to a control device that meets the requirements of 63.443(d); and

(2) Each opening shall be maintained in a closed, sealed position 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.

(Ref.: 40 CFR 63.446(d), Subpart S)

3.B.50 For Emission Point AA-028, the pulping process condensates shall be treated to remove at least 10.2 pounds of total HAP per ton of ODP on a 15-day rolling average.

(Ref.: 40 CFR 63.446(e)(5), Subpart S)

3.B.51 For Emission Point AA-028, each HAP removed from a pulping process condensate stream during treatment and handling shall be controlled as specified below (40 CFR 63.443(c) and (d)). All equipment shall be enclosed with emissions collected and vented to a control device as follows:

(a) Reduce total HAP emissions by 98 percent or more by weight; or

(b) 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

(c) Reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871 °C (1600 °F), based on a 3-hr block average, and a minimum residence time of 0.75 seconds; or

(d) Reduce total HAP emissions using one of the following:

(1) A boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone; or

(2) 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.

(Ref.: 40 CFR 63.446(f) and 63.443(c) and (d), Subpart S)

3.B.52 For Emission Point AA-028 and each control device used to treat pulping process condensates to comply with the requirements of 40 CFR 63.446(e)(5), periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.446(d), (e)(3), and (f) provided that the time of excess emissions (including periods of startup, shutdown, and malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed 10%.

(Ref.: 40 CFR 63.446(g), Subpart S)

3.B.53 For Emission Point AA-043, compliance with the Clean Condensate Alternative (CCA) shall be demonstrated through collection of those pulping condensate streams generated, produced, or associated with the equipment systems that in total contain a total HAP mass of at least 2.0 pounds per ODP from 15% of the total HAP in the condensate streams being collected on a 15-day rolling average basis. Only the oxygen delignification system (AA-021 and AA-023), atmospheric diffusion washer (PM-24a) and associated filtrate tank (PM-23) comply with the HVLC requirements of Subpart S using the Clean Condensate Alternative.

(Ref.: 40 CFR 63.443(a)(1)(iii) and (v) and 40 CFR 63.447, Subpart S)

3.B.54 For Emission Point AA-043, compliance with the CCA shall be demonstrated through treatment of pulping condensate streams to remove at least 1.8 pounds per ODP of total HAP on a 15-day rolling average basis. Only the oxygen delignification system (AA-021 and AA-023), atmospheric diffusion washer (PM-24a), and associated filtrate tank (PM-23) comply with the HVLC requirements of Subpart S using the Clean Condensate Alternative.

(Ref.: 40 CFR 63.443(a)(1)(iii) and (v) and 40 CFR 63.447, Subpart S)

3.B.55 For Emission Point AA-036, PM/PM10 emissions shall not exceed 0.21 pound per hour and 0.9 ton per year. In addition, the permittee is not authorized to operate the ground petroleum coke silo without the use of the baghouse.

(Ref.: PSD Permit to Construct issued January 28, 2005, and modified September 29, 2005)

3.B.56 For Emission Points AA-037 and AA-038, the maximum permissible emission of ash and/or particulate matter when burning fossil fuels shall not exceed 0.6 pounds per million BTU per hour heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

3.B.57 For Emission Points AA-037 and AA-038, the permittee shall operate the engines according to the following:

(a) There is no limit on the use of the engine during an emergency situation;

(b) The engines may operate for any combination of the purposes specified in paragraphs (1) through (3) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as allowed by paragraph (c), counts as part of the 100 hours per calendar year allowed by this paragraph.

(1) The engines may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engines. The permittee may

petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE/ICE beyond 100 hours per calendar year.

(2) The engines may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(3) Emergency stationary RICE/ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(c) The engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Any operation other than what is provided for in (a) through (c) above is prohibited.

(Ref.: 40 CFR 63.6640(f), Subpart ZZZZ and 40 CFR 60.4211(f), Subpart IIII)

3.B.58 For Emission Point AA-037, the permittee must comply with the following requirements:

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;

(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

During periods of startup, the permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. If the engine is operating during and emergency and it is not possible to shut down the engine in order to perform the maintenance practice according to the schedule listed in (a) through (c) above, or if performing the maintenance practice on the required schedule would otherwise pose an

unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated.The maintenance practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, state, or local laws has abated.

(Ref.: 40 CFR 63.6602, 63.6625(h), 63.6625(i), and Table 2c, Subpart ZZZZ)

3.B.59 For Emission Point AA-038, the permittee shall meet the emission standards for new non-road CI engines in 40 CFR 60.4202(a)(2) for the same model year and maximum engine power as outlined in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for the entire life of the engine. The emission standards for this engine are 4.0 g/kW-hr of NMHC+NOx, 3.5 g/kW-hr of CO and 0.2 g/kW-hr of PM.

(Ref.: 40 CFR 60.4205(b) and 60.4206, Subpart IIII)

3.B.60 Emission Point AA-038 shall burn only fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or maximum aromatic content of 35% by volume, as outline in 40 CFR 80.510(b) for non-road diesel fuel.

(Ref.: 40 CFR 60.4207(b), Subpart IIII)

3.B.61 For Emission Points AA-013, AA-015, AA-016, and AA-042, the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

(Ref.: 40 CFR 64.2(a), Compliance Assurance Monitoring)

C. Insignificant and Trivial Activity Emission Limitations & Standards

| Applicable Requirement | Condition Number(s) | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|
| 11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(a). | 3.C.1 | PM (filterable only) | 0.6 lbs/MMBTU |
| 11 Miss. Admin. Code Pt. 2, R.1.4.A(1). | 3.C.2 | $SO_2$ | 4.8 lbs/MMBTU |

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(a).)

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.4.A(1).)

D. Work Practice Standards

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter | Limit/Standard |
|---|---|---|---|---|
| Entire Facility | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 3.D.1 | Fugitive Dust | Quarterly (or as needed) Inspections, Maintenance, and Cleaning |
| AA-001 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 3.D.2 | Fugitive Dust | Paving, Surface Cleaning and Dust Suppression |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.866(a), Subpart MM | 3.D.3 | Operations | Implement a written Startup, Shutdown and Malfunction Plan as described in 40 CFR 63.6(e)(3) and 63.866(a)(1) and (a)(2). |
| AA-011<br>AA-013 | 40 CFR 63.864(e)(1), Subpart MM | 3.D.4 | Work Practice Standard | For the Recovery Furnace and Lime Kiln ESPs, maintain proper operation of the automatic voltage control (AVC) |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.864(j) and (k), Subpart MM | 3.D.5 | Opacity and Corrective Action | Implement corrective action, as specified in the required Startup, Shutdown and Malfunction Plan when opacity monitoring indicates that the average of 10 consecutive 6-minute averages result in a measurement > 20%. |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.864(j) and (k), Subpart MM | 3.D.5 | Parameter Monitoring and Corrective Action | The permittee must implement corrective action, as specified in the required Startup, Shutdown and Malfunction Plan when any 3-hour block average parametric monitoring value is outside of the parameter values established in accordance with 40 CFR 63.864 and Section 5.B of this document. |
| AA-014 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 3.D.6 | Opacity | No visible emissions |
| AA-005<br>AA-015 | 40 CFR 63.7540(a)(10), (11), (12), Subpart DDDDD | 3.D.7 | Work Practice Standard | Conduct boiler tune-ups |
| AA-015 | 40 CFR 63.7500(a) and Table 3, Items 5 and 6, Subpart DDDDD | 3.B.8 | Work Practice Standard | Operate all CMS during startup and shutdown.<br>The permittee must comply with all applicable emission limits, at all times, except for startup or shutdown periods conforming with this work practice. |
| AA-008<br>AA-025<br>AA-028 | 40 CFR 63.454(b), Subpart S | 3.D.9 | Inspection Plan | For each applicable enclosure opening, closed vent system, and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan. |

3.D.1 To prevent the generation of fugitive dust throughout the entire facility, the permittee shall conduct quarterly (or more frequently as needed) inspections, maintenance, and cleaning of the following areas: doors, silo hatches, diverter systems, transfer points, conveyor belts, screws, loaders, lime storage areas, or any other source of dust emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(a)(2).)

3.D.2 For Emission Point AA-001, the permittee shall employ appropriate combinations of paving, surface cleaning, and dust suppression to prevent the generation of fugitive dust in quantities sufficient to be visibly airborne off the plant property. These procedures should include but are not limited to the following practices:

(a) The handling and placing of chips, bark, or any other wood refuse must be performed in a manner to ensure that there is no airborne wood fiber loss outside the woodyard area.

(b) Monthly inspection of all accessible paved areas, storage piles, log handling, truck receiving, debarking, slashing, shredding, chipping, screening, wood fuel processing, and purchased chip/bark unloading areas to ensure equipment is functioning properly and to prevent buildup of fugitive dust.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(a)(2).)

3.D.3 For Emission Points AA-011, AA-012, and AA-013, the permittee is required to have and implement a written Startup, Shutdown and Malfunction Plan as described in 40 CFR 63.6(e)(3). The plan must contain specific procedures to be followed for operation and maintenance of the affected sources 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 requirements of in 40 CFR 63.6(e), the plan must include the following requirements as set forth in 40 CFR 63.866(a)(1) and (2):

(a) Procedures for responding to any process parameter level that is inconsistent with the level(s) established under 40 CFR 63.864(j), including:

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

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

(b) The Startup, Shutdown, and Malfunction Plan also must include the following schedules:

(1) 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

(2) An inspection schedule for each continuous monitoring system required under 40 CFR 63.864, to ensure at least once in each 24-hour period, that each continuous monitoring system is properly functioning.

(Ref.: 40 CFR 63.6(e)(3) and 40 CFR 63.866(a), Subpart MM)

3.D.4 For Emission Points AA-011 and AA-013, the permittee shall maintain proper operation of the ESP's automatic voltage control (AVC).

(Ref.: 40 CFR 63.864(e)(1), Subpart MM)

3.D.5 For Emission Points AA-011, AA-012, and AA-013, the permittee shall be required to implement corrective action, as specified in the Startup, Shutdown, and Malfunction Plan detailed above when the following monitoring exceedances occur:

(a) For Emission Point AA-011, Kraft Recovery Furnace, equipped with an ESP, when opacity monitoring indicates that the average of ten (10) consecutive 6-minute averages result in a measurement greater than 20%.

(b) For Emission Points AA-012 and AA-013, Kraft Smelt Dissolving Tank or Lime Kiln equipped with a wet scrubber, when any 3-hour block average parametric monitoring value is outside of the parameter values established in accordance with 40 CFR 63.864(j) and Section 5.B of this document.

(Ref.: 40 CFR 63.864(j) and 40 CFR 63.864(k)(1)(i) and (ii), Subpart MM)

3.D.6 For Emission Point AA-014, the permittee shall operate the causticizing plant (Emission Point AA-014) such that there are no visible emissions except water vapor.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(a)(2).)

3.D.7 For Emission Points AA-005 and AA-015, the permittee shall complete tune-ups in accordance with (a) through (f) below. For Emission Point AA-005 and AA-015, tune-ups shall be conducted annually, with each tune-up being completed no more than 13 months after the previous tune-up. If equipped with a continuous oxygen trim system, subsequent tune-ups shall be conducted every 5 years, with each tune-up being completed no more than 61 months after the previous one. The permittee may delay the burner inspection until the next scheduled or unscheduled unit shut down.

(a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay

the inspection until the first outage, not to exceed 36 months from the previous inspection;

(d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;

(e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(f) Maintain on-site and submit, if requested by MDEQ, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

(1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(2) A description of any corrective actions taken as a part of the tune-up; and

(3) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(Ref.: 40 CFR 63.7540(a)(10), (11), or (12), Subpart DDDDD)

3.D.8 For Emission Point AA-015, an existing boiler subject to emission limits in Table 2 of 40 CFR 63, Subpart DDDDD, the permittee must operate all CMS during startup. For startup of a unit, the permittee must use one or a combination of the following clean fuels: natural gas, synthetic natural gas, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, and liquefied petroleum gas.

If the permittee starts firing biomass/bio-based solids, the permittee must vent emissions to the main stack(s) and engage all of the applicable control devices. Startup ends when steam or heat is supplied for any purpose.

For Emission Point AA-015, an existing boiler subject to emission limits in Tables 2 of 40 CFR 63, Subpart DDDDD, the permittee must operate all CMS during shutdown. While firing biomass/bio-based solids during shutdown, the permittee must vent emissions to the main stack(s) and operate all applicable control devices.

The permittee must also comply with all applicable emissions limits at all times except for startup or shutdown periods conforming with this work practice.

(Ref.: 40 CFR 63.7500(a) and Table 3 (3.3-6) of Subpart DDDDD)

3.D.9 For Emission Points AA-008, AA-025, and AA-028, the permittee shall prepare and maintain a site-specific inspection plan for each applicable enclosure opening, closed-vent system, and closed collection system. The plan must include a drawing or schematic of the components of applicable affected equipment and shall record the following for each inspection:

(a) The date each inspection is conducted;

(b) The equipment type and identification;

(c) The results of negative pressure tests;

(d) The results of leak detection tests;

(e) The nature of the defect or leak and the method of detection (e.g., visual inspection or instrument detection);

(f) The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

(g) The repair methods applied in each attempt to repair the defect or leak;

(h) The reason for the delay if the defect or leak is not repaired within 15 days after discovery of the problem;

(i) The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

(j) The date of successful repair of the defect or leak;

(k) The position and duration of opening of bypass line valves and the condition of any valve seals; and

(l) The duration of the use of bypass valves on computer controlled valves.

(Ref.: 40 CFR 63.454(b), Subpart S)

## SECTION 4. COMPLIANCE SCHEDULE

4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.

4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to MDEQ of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:

(a) the identification of each term or condition of the permit that is the basis of the certification;

(b) the compliance status;

(c) whether compliance was continuous or intermittent;

(d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;

(e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.C(5)(a), (c), and (d).)

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

## A. General Monitoring, Recordkeeping and Reporting Requirements

5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:

(a) the date, place as defined in the permit, and time of sampling or measurements;

(b) the date(s) analyses were performed;

(c) the company or entity that performed the analyses;

(d) the analytical techniques or methods used;

(e) the results of such analyses; and

(f) the operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or electronic records for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R.6.2.E.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such

deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(2).)

5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the MDEQ and the EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring and Recordkeeping Requirements

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| Entire Facility | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.1 | Fugitive Dust | Maintain records of all inspections, maintenance, and cleanings conducted in accordance with 3.D. |
| Entire Facility | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.2 | Monitoring Requirements | Monitor and record appropriate operation and control equipment parameters during performance testing. |
| Entire Facility | 11 Miss. Admin. Code Pt. 2, R. 2.6.B(7). | 5.B.3 | Performance Testing | Conduct performace testing at capacity and while otherwise operating normally |
| AA-005 | Permit to Construct issued November 23, 1993 | 5.B.4 | Operating Hours | Maintain daily records of the hours of operation. Calculate and record daily the hours of simultaneous operation with Emission Points AA-011 and AA-015 on a 365-day rolling total. |
| AA-005 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.5 | Fuel Consumption | Maintain records monthly of the Annual Fuel Consumption Rate and calculate a 12-month rolling total for each fuel used. |
| AA-005 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.6 | PM, $SO_2$, $NO_X$, CO, VOC | Stack test within 18 months of the permit issuance and every five years thereafter. |
| AA-005 AA-015 | 40 CFR 63.7555, Subpart DDDDD | 5.B.7 | Recordkeeping | Maintain records in accordance with the applicable sections of 40 CFR 63.7555, which includes a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-006<br>AA-007<br>AA-010<br>AA-041 | 40 CFR 60.284(d)(3), Subpart BB | 5.B.8 | TRS or Combustion Temperature | Maintain records of any occurrence of excess emissions from the digester system, brown stock washer system, multiple effect evaporator system, and condensate stripper system. |
| AA-006<br>AA-007<br>AA-010 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.9 | Hours Vented to Controls | Maintain daily records of the time the Lime Kiln (AA-013) and Incinerator (AA-016) combust TRS gases. |
| AA-011 | Permit to Construct issued November 23, 1993 | 5.B.11 | Hours of Operation | Maintain daily records of the hours of operation. |
| AA-011 | PSD Permit to Construct issued July 14, 1992 | 5.B.12 | Fuel Usage | Maintain daily records of the type and amount of fossil fuel fired. |
| AA-011 | PSD Permit to Construct issued July 14, 1992 | 5.B.13 | Heat Input | Maintain daily records of the actual heat input of fossil fuel (Natural Gas) to the Recovery Furnace. |
| AA-011 | PSD Permit to Construct issued July 14, 1992 | 5.B.14 | Fossil Fuel | Maintain and record monthly a Fossil Fuel Annual Capacity Factor and calculated on a 12-month rolling average each calendar quarter. |
| AA-011 | 40 CFR 63.866(c)(1), Subpart MM | 5.B.15 | Black Liquor Solids (BLS) | Record daily the BLS firing rate (tons/day) |
| AA-011 | 40 CFR 60.284(d)(1)(i), Subpart BB | 5.B.16 | TRS | Maintain records of any occurrence of excess TRS emissions from the Recovery Furnace. Excess emissions shall be defined as 12-hour block averages of TRS concentrations above 5 ppm by volume. |
| AA-011 | 40 CFR 63.864(d), Subpart MM | 5.B.17 | Opacity | Install, maintain, operate, and calibrate a COMS to record opacity every successive 10-second period and calculate and record each successive 6-minute average opacity. |
| AA-011 | 40 CFR 60.284(a)(1) and 60.284(d)(1)(ii), Subpart BB | 5.B.18 | Opacity | Monitor and record the opacity from the Recovery Furnace. |
| | | | | Maintain records of excess opacity emissions (e.g., 6-min average opacities that exceed 35%). |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.19 | ESP O&M Plan | Maintain an O&M Plan for the ESP control device. |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.20 | PM (filterable only), $SO_2$, $NO_x$, and CO | Stack test within 18 months of permit issuance and biennially thereafter. |
| AA-012 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.21 | PM (filterable only), $SO_2$, and TRS | Stack test within 18 months of permit issuance and biennially thereafter. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-012 | 40 CFR 60.284(b)(2)(i) and 60.284(c)(4), Subpart BB | 5.B.22 | Scrubber Gas Pressure Drop | Install, calibrate, maintain, and operate a CMS for pressure drop of the gas stream through the scrubber. Record the pressure drop at least once per shift. |
| AA-012 | 40 CFR 60.284(b)(2)(ii) and 60.284(c)(4), Subpart BB | 5.B.23 | Scrubber Liquid Supply Pressure | Install, calibrate, maintain, and operate a CMS for scrubber liquid supply pressure to the scrubber. Record the pressure at least once per shift. |
| AA-012 | 40 CFR 63.864(e)(10), Subpart MM | 5.B.24 | Scrubber Pressure Drop and Liquid Flow Rate | Monitor and record the pressure drop and liquid flow rate at least once every successive 15-minute period. |
| AA-013 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.25 | PM, $SO_2$, $NO_x$, CO and Opacity | Stack test within 18 months of permit issuance and biennially thereafter. |
| AA-013 | 40 CFR 60.284(d)(2), Subpart BB | 5.B.26 | TRS | Maintain records of excess TRS emissions from the Lime Kiln. Excess emissions shall be defined as all 12-hour block averages of TRS concentrations above 8 ppm. |
| AA-013 | 40 CFR 63.866(c)(2), Subpart MM | 5.B.27 | CaO Production | Record daily CaO production rate (in tons/day) |
| AA-013 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.28 | Fuel Usage | Maintain records daily of the amount and type of fuel combusted. |
| | | | Used Oil Combusted and Analysis | Maintain records monthly of the amount of on-site generated used oil burned as fuel on a 12-month rolling total.<br>Perform and maintain an annual chemical analysis of the on-site generated used oil to ensure that it is not a hazardous waste. |
| AA-013 | 40 CFR 60.284(b)(2)(ii), 60.284(c)(4), 60.284(f), Subpart BB | 5.B.29 | Scrubber Flow Rate and Supply Pressure | Monitor and record the scrubbing liquid flow rate once per operating shift. EPA approval letter for alternate monitoring (flow rate in lieu of pressure drop) dated 2/13/2002. |
| AA-013 | 40 CFR 64.3(a) and (b), 64.6(c), CAM | 5.B.10 | Scrubber Liquid pH and Flow Rate | Monitor and maintain records of the Scrubber Liquid pH and flow rate while burning Pet Coke. |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.864(j), Subpart MM | 5.B.30 | Parametric Monitoring | Establish operating ranges during initial testing. If desired, during subsequent performance testing, establish replacement operating ranges for monitored parameters. |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.863(c) and 63.865, Subpart MM | 5.B.31 | HAP<br>Metals (PM) | Initial performance test shall be conducted by October 13, 2020 and subsequent testing shall be once every five (5) years thereafter |
| AA-011<br>AA-012 | 40 CFR 63.866(b), Subpart | 5.B.32 | Corrective Actions | Maintain records of violations and any |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-013 | MM | | | occurrence when corrective action is required. |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.866(c)(3)-(5), Subpart MM | 5.B.33 | Parametric Monitoring | Maintain records required by 40 CFR 63.10(b)(2) plus parameter monitoring data required under 40 CFR 63.864; all records and documentation of supporting calculations for compliance determinations made under 40 CFR 63.865(a)-(e); and records of any monitoring parameter ranges established for each affected source or process unit. |
| AA-011<br>AA-013 | 40 CFR 60.284(a)(2), Subpart BB | 5.B.34 | TRS | Monitor and record the TRS concentration on a dry basis using a CMS. |
| AA-011<br>AA-013 | 40 CFR 60.284(c)(1) and (3), Subpart BB | 5.B.35 | TRS | Calculate and record on a daily basis, 12-hour block average TRS concentrations from the Recovery Furnace and Lime Kiln for the two consecutive periods of each operating day. Calculations should be corrected to 8% by volume $O_2$ for the Recovery Furnace and 10% by volume $O_2$ for the Lime Kiln. |
| AA-011<br>AA-013 | 40 CFR 60.284(a)(2), Subpart BB | 5.B.36 | $O_2$ | Monitor and record the percent of $O_2$ by volume on a dry basis in the gases discharged into the atmosphere from the Recovery Furnace and Lime Kiln using a CMS. |
| AA-011<br>AA-013 | 40 CFR 60.284(c)(2), Subpart BB | 5.B.37 | $O_2$ | Calculate and record daily the 12-hour block average $O_2$ concentrations from the Recovery Furnace and Lime Kiln for the two consecutive periods of each operating day. |
| AA-012<br>AA-013 | 40 CFR 60.284(b)(2)(ii) and 60.284(c)(4), Subpart BB | 5.B.38 | Scrubbing Liquid Supply Pressure and Pressure Drop | Monitor and record the scrubbing liquid supply pressure and pressure drop utilizing a CMS once per shift. The liquid supply pressure monitoring device must be certified to an accuracy of ±15%. The pressure drop monitoring device must be accurate to within a guage pressure of +/- 500 pascals. |
| AA-012<br>AA-013 | 40 CFR 63.864(e), Subpart MM | 5.B.39 | Scrubber Flow Rate and Pressure Drop | Monitor and record the scrubber flow rate utilizing a CMS at least once every successive 15-minute. The flow monitoring device must be accurate to within ±5% of the design scrubber flow rate. The pressure drop monitoring device must be accurate to within gauge pressure +/- 500 pascals.<br>Alternative monitoring (liquid supply pressure in lieu of pressure drop) was identified in the subpart MM initial performance test, dated 4/12/2004. |
| AA-012<br>AA-013<br>AA-014 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.40 | Opacity | Perform and maintain visible emissions inspections in accordance with a *tiered* |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-016<br>AA-021<br>AA-023 | | | | inspection schedule. |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.41 | PM (filterable only), $SO_2$, $NO_X$, CO | Stack test within 18 months of permit issuance and biennially thereafter. |
| AA-015 | 40 CFR 60.45(a) and (c)(3), Subpart D | 5.B.42 | Opacity | Install, calibrate, maintain, and operate a CMS to measure and record opacity. |
| AA-015 | 40 CFR 60.45(g) and (l), Subpart D | 5.B.43 | Opacity | Maintain records of excess opacity emissions (6-minute period during which the average opacity exceeds 20%, except that one 6-minute average per hour of up to 27% opacity need not be reported). |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.44 | O&M Plan | Maintain an O&M Plan for the ESP (control device). |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.45 | Fuel Usage | Maintain daily records of the amount(s) and type(s) of fuel combusted. |
| AA-015 | Permit to Construct issued November 23, 1993 | 5.B.46 | Hours of Operation | Maintain daily records of the hours of operation. |
| AA-015 | 40 CFR 63.7510(a)(1-4), Subpart DDDDD | 5.B.47 | Compliance Requirements | Demonstrate compliance with HCl, Mercury, and Filterable PM (or TSM) limits by conducting performance tests, conducting a fuel analysis for each type of fuel burned as required per 40 CFR 63.7510(a)(2), establishing operating limits, and conducting CMS performance evaluations. |
| AA-015 | 40 CFR 63.7515(a) and (b), Subpart DDDDD | 5.B.48 | HCl, Mercury, and Filterable PM (or TSM) | Conduct applicable performance tests on an annual basis. If performance tests for a given pollutant for at least two concesutive years are at or below the emission limit, and there are no changes to the operation of the boiler or air pollution control equipment that could increase emissions, performance tests may be conducted for that pollutant every third year. |
| AA-015 | 40 CFR 63.7525(a), Subpart DDDDD | 5.B.49 | CO | Install, operate, and maintain an $O_2$ analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate and maintain CEMS for CO and $O_2$ according to 63.7525(a)(1)-(6). |
| AA-015 | 40 CFR 63.7535(a), Subpart DDDDD | 5.B.50 | Monitoring Requirements | Monitor and collect data according to 40 CFR 63.7535 and the site-specific monitoring plan required by 40 CFR 63.7505(d). |
| AA-015 | 40 CFR 63.7540(a)(1),(2)(ii), | 5.B.51 | Monitoring | Demonstrate continuous compliance with each |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| | and(10) and 63.7540(b), Subpart DDDDD | | Requirements | applicable emission limit in Table 2, the work practice standards in Table 3, and the operating limits in Table 4 of 40 CFR 63, Subpart DDDDD according to methods specified in Table 8 and 40 CFR 63.7540(a)(1) through (19). |
| AA-015 | 40 CFR 64.3(a) and (b), 64.6(c), CAM | 5.B.10 | Opacity | Monitor opacity with COMS |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.52 | $SO_2$, $NO_X$, and CO | Stack within 18 months of permit issuance and biennially thereafter. |
| AA-016 | 40 CFR 60.284(b)(1), Subpart BB | 5.B.53 | Combustion Temperature | Monitor and record the combustion temperature at the point of incineration of effluent gases. The monitoring device is to be certified to be accurate within ±1 percent of the temperature being measured. |
| AA-016 | 40 CFR 60.284(d)(3)(ii), Subpart BB | 5.B.54 | Combustion Temperature | Maintain records of any period in excess of 5 minutes during which the combustion temperature at the point of incineration is less than 1200º F. |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.55 | Fuel Usage | Maintain records to demonstrate only permitted fuels were combusted |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.56 | Hours of NCG Incineration | Maintain daily and 12-month rolling total records of the hours of NCG incineration. |
| AA-016 | 40 CFR 64.3(a) and (b), 64.6(c), CAM | 5.B.10 | Scrubber Liquid pH and Flow Rate | Monitor and maintain records of the Scrubber Liquid pH and Flow Rate. |
| AA-021 AA-023 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.57 | CO, VOC, and Opacity | Stack within 18 months of permit issuance and biennially thereafter. |
| AA-008 AA-025 | 40 CFR 63.453(k), Subpart S | 5.B.58 | Maintenance Requirements | Conduct, record, and maintain enclosure and closed-vent system inspections. |
| AA-008 AA-025 AA-028 | 40 CFR 63.453(m), Subpart S | 5.B.59 | Alternative Parameter Monitoring | If the permittee elects to use a control device, technique, or an alternative parameter other than those specified, obtain prior approval from MDEQ. |
| AA-008 AA-025 AA-028 | 40 CFR 63.453(n)(1)-(n)(4), Subpart S | 5.B.60 | Operating Parameters | Establish or reestablish the value for each operating parameter as detailed in 40 CFR 63.453(n). |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-008<br>AA-025<br>AA-028 | 40 CFR 63.453(o), Subpart S | 5.B.61 | Control Device Operation | For each control device subject to the monitoring provisions of 40 CFR 63.453, operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required. |
| AA-008<br>AA-025<br>AA-028 | 40 CFR 63.454(b) and 63.454(g), Subpart S | 5.B.62 | Site-Specific Inspection Plan | Maintain records of all information required by the site-specific inspection plan developed in accordance with Section 3.D. and records of malfunctions |
| AA-025 | 40 CFR 63.453(b), Subpart S | 5.B.63 | Firebox Temperature | Install, calibrate, certify, operate, and maintain a CMS to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox when the incinerator (AA-016) is used to comply with the requirements of 40 CFR 63.443(d)(1)-(3). |
| AA-008<br>AA-028 | 40 CFR 63.457(a), Subpart S<br>11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.64 | HAP | Repeat performance testing at five-year intervals for all emission sources subject to limitations in 40 CFR 63.443, 63.444, and 63.445, as specified in 40 CFR 63.457(a). |
| AA-008 | 40 CFR 63.453(c), Subpart S | 5.B.65 | Monitoring Requirements | Install, calibrate, certify, operate, and maintain a CMS to measure scrubber liquid influent flow rate, ORP, and fan amperage for both First Stage $ClO_2$ Scrubber (BP-19) and the $ClO_2$ Gas Scrubber (BP-20). (EPA approval letter for alternate monitoring of fan amperage in lieu of scrubber vent gas inlet flow rate, dated 06/07/2001.) |
| AA-041 | 40 CFR 63.453(g), Subpart S | 5.B.66 | Monitoring Requirements | Install, calibrate, certify, operate, and maintain a CMS to measure the process waste water feed rate (condensate flow), steam feed rate, and the stripper column feed temperature. |
| AA-028 | 40 CFR 63.453(i), Subpart S | 5.B.67 | Monitoring Requirements | Install, calibrate, certify, operate, and maintain a CMS to measure foul condensate collection. |
| AA-028 | 40 CFR 63.453(l)(1), Subpart S | 5.B.68 | Monitoring Requirements | Monitor and inspect, as specified in 40 CFR 63.453(l)(1), each pulping process condensate closed collection system used to comply with 40 CFR 63.446(d). |
| AA-028 | 40 CFR 63.453(l)(2), Subpart S | 5.B.69 | Operating Requirements | Each condensate tank used in the closed collection system shall be operated with no detectable leaks as measured initially and annually, thereafter, by the procedures specified in 40 CFR 63.457(d). |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-028<br>AA-041 | 40 CFR 63.453(l)(3), Subpart S | 5.B.70 | Corrective Action Requirements | If an inspection identifies visible defects in the closed collection system, or if an instrument reading of 500 ppm or greater above background is measured, corrective actions shall be taken. |
| AA-036 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.71 | Opacity | Perform monthly visible emissions evaluation during unloading operations using EPA Ref. Method 9. |
| AA-036 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.72 | Maintenance Requirements | Perform inspections and maintenance each month, or more often as needed, to ensure proper operation of the baghouse is maintained. |
| AA-037 | 40 CFR 63.6605, Subpart ZZZZ | 3.B.73 | Operating Requirements | Comply with the applicable emission limitations, work practice standards, and operating limitations in Subpart ZZZZ, and operate and maintain the units in a manner consistent with safety and good air pollution control practices for minimizing emissions, at all times. |
| AA-037 | 40 CFR 63.6625(e), (f), (h), and (i), Subpart ZZZZ | 5.B.74 | Operating and Maintenance Requirements | Operate and maintain in accordance with the manufacturer's recommendations or develop maintenance plan.<br>Install a non-resettable hour meters.<br>Change oil and filter every 500 hours of operation or annually, whichever comes first. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. Facility has the option to utilize an oil analysis program. |
| AA-037 | 40 CFR 63.6625(i), 63.6655(a), (d), (e) and (f), and 63.6660(b) and (c), Subpart ZZZZ | 5.B.75 | Operating and Maintenance Requirements | Maintain records for at least five (5) years after the date of each occurrence. |
| AA-038 | 40 CFR 60.4209(a), Subpart IIII | 5.B.76 | Operating Requirements | Install a non-resettable hour meter prior to start-up of the engine. |
| AA-038 | 40 CFR 60.4214(b), Subpart IIII and<br>11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2). | 5.B.77 | Operating Requirements | Monitor and record hours of operation in emergency and non-emergency service. |
| AA-038 | 40 CFR 60.4211(a) and (c), Subpart IIII | 5.B.78 | Compliance Requirements | Install and operate a certified engine. |
| AA-038 | 40 CFR 60.4211(g), Subpart IIII | 5.B.79 | Compliance Requirements | Alternative emission limitations and testing. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-042 | 40 CFR 64.3(a) and (b), 64.6(c), CAM | 5.B.10 | Scrubber Liquid pH and Scrubber Pump Operation Status (On/Off) | Monitor and maintain records of the Scrubber Liquid pH and Scrubber Pump Operation Status (On/Off). |
| AA-013 AA-015 AA-016 AA-042 | 40 CFR 64.7(b) and (c), CAM | 5.B.80 | Operation & Maintenance | Operation and maintenance requirements for monitoring system(s) |
| | 40 CFR 64.7(d), CAM | 5.B.81 | Corrective Action | Corrective Action response to an excursion/exceedance of a CAM indicator |
| | 40 CFR 64.8, CAM | 5.B.82 | QIP | Upon request by MDEQ, develop a Quality Improvement Plan (QIP) |
| | 40 CFR 64.9(b), CAM | 5.B.83 | CAM Records | Maintain CAM records as specified |

5.B.1 For the entire facility, the permittee shall maintain records of all inspections, maintenance, and cleanings conducted in accordance with the Work Practice Requirements in Section 3.D. Records should be maintained on-site in accordance with Permit Condition 5.A.3, and made available upon request from MDEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.2 The permittee shall document, as required to determine operation and control equipment parameters, all appropriate parametric monitoring data and operating conditions during performance testing and provide the information with the test report. Such documentation may include, but is not limited to, fuel quality analyses, fuel flow/firing rates, steam production rates, scrubbing liquid flow rate and/or pressure, ESP field electrical data, firebox temperature, opacity, production rate of air-dried pulp, and production rate of CaO from the Lime Kiln.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.3 Unless otherwise specified in an applicable regulation, compliance testing must be performed when the stationary source is operating at capacity and is otherwise operating normally. In the event that a demonstration of compliance by testing is performed at less the capacity, the MDEQ may modify the permit to limit the capacity of the stationary source to the rate at which compliance was demonstrated if the MDEQ determined the rate was not representative of the normal operation of the stationary source or compliance was not demonstrated. In the event that the stationary source is not operating or being operated normally during a demonstration of compliance by testing, the results of such testing will not be accepted by the MDEQ as representative fo normal operation and will be considered inadequate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(7).)

5.B.4 For Emission Point AA-005, the permittee shall maintain records of the hours of operation on a daily basis. In addition, the permittee shall calculate and record daily the hours of simultaneous operation with Emission Points AA-011 and AA-015 based on a 365-day rolling total.

(Ref.: Permit to Construct issued November 23, 1993)

5.B.5 For Emission Point AA-005, the permittee shall maintain monthly records of the fuels combusted and annual fuel consumption rate (for each fuel) and calculate a twelve-month rolling total for each fuel used.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.6 For Emission Point AA-005, the permittee shall conduct a stack test within eighteen (18) months of permit issuance and every five (5) years thereafter. The permittee shall demonstrate compliance with the PM, $SO_2$, NOx, CO, and VOC (as carbon) emission limitations in accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 1-5, 6/8, 7, 10, and 18/25), or an EPA-approved equivalent method.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.7 For Emission Points AA-005 and AA-015, the permittee must keep records in accordance with the applicable sections of 40 CFR 63.7555. This includes a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted and records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations.

(Ref.: 40 CFR 63.7555, Subpart DDDDD)

5.B.8 For Emission Points AA-006, AA-007, AA-010, and AA-041, the permittee shall maintain records of any occurrence of excess emissions from the digester system, brown stock washer system, multiple effect evaporator system, and condensate stripper system. Excess emissions shall be defined as follows:

(a) All twelve-hour average TRS concentrations above 5 ppm by volume unless the provisions of 40 CFR 60.283(a)(1)(i), (ii), or (iv) apply; or

(b) All periods in excess of 5 minutes and their duration which the combustion temperature at the point of incineration is less than 1200˚ F, where the provisions of 40 CFR 60.283(a)(1)(iii) apply.

(Ref.: 40 CFR 60.284(d)(3), Subpart BB)

5.B.9 For Emission Points AA-006, AA-007, and AA-010, the permittee shall maintain daily records of the amount of time the Lime Kiln (AA-013) and the Incinerator (AA-016) are used to combust TRS gases.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.10 For Emission Points AA-013, AA-015, AA-016 and AA-042, the permittee shall comply with the compliance assurance monitoring (CAM) requirements, in accordance with the CAM Plans found in Appendix C. For Emission Point AA-013 and AA-016, the permittee shall monitor scrubbing liquid pH and flow rate. For Emission Point AA-015, the permittee shall continuously monitor the opacity of the ESP. For Emission Point AA-042, the permittee shall monitor the scrubbing liquid pH and scrubbing liquid flow as determined by operation of the pump (on/off).

(Ref.: 40 CFR 64.3(a) and (b), 64.6(c), Compliance Assurance Monitoring)

5.B.11 For Emission Points AA-011, the permittee shall maintain records of the hours of operation on a daily basis.

(Ref.: Permit to Construct issued November 23, 1993)

5.B.12 For Emission Point AA-011, the permittee shall maintain daily records of the type and amount of fossil fuel (e.g., natural gas or fuel oil) fired.

(Ref.: PSD Permit to Construct issued July 14, 1992)

5.B.13 For Emission Point AA-011, the permittee shall maintain records of the actual heat input of fossil fuel (e.g., natural gas or fuel oil) to the Recovery Furnace on a daily basis.

(Ref.: PSD Permit to Construct issued July 14, 1992)

5.B.14 For Emission Point AA-011, the permittee shall calculate and record the annual capacity factor of each fossil fuel (e.g., natural gas or fuel oil) used. 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 calendar month.

(Ref.: PSD Permit to Construct issued July 14, 1992)

5.B.15 For Emission Point AA-011, the permittee shall maintain daily records of the black liquor solids (BLS) firing rate (in tons/day).

(Ref.: 40 CFR 63.866(c)(1), Subpart MM)

5.B.16 For Emission Point AA-011, the permittee shall maintain records of any occurrence of excess TRS emissions from the Recovery Furnace. Excess emissions shall be defined as all 12-hour block averages of TRS concentrations above 5 ppm by volume.

(Ref.: 40 CFR 60.284(d)(1)(i), Subpart BB)

5.B.17 For Emission Point AA-011, the permittee must install, maintain, operate, and calibrate a continuous opacity monitoring system (COMS) for the Recovery Furnace to record the opacity of the gases discharged into the atmosphere at least once every successive 10-

second period. The permittee must also calculate and record each successive 6-minute average opacity calculated as the average of 36 or more data points, equally spaced over each 6-minute period using the procedures set forth in 40 CFR 63.6(h) and 40 CFR 63.8.

(Ref.: 40 CFR 63.864(d), Subpart MM)

5.B.18 For Emission Point AA-011, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from the Recovery Furnace. When burning BLS, the monitoring system shall be operated as required in 40 CFR 60.284 and the span of this system shall be set at 70 percent opacity. The procedures under 40 CFR 60.13 shall be followed for evaluation and operation of the monitoring system.

The permittee shall maintain records of excess opacity emissions from the recovery furnace. Excess emissions shall be defined as all 6-minute average opacities that exceed 35%.

(Ref.: 40 CFR 60.284(a)(1) and 60.284(d)(1)(ii), Subpart BB)

5.B.19 For Emission Point AA-011, the permittee shall maintain an Operation and Maintenance (O&M) Plan for the electrostatic precipitator (ESP) control device. The O&M Plan should be maintained on-site and include, but is not limited to, the following information:

(a) Operational Checklist (i.e., fields energized, minimum voltage level);

(b) Operational Procedures; and

(c) Maintenance Schedules and Maintenance Activity Performed.

The permittee shall maintain records of any operational and/or maintenance activities associated with the ESP's O&M Plan in accordance with Condition 5.A.3, and all records shall be made available upon request by MDEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.20 For Emission Point AA-011, the permittee shall conduct a stack test within eighteen (18) months of permit issuance and biennially (i.e., every two years) thereafter. The permittee shall demonstrate compliance with the PM (filterable only), $SO_2$, NOx, and CO limitations in accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 1-5, 8, 7, and 10), or an EPA-approved equivalent method. The permittee must record the black liquor solids firing rate during each performance test.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.21 For Emission Point AA-012, the permittee shall conduct a stack test within eighteen (18) months of permit issuance and biennially (i.e., every two years) thereafter. The permittee shall demonstrate compliance with the PM (filterable only), $SO_2$, and TRS limitations in

accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 1-5, 6/8, and 16/16A/16B), or an otherwise approved equivalent method.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.22 For Emission Points AA-012, the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous monitoring of the the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate to within a gage pressure of ±2 inches water gage pressure (±500 Pascals). The measurements obtained from the continuous monitoring system (CMS) shall be recorded once per shift.

(Ref.: 40 CFR 60.284(b)(2)(i) and 60.284(c)(4), Subpart BB)

5.B.23 For Emission Points AA-012, the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous monitoring of the scrubber liquid supply pressure to the scrubber. The monitoring device must be certified by the manufacturer to an accuracy of ±15% of the design scrubbing liquid supply pressure. The measurements obtained from the CMS shall be recorded once per shift.

(Ref.: 40 CFR 60.284(b)(2)(ii) and 60.284(c)(4), Subpart BB)

5.B.24 For Emission Point AA-012, the permittee shall install, maintain, operate, and calibrate a CMS to determine and record the pressure drop across the scrubber and liquid flow rate at least once every successive 15-minute period using the procedures set forth in 40 CFR 63.8(c). The pressure drop monitoring device must be certified by the manufacturer to be accurate to within ±2 inches water gage pressure (±500 Pascals). 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.

(Ref.: 40 CFR 63.864(e)(10), Subpart MM)

5.B.25 For Emission Point AA-013, the permittee shall conduct a stack test within eighteen (18) months of permit issuance and biennially (i.e., every two years) thereafter. The permittee shall demonstrate compliance with the PM (filterable only), $SO_2$, $NO_X$, CO, and Opacity limitations in accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 1-5, 6, 7, 10, and 9), or an otherwise approved equivalent method. The performance testing must be performed while controlling noncondensable gas (NCG) emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.26 For Emission Point AA-013, the permittee shall maintain records of any occurrence of excess TRS emissions from the Lime Kiln. Excess emissions shall be defined as all 12-hour block averages of TRS concentrations above 8 ppm by volume.

(Ref.: 40 CFR 60.284(d)(2), Subpart BB)

5.B.27 For Emission Point AA-013, the permittee shall record daily CaO production rate in tons per day (or megagrams per day).

(Ref.: 40 CFR 63.866(c)(2), Subpart MM)

5.B.28 For Emission Point AA-013, the permittee shall maintain daily records of the type(s) and amount(s) of fuel combusted. Also, the permittee shall maintain monthly records of the amount of on-site generated used oil burned as fuel and calculated on a 12-month rolling total. An annual chemical analysis of the on-site generated used oil, in accordance with Mississippi Hazardous Waste Management Regulations (Part 279.11), shall be conducted to determine if the material may be a hazardous waste. This analysis is only required if used oil has been burned at any time during the year. The sample that is analyzed should be representative of what is normally combusted. The on-site generated used oil combusted in the kiln must not contain hazardous waste. Records shall be maintained on-site of all analyses in accordance with Condition 5.A.3, and shall be made available upon request by MDEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.29 For Emission Point AA-013, the permittee shall monitor and record the scrubbing liquid flow rate once per operating shift. Monitoring of the scrubbing liquid flow rate is an EPA-approved alternative to monitoring pressure drop across the scrubber as set forth in 40 CFR 60.284(b). Monitoring of the scrubbing liquid flow rate shall be conducted as set forth in 40 CFR 60.13.

(Ref.: 40 CFR 60.284(b)(2)(ii), 60.284(c)(4), 60.284(f) ,Subpart BB)

5.B.30 For Emission Points AA-011, AA-012, and AA-013, during the initial or periodic performance test, the permittee must establish operating ranges for the monitoring parameters specified in 40 CFR 63.864(j) as appropriate; or

(a) The permittee may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required by 40 CFR 63, Subpart MM. The permittee must certify that all control techniques and processes have not been modified subsequent to the testing for which the data used to establish the operating parameter ranges were obtained.

(b) The permittee may establish expanded or replacement operating ranges for the monitoring parameter values specified in 40 CFR 63.864 during subsequent performance tests using the test methods set forth in 40 CFR 63.865.

(c) The permittee of the affected source or process unit must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test run. Multiple performance tests may be conducted to establish a range of parameter values. Operating outside a previously established parameter limit during a performance test to expand the operating limit range does

not constitute a monitoring exceedance. Operating limits must be confirmed or reestablished during performance tests.

(d) New, expanded, or replacement operating limits for the monitoring parameter values listed in 40 CFR 63.864(e)(1) and (2) and (e)(10) through (14), as applicable, should be determined as described in 40 CFR 63.864(j)(5)(i) and (ii) of this section.

(Ref.: 40 CFR 63.864(j), Subpart MM)

5.B.31 For Emission Points AA-011, AA-012 and AA-013, to demonstrate compliance with the PM limitations, the permittee shall perform the initial stack test by October 13, 2020 and once every five years thereafter using the test methods and procedures listed in 40 CFR 63.7 and 40 CFR 63.865(b). The permittee shall submit the performance test data through CEDRI within 60 days of the performance test completion, in addition to submitting the test report to MDEQ.

(Ref.: 40 CFR 63.863(c) and 63.865, Subpart MM)

5.B.32 For Emission Points AA-011, AA-012, and AA-013, the permittee must maintain records of any occurrence when corrective action is required under 40 CFR 63.864(k)(1) and when a violation is noted under 40 CFR 63.864(k)(2). The following conditions shall be considered violations:

(a) For an existing Kraft Recovery Furnace equipped with an ESP (AA-011), when opacity is greater than 35% for 2% or more of the operating time within any semiannual period;

(b) For an existing lime kiln equipped with an ESP (AA-013), when opacity is greater than 20% for 3% or more of the operating time within any semiannual period;

(c) For an existing Kraft smelt dissolving tank (AA-012) or Kraft lime kiln equipped with a wet scrubber (AA-013), when six (6) or more 3-hour block average parameter values within any 6-month reporting period are outside the range of values established in accordance with 40 CFR 63.864(j).

(Ref.: 40 CFR 63.866(b), Subpart MM)

5.B.33 For Emission Points AA-011, AA-012, and AA-013, in addition to the general records required by 40 CFR 63.10(b)(2), the permittee must maintain the following information:

(a) Records of the parameter monitoring data required under 40 CFR 63.864, including the following information:

(1) Any period when the operating parameter levels were inconsistent with the levels established during the initial and/or subsequent performance tests;

(2) A brief explanation of the cause of the monitoring exceedance;

(3) The time the monitoring exceedance occurred;

(4) The time corrective action was initiated and completed; and

(5) The corrective action taken;

(b) All records and documentation of supporting calculations for compliance determinations made under 40 CFR 63.865 (a) through (e); and

(c) Records of any monitoring parameter ranges established for each affected source or process unit.

(Ref.: 40 CFR 63.866(c)(3)-(5), Subpart MM)

5.B.34 For Emission Points AA-011 and AA-013, the permittee shall install, calibrate, maintain, and operate a CMS to monitor and record the concentration of TRS emissions (on a dry basis). The TRS concentration span of the monitoring system shall be set at 30 ppm.

(Ref.: 40 CFR 60.284(a)(2), Subpart BB)

5.B.35 For Emission Points AA-011 and AA-013, the permittee shall calculate and record on a daily basis, 12-hour block average TRS concentrations for the two (2) 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 TRS concentrations provided by the continuous monitoring system(s). For the Recovery Furnace, the 12-hour TRS concentration shall be corrected to 8% oxygen. For the Lime Kiln, the 12-hour TRS concentration shall be corrected to 10% oxygen.

(Ref.: 40 CFR 60.284(c)(1) and (3), Subpart BB)

5.B.36 For Emission Points AA-011 and AA-013, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the percent oxygen on a dry basis from the gases discharged into the atmosphere from the Recovery Furnace and the Lime Kiln. The span of the monitoring system shall be set at 25% oxygen.

(Ref.: 40 CFR 60.284(a)(2), Subpart BB)

5.B.37 For Emission Points AA-011 and AA-013, the permittee shall calculate and record on a daily basis, 12-hour average oxygen concentrations from the Recovery Furnace and Lime Kiln, for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate twelve contiguous 1-hour average oxygen concentrations provided by the CMS. The 12-hour oxygen average must correspond to the TRS concentration average.

(Ref.: 40 CFR 60.284(c)(2), Subpart BB)

5.B.38 For Emission Point AA-012 and AA-013, the permittee shall install, maintain, operate, and calibrate a monitoring device for the continuous measurement of the scrubbing liquid

supply pressure to the control equipment. The monitoring device must be certified by the manufacturer to be accurate within ±15% of the design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. If necessary, the permittee may submit a written request for approval of an alternative sensor location. The measurements obtained from the CMS shall be recorded once per shift.

(Ref.: 40 CFR 60.284(b)(2)(ii) and 60.284(c)(4), Subpart BB.)

5.B.39 For Emission Point AA-012 and AA-013, the permittee shall install, maintain, operate, and calibrate a CMS to monitor and record the scrubber liquid flow rate at least once every successive 15-minute period in accordance with the procedures set forth in 40 CFR 63.8(c) and 40 CFR 63.864(e). The monitoring device must be certified by the manufacturer to an accuracy of ±5 percent of the design scrubbing liquid flow rate. Alternative monitoring (liquid supply pressure in lieu of pressure drop) was identified in the subpart MM initial performance test, dated 4/12/2004.

(Ref.: 40 CFR 63.864(e), Subpart MM)

5.B.40 For Emission Points AA-012, AA-013, AA-014 (Lime Slaker Vents RC-1/2), AA-016, AA-021, and AA-023, the permittee must conduct *weekly* inspections for visible emissions. If visible emissions are detected (one-minute interval), with the exception of steam plumes, conduct a minimum of one 6-minute observation in accordance with EPA Reference Method 9. Upon observation of visible emissions from an emission point, the frequency of observation for that emission point shall become *daily* until no emissions are observed for seven (7) consecutive days. After 7 consecutive days of no visible emission observations, the inspection frequency may be reduced to *weekly*. If no visible emissions are observed after three (3) consecutive months of weekly observations, the frequency may be reduced to *monthly*. However, if emissions are observed during a monthly inspection, the frequency of inspection shall revert to the *daily* schedule as specified above. The permittee shall maintain records of all applicable opacity inspections (visible emissions evaluations (VEE)) in accordance with Condition 5.A.3.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.41 For Emission Point AA-015, the permittee shall conduct a stack test within eighteen (18) months of permit issuance and biennially (i.e., every two years) thereafter. The permittee shall demonstrate compliance with the PM (filterable only), $SO_2$, $NO_X$, and CO limitations in accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 1-5, 6, 16, 7, and 10), or an otherwise approved equivalent method. The permittee shall determine the maximum fuel-firing rate and record the oxygen concentration in the stack during testing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.42 For Emission Point AA-015, the permittee shall install, calibrate, maintain and operate a CMS to measure and record the opacity of gases discharged into the atmosphere from

the power boiler. The span value for the CMS measuring the opacity of emissions shall be 80, 90, or 100 percent.

(Ref.: 40 CFR 60.45(a) and (c)(3), Subpart D)

5.B.43 For Emission Point AA-015, the permittee shall maintain records of any occurrence of excess opacity emissions. Excess emissions shall be defined as any 6-minute period during which the average opacity of emissions exceeds 20%, except that one 6-minute average per hour of up to 27% opacity need not be reported.

(Ref.: 40 CFR 60.45(g) and (l), Subpart D.)

5.B.44 For Emission Point AA-015, the permittee shall maintain an O&M Plan for the ESP (control device). The O&M Plan should be maintained on-site in accordance with Condition 5.A.3. The plan should include, but is not limited to, the following information:

(a) Operational Checklist (i.e., fields energized, minimum voltage level);

(b) Operational Procedures;

(c) Maintenance Schedules and Maintenance Activity Performed;

The permittee shall maintain records of any operational and/or maintenance activities associated with the ESP's O&M Plan, and all records shall be made available upon request by MDEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.45 For Emission Point AA-015, the permittee shall maintain daily records of the type(s) and amount(s) of fuel combusted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.46 For Emission Point AA-015, the permittee shall maintain records daily of the hours of operation.

(Ref.: Permit to Construct issued November 23, 1993)

5.B.47 For Emission Point AA-015, the permittee is required to demonstrate compliance with the applicable emission limits in Table 2 of 40 CFR 63, Subpart DDDDD (HCl, Mercury, and Filterable PM (or TSM)) through performance testing, and the initial compliance requirements include all the following:

(a) Conduct performance tests according to 40 CFR 63.7520 and Table 5.

(b) Conduct a fuel analysis for each type of fuel burned in the boiler according to 40 CFR 63.7521 and Table 6, except as specified 63.7510(a)(2)(i)-(iii).

(c) Establish operating limits according to 40 CFR 63.7530 and Table 7.

(d) Conduct CMS performance evaluations according to 40 CFR 63.7525.

(Ref.: 40 CFR 63.7510(a)(1-4), Subpart DDDDD)

5.B.48 For Emission Point AA-015, the permittee must conduct all applicable performance tests for HCl, Mercury, and Filterable PM (or TSM) according to 40 CFR 63.7520 on an annual basis (no more than 13 months after the previous performance test), except as specified in 40 CFR 63.7515(b)-(e), (g), and (h).

If the performance tests for a given pollutant (PM, HCl and Hg) for at least 2 consecutive years show that emissions are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the individual boiler or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test.

(Ref.: 40 CFR 63.7515(a) and (b), Subpart DDDDD)

5.B.49 For Emission Point AA-015, the permittee must install, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen according to the procedures in 40 CFR 63.7525(a)(1)-(6).

(Ref.: 40 CFR 63.7525(a), Subpart DDDDD)

5.B.50 For Emission Point AA-015, the permittee must monitor and collect data according to 40 CFR 63.7535(a)-(d) and the site-specific monitoring plan required by 40 CFR 63.7505(d).

(Ref.: 40 CFR 63.7535(a), Subpart DDDDD)

5.B.51 For Emission Point AA-015, the permittee must demonstrate continuous compliance with each emission limits in Table 2, the work practice standards in Table 3, and the operating limits in Table 4 of 40 CFR 63, Subpart DDDDD according to the methods listed in (a) through (g) of this Condition specified in Table 8 and 40 CFR 63.7540(a)(1) through (19).

(a) After the initial compliance demonstration is completed, operation above the established maximum or below the established minimum operating limit is a deviation of established operating limits except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed and/or reestablished during performance tests.

(b) Keep records of the type and amount of all fuels burned in the boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in equal to or lower fuel input of chlorine, mercury, and TSM than the maximum values calculated during the last performance test.

(c) Conduct a tune-up in accordance with Section 3.D.

(d) Report each instance in which the boiler did not meet the emission limits and operating limits. These instances are considered deviations and as such must be reported according to the requirements of Condition 5.A.5.

(Ref.: 40 CFR 63. 7540(a)(1),(2)(ii), and (10) and 63.7540(b), Subpart DDDDD)

5.B.52 For Emission Point AA-016, the permittee shall conduct conduct a stack test within eighteen (18) months of permit issuance and biennially (i.e., every two years) thereafter. The permittee shall demonstrate compliance with the $SO_2$, NOx, and CO limitations in accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 6, 7, 10, and 9), or an EPA-approved equivalent method. Performance testing must be performed while controlling noncondensable gas (NCG) emissions.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.53 For Emission Point AA-016, the permittee shall install, calibrate, maintain and operate a CMS to monitor and record the combustion temperature at the point of incineration of effluent gases, which are emitted from any digester system, brown stock washer system, multiple-effect evaporator system, black liquor oxidation system, or condensate stripper system, where the provisions of 40 CFR 60.283(a)(1)(iii) apply. The monitoring device is to be certified by the manufacturer to be accurate within ±1% of the temperature being measured.

(Ref.: 40 CFR 60.284(b)(1), Subpart BB)

5.B.54 For Emission Point AA-016, the permittee shall maintain records of any period of excess emissions. Periods of excess emissions are defined as all periods in excess of five (5) minutes and their duration during which the combustion temperature at the point of incineration is less than 1200 º F (650 ºC).

(Ref.: 40 CFR 60.284(d)(3)(ii), Subpart BB)

5.B.55 For Emission Point AA-016, the permittee shall maintain records to demonstrate only permitted fuels were combusted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.56 For Emission Point AA-016, the permittee shall maintain daily records of the hours of NCG incineration and calculate a 12-month rolling total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.57 For Emission Points AA-021 and AA-023, the permittee shall conduct a stack test within eighteen (18) months of permit issuance and biennially (i.e., every two years) thereafter. For Emission Points AA-021 and AA-023, the permittee shall demonstrate compliance with the VOC (as carbon) and Opacity limitations. In addition, Emission Point AA-021

shall demonstrate compliance with the CO limitations. The testing shall be conducted in accordance with the appropriate EPA Reference Methods (e.g., EPA Ref. Methods 10, 25/25A, and 9), or an otherwise approved equivalent method.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.58 For Emission Points AA-008 and AA-025, the permittee shall meet the following requirements for each enclosure and closed-vent system used to comply with 40 CFR 63.450(a):

(a) For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least at least once monthly, with at least 15 days elapsed time between inspections, to ensure the opening is maintained in the closed position and sealed.

(b) Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected monthly, with at least 15 days elapsed time between inspections,and as necessary to ensure proper function. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

(c) For positive pressure closed-vent systems or portions of closed-vent systems, the permittee must demonstrate that there were no detectable leaks as specified in 40 CFR 63.450(c) to be measured initially and annually, thereafter, in accordance with the procedures specified in 40 CFR 63.457(d).

(d) The permittee must demonstrate initially and annually, thereafter, that each applicable enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e).

(e) The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least monthly, with at least 15 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.

(f) If an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450; or, if an instrument reading of 500 ppm 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:

(1) 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.

(2) 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 permittee 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.

(Ref.: 40 CFR 63.453(k), Subpart S)

5.B.59 For Emission Points AA-008, AA-025 and AA-028, if the permittee elects to use a control device, technique, or an alternative parameter other than those specified in this Section, the permittee must obtain prior approval from MDEQ. In addition, the permittee shall install a CMS, and establish appropriate operating parameters to be monitored that sufficiently demonstrate continuous compliance with the applicable control requirements.

(Ref: 40 CFR 63.453(m), Subpart S)

5.B.60 For Emission Points AA-008, AA-025 and AA-028, the permittee may establish or reestablish the value for each operating parameter required to be monitored and more specifically detailed in 40 CFR 63.453(n) by following the procedures listed below:

(a) During the initial performance test required in 40 CFR 63.457(a) or any subsequent performance test, 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 permittee shall submit for approval by MDEQ, the rationale for selecting the monitoring parameters; and

(d) The permittee shall submit for approval by MDEQ, 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.

(Ref.: 40 CFR 63.453(n)(1)-(n)(4), Subpart S)

5.B.61 For Emission Points AA-008, AA-025 and AA-028, and each control device subject to the monitoring provisions of 40 CFR 63.453, the permittee shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure. Note, except as provided in 40 CFR 63.443(e), or 63.446(g), operation of the control device below the established minimum operating parameter values or above the established maximum operating parameter values; or failure to perform required procedures set forth in 40 CFR 63 Subpart S shall constitute a violation of the applicable emission standard and must be reported as a period of excess emissions.

(Ref.: 40 CFR 63.453(o), Subpart S)

5.B.62 For Emission Points AA-008, AA-025 and AA-028, the permittee shall maintain records of all information required by the site-specific inspection plan developed in accordance with Section 3.D. of this document. These records should be made available upon request by MDEQ personnel.

The permittee shall also maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. These records shall include the actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.453(q), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR 63.454(b) and 63.454(g), Subpart S)

5.B.63 For Emission Point AA-025, the permittee shall install, calibrate, certify, operate, and maintain, in accordance with the manufacturer's specifications, a CMS, as defined in 40 CFR 63.2, to measure the temperature in the firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs when the incinerator (Emission Point AA-016) is used to comply with the requirements of 40 CFR 63.443(d)(1)-(3). As an alternative to monitoring thermal oxidizer temperature, when complying with the HAP concentration requirements in 40 CFR 63.443(d)(2), the permittee may install a CMS to monitor the thermal oxidizer outlet total HAP or methanol concentration.

(Ref: 40 CFR 63.453(b), Subpart S)

5.B.64 For Emission Points AA-008 and AA-028, repeat performance tests are required for the emissions sources specified below, except for emission sources controlled by a combustion device that is designed and operated as specified in 40 CFR 63.443(d)(3) or (4).

(a) Conduct repeat performance tests at five-year intervals for all emission sources subject to the limitations in 40 CFR 63.443, 63.444, and 63.445. The first of the 5-year repeat tests must be conducted by September 7, 2015, and thereafter within 60 months from the date of the previous performance test.

(Ref.: 40 CFR 63.457(a)(2), Subpart S and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.65 For Emission Point AA-008, the permittee shall install, calibrate, certify, operate, and maintain, in accordance with the manufacturer's specifications, a CMS, as defined in 40 CFR 63.2, to measure the following parameters for each bleach plant gas scrubber used to comply with the bleaching system requirements of 40 CFR 63.445(c):

(a) The pH or the oxidation/reduction potential (ORP) of the gas scrubber effluent;

(b) The gas scrubber fan amps for both First Stage ClO2 Scrubber (BP-19) and the ClO2 Gas Scrubber (BP-20). (EPA Alternative Approved June 7, 2001); and

(c) The gas scrubber liquid influent flow rate.

(Ref: 40 CFR 63.453(c), Subpart S)

5.B.66 For Emission Point AA-041, the permittee shall install, calibrate, certify, operate, and maintain, in accordance with the manufacturer's specifications, a CMS as defined in 40 CFR 63.2 to measure the following parameters for each steam stripper used to comply with the treatment requirements in 40 CFR 63.446(e)(3):

(a) The process wastewater feed rate (condensate flow);

(b) The steam feed rate; and

(c) The process wastewater column feed temperature.

(Ref.: 40 CFR 63.453(g), Subpart S)

5.B.67 For Emission Point AA-028, to comply with the condensate applicability requirements specified in 63.446(c), the permittee shall install, calibrate, certify, operate, and maintain, in accordance with the manufacturer's specifications, a CMS to measure foul condensate collection (approved in a letter to the MDEQ on May 28, 2003).

(Ref.: 40 CFR 63.453(i), Subpart S)

5.B.68 For Emission Point AA-028, the permittee shall meet the following requirements for each pulping process condensate closed collection system used to comply with 40 CFR 63.446(d):

(a) Each pulping process condensate closed collection system shall be visually inspected every 30 days and shall comply with the inspection and monitoring requirements specified in 40 CFR 63.964 of 40 CFR 63, Subpart RR, except:

(b) The permittee shall comply with the recordkeeping requirements of 40 CFR 63.454 instead of the requirements specified in 40 CFR 63.964(a)(1)(vi) and (b)(3) of Subpart RR.

(c) The permittee shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in 40 CFR 63.453(a) and (k), instead of the requirements specified in 40 CFR 63.964(a)(2) of Subpart RR.

(Ref.: 40 CFR 63.453(l)(1), Subpart S)

5.B.69 For Emission Point AA-028, each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in 40 CFR 63.446(d)(2)(i) measured initially and annually, thereafter, by the procedures specified in 40 CFR 63.457(d).

(Ref.: 40 CFR 63.453(1)(2), Subpart S)

5.B.70 For Emission Points AA-028 and AA-041, if an inspection required by 40 CFR 63.453(l) identifies visible defects in the closed collection system, or if an instrument reading of 500 ppm or greater above background is measured for the condensate tanks; then corrective actions specified in 40 CFR 63.964(b) of Subpart RR shall be taken.

(Ref.: 40 CFR 63.453(l)(3), Subpart S)

5.B.71 For Emission Point AA-036, the permittee shall perform monthly opacity observations using EPA Reference Method 9 during unloading operations and maintain a log of the results.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.72 For Emission Point AA-036, the permittee shall perform inspections and maintenance each month, or more often as needed, to ensure proper operation of the baghouse is maintained. Records of any inspections and/or maintenance shall be kept in log form and must be made available for review upon request by MDEQ personnel.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.73 For Emission Point AA-037, the permittee shall comply with the applicable emission limitations, work practice standards, and operating limitations in 40 CFR 63, Subpart ZZZZ at all times. The permittee shall at all times operate and maintain the affected sources, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspections.

(Ref.: 40 CFR 63.6605, Subpart ZZZZ)

5.B.74 For Emission Point AA-037, the permittee shall comply with the following monitoring, operating and maintenance requirements:

(a) Operate and maintain the stationary RICE in accordance with the manufacturer's emission-related written instruction or develop a maintenance plan that provides to the extent practicable for the maintenance and operation or the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(b) The permittee must install a non-resettable hour meter, if not already installed.

(Ref.: 40 CFR 63.6625(e), (f), (h), and (i), Subpart ZZZZ)

5.B.75 For Emission Point AA-037, the permittee shall maintain the following records and keep each readily accessible for at least five (5) years after the date of each occurrence:

(a) All maintenance records that demonstrate the engine was operated and maintained in accordance with the written maintenance plan identified in Condition 5.B.79 above, including the results of any oil analyses according to Condition 3.B.67.

(b) The hours of operation of the engine recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the event as an emergency, and how many hours are non-emergency operations. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(c) Copies of notifications and reports submitted to comply with Subpart ZZZZ;

(d) The occurrence and duration of each malfunction of the engine or air pollution control equipment and actions taken to minimize emissions, including corrective actions taken to restore equipment to its normal manner of operation, during periods of malfunction.

(Ref.: 40 CFR 63.6625(i), 63.6655(a) and (d)-(f), and 63.6660 (b) and (c), Subpart ZZZZ)

5.B.76 For Emission Point AA-038, the permittee shall install a non-resettable hour meter prior to start-up of the engine.

(Ref.: 40 CFR 60.4209(a), Subpart IIII)

5.B.77 For Emission Point AA-038, the permittee shall keep records of the operation of the engine in emergency and non-emergency service as recorded through the non-resettable hour meter. The records shall include the time of operation and the reason the engine was in operation during that time. Records of this monitoring shall be maintained in log form and shall be made available upon request by MDEQ personnel.

**(**Ref.: 40 CFR 60.4214(b), Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.78 For Emission Point AA-038, the permittee shall comply with the emission limitations in Condition 3.B.59 by purchasing an engine certified by the manufacturer to those standards. The engine shall be installed, configured, operated, and maintained according to the manufacturer's emission-related written specifications and instructions. The permittee may only change those emission-related settings that are permitted by the manufacturer. The permittee shall also meet all applicable requirements of 40 CFR Parts 89, 94, and/or 1068. If all of the requirements of this condition are not met, the permittee shall instead demonstrate compliance according to Condition 5.B.81.

(Ref.: 40 CFR 60.4211(a) and (c), Subpart IIII)

5.B.79 For Emission Point AA-038, if the permittee does not install, configure, operate, and maintain the engine and control device, if any, according to the manufacturer's emission-

related written instructions, or the emission-related settings are changed in a way not permitted by the manufacturer, the permittee shall do the following:

(a) Maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions.

(b) Keep a maintenance plan and records of maintenance conducted on the engine.

(c) Conduct an initial performance test in accordance with 40 CFR 60.4212 to demonstrate compliance with the emission limitations in Condition 3.B.80 within one year of startup, or within one year after the engine is no longer installed, configured, operated, or maintained in accordance with the manufacturer's emission-related written instructions, or within one year after an emission-related setting is changed in a way not permitted by the manufacturer.

(Ref.: 40 CFR 60.4211(g), Subpart IIII)

5.B.80 For Emission Points AA-013, AA-015, AA-016, and AA-042, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:

(a) *Proper maintenance.* At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(b) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used, including in data averaging and calculations or in fulfilling a minimum data availability requirement, as applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. 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.

(Ref.: 40 CFR 64.7(b) and (c), Compliance Assurance Monitoring)

5.B.81 For Emission Points AA-013, AA-015, AA-016, and AA-042, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or

shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d), Compliance Assurance Monitoring)

5.B.82 For Emission Points AA-013, AA-015, AA-016, and AA-042, based on the results of a determination made under Condition 5.B.81, the MDEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b). The QIP shall be developed and implemented within 180 days of written notification from MDEQ that a QIP is required. The MDEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8, Compliance Assurance Monitoring)

5.B.83 For Emission Points AA-013, AA-015, AA-016, and AA-042, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.82 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions, as applicable. As applicable, records of monitoring data and monitoring performance data should include date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b), Compliance Assurance Monitoring)

C. Specific Reporting Requirements

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-005 | Permit to Construct issued November 23, 1993<br>11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.1 | Operating Hours | Semiannual report summarizing the hours of operation for the preceding six-month period. |
| AA-005 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.2 | Fuel Consumption | Semiannual report of the annual fuel consumption rate for natural gas based on a 12-month rolling total for the preceding 6-month period. |
| AA-005<br>AA-011<br>AA-015 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.3 | Operating Hours | Semiannual report summarizing the total hours of simultaneous operation of Emission Points AA-005, AA-011, and AA-015. |
| AA-005 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | PM, $SO_2$, $NO_X$, CO, and VOC | Pretest notifications and stack test report requirements. |
| AA-006<br>AA-007<br>AA-010<br>AA-041 | 40 CFR 60.284(d) and (e), Subpart BB | 5.C.5 | TRS or Combustion Temperature Excess Emissions | Semiannual report of any periods of excess emissions that occurred as indicated in Condition 5.B.9 (40 CFR 60.284(d)(3)). Each excess emission report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions allowed by Condition 5.B.9 are exempt from the devation reporting required by Condition 5.A.5. |
| AA-006 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.6 | Hours Vented to Controls | Semiannual report summarizing the amount of time the Lime Kiln (AA-013) and the Incinerator (AA-016) are used to combust TRS gases from the digester system. |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.867(a)(1), Subpart MM<br>11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | HAP Metals (PM) | Pretest notifications and stack test report requirements. |
| AA-011<br>AA-012<br>AA-013 | 40 CFR 63.867(c), Subpart MM | 5.C.7 | Excess Emissions | Submit semiannual excess emissions reports<br>Periods of excess emissions allowed by Conditions 3.B.15 and 3.B.25 are exempt from the deviation reporting required by Condition 5.A.5 |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | PM, $SO_2$, $NO_x$, and CO | Pretest notifications and stack test report requirements. |
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.8 | Fuel Usage | Semiannual report summarizing the fossil fuel usage and heat input to the boiler. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-011 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.9 | Fossil Fuel Capacity Factor | Semiannual report of the Fossil Fuel Annual Capacity Factor calculations and rolling total. |
| AA-011 | 40 CFR 60.284(d) and (e), Subpart BB | 5.C.10 | TRS | Semiannual excess emissions report. Each excess emission report shall include the information required in 40 CFR 60.7(c). |
| AA-012 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | PM, $SO_2$, and TRS | Pretest notifications and stack test report requirements. |
| AA-013 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | PM, $SO_2$, $NO_x$, CO, and Opacity | Pretest notifications and stack test report requirements. |
| AA-013 | 40 CFR 60.284(d) and (e), Subpart BB | 5.C.11 | TRS | Semiannual excess emissions report. Each excess emission report shall include the information required in 40 CFR 60.7(c).<br>Periods of excess emissions allowed by Condition 5.B.26 are exempt from the deviation reporting required by Condition 5.A.5. |
| AA-013 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.12 | Fuel Usage | Semiannual report summarizing the amount(s) and type(s) of fuels combusted for the preceding 6-month period. |
| AA-013 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.13 | Used Oil Combusted | Semiannual report of the amount of on-site generated used oil burned as fuel on a monthly basis and on a 12-month rolling total. |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | PM, $SO_2$, $NO_x$ CO, and Opacity | Pretest notifications and stack test report requirements. |
| AA-015 | 40 CFR 60.45(g), Subpart D; | 5.C.14 | Opacity | Semiannual excess emission and monitoring system performance reports for Opacity. Each excess emission and monitoring system performance report shall include the information required in 40 CFR 60.7(c).<br>Periods of excess emissions allowed by Condition 5.B.43 are exempt from the deviation reporting required by Condition 5.A.5. |
| AA-015 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.15 | Fuel Usage | Semiannual report summarizing the amount(s) and type(s) of fuels combusted for the preceding 6-month period. |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | $SO_2$, $NO_X$, CO, and Opacity | Pretest notifications and stack test report requirements. |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-016 | 40 CFR 60.284(d) and (e), Subpart BB | 5.C.16 | Combustion Temperature | Submit semiannual report of periods of excess emissions where the combustion temperature at the point of incineration is less than 1200ºF in excess of 5 minutes.<br>Periods of excess emissions allowed in Condition 5.B.54 are exempt from the deviation reporting required by Condition 5.A.5. |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.17 | Hours of NCG Incineration | Semiannual report of the hours of NCG incineration. |
| AA-016 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). | 5.C.18 | Fuel Usage | Semiannual report summarizing the amount(s) and type(s) of fuels combusted for the preceding 6-month period. |
| AA-021 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | CO, VOC, and Opacity | Pretest notifications and stack test report requirements. |
| AA-023 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | VOC and Opacity | Pretest notifications and stack test report requirements. |
| AA-025<br>AA-008<br>AA-028<br>AA-043 | 40 CFR 63.455(a) and 63.455(g), Subpart S<br>40 CFR 63.10(e)(3), Subpart A | 5.C.19 | CMS and/or Control Device | Semiannual excess emissions report and malfunction report. Each excess emission report shall include the information required in 40 CFR 63.10(e)(3). Periods of excess emissions allowed by Condition 3.B.44 and 3.B.52 are exempt from the devation reporting required by Condition 5.A.5. |
| AA-008<br>AA-028 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | HAP | Pretest notifications and stack test report requirements. |
| AA-036 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.4 | Opacity | Pretest notifications and stack test report requirements. |
| AA-005<br>AA-015 | 40 CFR 63.7545(a)-(d), Subpart DDDDD | 5.C.20 | Performance Testing Notices | Submit the notifications in 40 CFR 63.7(b) and (c); 63.8(e), (f)(4) and (6); and 63.9(b) through (h) that apply by the dates specified.<br>Submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. |
| AA-005<br>AA-015 | 40 CFR 63.7550(a), (b) and (c), Subpart DDDDD | 5.C.21 | Reporting Requirements | Submit each report in Table 9 of 40 CFR 63, Subpart DDDDD that applies.<br>Submit each compliance report as provided in 40 CFR 63.7550(b). Compliance report must contain information detailed in 40 CFR 63.7550(c). |
| AA-037 | 40 CFR 63.6640(b), 63.6650(f), and Table 2c of 40 CFR Part 63, Subpart ZZZZ | 5.C.22 | Reporting Requirements | Semiannual report of any deviations |

| Emission Point(s) | Applicable Requirement | Condition Number | Pollutant/ Parameter Monitored | Monitoring/Recordkeeping Requirement |
|---|---|---|---|---|
| AA-037 | 40 CFR 63.6640(e), Subpart ZZZZ | 5.C.23 | Reporting Requirements | Semiannual report of devations from General Provisions |
| AA-038 | 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c). | 5.C.24 | Hours of operation | Annual report of hours of emergency and non-emergency operations for previous calendar year |
| AA-013 AA-015 AA-016 AA-042 | 40 CFR 64.9(a), CAM | 5.C.25 | CAM Reporting | Semiannual reporting of excess emissions or excursions |
| | 40 CFR 64.7(e), CAM | 5.C.26 | CAM Modification | Promptly notify MDEQ of failure to achieve limit/standard though no excursion or exceedance was indicated by approved monitoring |

5.C.1 For Emission Point AA-005, the permittee must submit a semiannual report summarizing the hours of operation in accordance with Condition 5.A.4.

(Ref.: Permit to Construct issued November 23, 1993 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.2 For Emission Point AA-005, the permittee shall submit a semiannual report of the annual fuel consumption rate for natural gas based on a 12-month rolling total, in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.3 For Emission Points AA-005, AA-011 and AA-015, the permittee must submit a semiannual report summarizing the hours of simultaneous operation of the three emission points in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.4 The permittee shall submit the following notifications, information, and reports for each required performance test on or before the date(s) specified in Section 5.B:

(a) A notification of the scheduled test date(s) shall be submitted ten (10) days prior to the scheduled date(s) so an observer may be afforded the opportunity to witness the test(s).

(b) For all required testing, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the MDEQ.

(c) After the first successful submittal of a written test protocol, the permittee may request that the submittal of a testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to the subsequent testing that all

conditions for testing remain unchanged such that the original protocol can and will be followed.

(d) The permittee shall submit the results of all required emissions testing in the units specified by the limitations set forth in Section 3.B. Note, for VOC emissions testing conducted in accordance with EPA Reference Methods 25 or 25A, the permittee shall report the results on an "as carbon" basis.

(e) The permittee shall submit a summary of the results of any periodic and/or parametric monitoring required to be monitored and recorded by Condition 5.B during performance testing.

(f) The performance test results must be submitted to MDEQ within sixty (60) days following completion of the performance test.

(g) Special Testing Requirements, include but are not limited to:

(1) For Emission Point AA-011, report the black liquor solids firing rate during each performance test.

(2) For Emission Point AA-015, report the maximum fuel-firing rate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).)

5.C.5 For Emission Points AA-006, AA-007,AA-010and AA-041, the permittee shall submit a semiannual report of any periods of excess emissions recorded as required by Condition 5.B.9 (40 CFR 60.284(d)(3)). Each excess emission report shall be submitted in accordance with 40 CFR 60.7(c).

Periods of excess emissions will not be considered indicative of a violation of 40 CFR 60.11(d) provided that the MDEQ 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.

Periods of excess emissions allowed by Condition 5.B.9 are exempt from the devation reporting required by Condition 5.A.5.

(Ref.: 40 CFR 60.284(d) and (e), Subpart BB)

5.C.6 For Emission Point AA-006, the permittee shall submit a semiannual report summarizing the amount of time the Lime Kiln (AA-013) and the amount of time the incinerator (AA-016) are used to combust TRS gases from the digester system in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.7 For Emission Points AA-011, AA-012 and AA-013, the permittee shall submit semiannual excess emission reports containing the information specified in 40 CFR 63.867(c)(1) through (c)(5). The permittee must submit semiannual excess emission reports following the procedure specified in 40 CFR 63.867(d)(2) as specified in 40 CFR 63.10(e)(3)(v) for electronic submittal through EPA's CEDRI interface. If the reporting form specific to Subpart MM is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at all the appropriate addresses listed in 40 CFR 63.13. Once the form has been available in CEDRI for 1 year, the permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in Subpart MM, regardless of the method in which the reports are submitted. In accordance with Condition 5.A.4, these reports shall also be submitted to the MDEQ.

Periods of excess emissions allowed by Conditions 3.B.15 and 3.B.25 are exempt from the deviation reporting required by Condition 5.A.5.

(Ref.: 40 CFR 63.867(c) and (d)(2), Subpart MM)

5.C.8 For Emission Point AA-011, the permittee shall submit semiannual report summarizing the fossil fuel usage and heat input in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.9 For Emission Point AA-011, the permittee shall submit reports of the monthly annual capacity factor calculations based on a 12-month rolling total in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.10 For Emission Point AA-011, in accordance with 40 CFR 60.7(c), the permittee shall submit a semiannual report indicating periods of excess emissions in accordance with Condition 5.A.4. The MDEQ will not consider periods of excess emissions to be indicative of a violation of 40 CFR 60.11(d) if:

(a) For all 12-hour average TRS concentrations, the percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction) during which excess emissions occur does not exceed 1%.

(b) For all 6-minute average opacities, the percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction) during which excess emissions occur does not exceed 6%.

(c) In addition to (a) and (b), the DEQ 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.

Periods of excess emissions allowed for TRS and opacity by Conditions 5.B.16 and 5.B.18, respectively, are exempt from the deviation reporting required by Condition 5.A.5.

(Ref.: 40 CFR 60.284(d) and (e), Subpart BB)

5.C.11 For Emission Point AA-013, in accordance with 40 CFR 60.7(c), the permittee shall submit a semiannual report indicating periods of excess emissions for all 12-hour averages of TRS above 8 ppm by volume. The MDEQ will not consider excess emissions to be indicative of a violation of 40 CFR 60.11(d) if the MDEQ 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. Periods of excess emissions allowed by Condition 5.B.26 are exempt from the deviation reporting required by Condition 5.A.5.

(Ref.: 40 CFR 60.284(d) and (e), Subpart BB)

5.C.12 For Emission Point AA-013, the permittee shall submit a semiannual report summarizing the amount(s) and type(s) of fuels combusted for the preceding 6-month period in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

5.C.13 For Emission Point AA-013, the permittee shall submit a report of the amount of on-site generated used oil burned as fuel, determined monthly and based on a 12-month rolling total, in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

5.C.14 For Emission Point AA-015, the permittee shall submit a semiannual report of excess opacity emissions and monitoring system performance as specified in 40 CFR 60.45(g). These reports shall be postmarked by the 30$^{th}$ day following the end of each six-month period. Periods of excess emissions allowed by Condition 5.B.43 are exempt from the deviation reporting required by Condition 5.A.5 .

(Ref.: 40 CFR 60.45(g), Subpart D)

5.C.15 For Emission Point AA-015, the permittee shall submit a semiannual report summarizing the amount(s) and type(s) of fuels combusted for the preceding 6-month period in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

5.C.16 For Emission Point AA-016, in accordance with 40 CFR 60.7(c), the permittee shall submit semiannual reports of the periods of excess emissions when the combustion temperature at the point of incineration is less than 1200ºF in excess of five (5) minutes. The MDEQ will not consider periods of excess emissions to be indicative of a violation of 40 CFR 60.11(d) if the facility can demonstrate 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. Periods of excess emissions allowed in Condition 5.B.54 are exempt from the deviation reporting required by Condition 5.A.5.

(Ref.: 40 CFR 60.284(d) and (e), Subpart BB)

5.C.17 For Emission Point AA-016, the permittee shall submit a semiannual report summarizing the hours of incineration of NCG in the incinerator in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

5.C.18 For Emission Point AA-016, the permittee shall submit a semiannual report summarizing the amount(s) and type(s) of fuels combusted for the preceding 6-month period in accordance with Condition 5.A.4.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(c)(1).)

5.C.19 For Emission Points AA-025, AA-008, AA-028 and AA-043 the permittee shall submit a semiannual report containing the information required in 40 CFR 63.10(e)(3). The report shall be submitted in accordance with Condition 5.A.4. Each report must also include the number, duration and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR 63.453(q), including actions taken to correct a malfunction. Periods of excess emissions allowed by Condition 3.B.44 and 3.B.52 are exempt from the devation reporting required by Condition 5.A.5.

(Ref.: 40 CFR 63.455(a) and 63.455(g), Subpart S and 63.10(e)(3), Subpart A)

5.C.20 For Emission Points AA-005 and AA-015, the permittee must submit to MDEQ all of the notifications in 40 CFR 63.7(b) and (c); 63.8(e), (f)(4) and (6); and 63.9(b) through (h) that apply by the dates specified. If required to conduct a performance test on this unit, the permittee must submit a Notification of Intent to conduct a performance test at least sixty (60) days before the performance test is scheduled to begin.

(Ref.: 40 CFR 63.7545(a)-(d), Subpart DDDDD)

5.C.21 For Emission Points AA-005 and AA-015, the permittee must submit each report in Table 9 of 40 CFR 63, Subpart DDDDD that applies. The permittee must submit each compliance report as provided in 40 CFR 63.7550(b). Compliance reports must be postmarked or submitted in accordance with Permit Condition 5.A.4. The compliance report must contain the information detailed in 40 CFR 63.7550(c), depending on how the facility chooses to comply.

(Ref.: 40 CFR 63.7550(a), (b) and (c), Subpart DDDDD)

5.C.22 For Emission Point AA-037, the permittee shall report each instance in which the work practice standards were not met. These deviations shall be reported semiannually in accordance with Condition 5.A.4, as specified in 40 CFR 63.6650(f). If the work practices were not performed on the required schedule because it posed an unacceptable risk under federal, state, or local law at the time of the required scheduled maintenance, the report must include the Federal, State, or local law under which the risk was deemed unacceptable.

(Ref.: 40 CFR 63.6640(b), 63.6650(f), and Table 2c of 40 CFR Part 63, Subpart ZZZZ)

5.C.23 For Emission Point AA-037, the permittee shall report each instance when the applicable requirements of Table 8 of 40 CFR Part 63, Subpart ZZZZ were not met, in accordance with Condition 5.A.4.

(Ref.: 40 CFR 63.6640(e), Subpart ZZZZ)

5.C.24 For Emission Point AA-038, the permittee shall submit an annual report by January 31st for the previous calendar year summarizing the time the engine was operated in emergency and non-emergency service.

**(**Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).)

5.C.25 For Emission Points AA-013, AA-015, AA-016, and AA-042, the permittee shall submit reports in accordance with Condition 5.A.4 of the following information, as applicable:

(a) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.83. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref.: 40 CFR 64.9(a), Compliance Assurance Monitoring)

5.C.26 For Emission Points AA-013, AA-015, AA-016, and AA-042, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a

modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e), Compliance Assurance Monitoring)

## SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

## SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at **http://ecfr.gpoaccess.gov** under Title 40, or MDEQ shall provide a copy upon request from the permittee.

7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.

7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.

7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:

(a) All containers in which a class I or class II substance is stored or transported;

(b) All products containing a class I substance; and

(c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.

7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:

(a) Servicing, maintaining, or repairing appliances;

(b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

(c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

(a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;

(b) Any person disposing of halons;

(c) Manufacturers of halon blends; or

(d) Organizations that employ technicians who service halon-containing equipment.

# APPENDIX A

## LIST OF ABBREVIATIONS USED IN THIS PERMIT

| | |
|---|---|
| 11 Miss. Admin. Code Pt. 2, Ch. 1. | Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants |
| 11 Miss. Admin. Code Pt. 2, Ch. 2. | Permit Regulations for the Construction and/or Operation of Air Emissions Equipment |
| 11 Miss. Admin. Code Pt. 2, Ch. 3. | Regulations for the Prevention of Air Pollution Emergency Episodes |
| 11 Miss. Admin. Code Pt. 2, Ch. 4. | Ambient Air Quality Standards |
| 11 Miss. Admin. Code Pt. 2, Ch. 5. | Regulations for the Prevention of Significant Deterioration of Air Quality |
| 11 Miss. Admin. Code Pt. 2, Ch. 6. | Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act |
| 11 Miss. Admin. Code Pt. 2, Ch. 7. | Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act |
| BACT | Best Available Control Technology |
| CEM | Continuous Emission Monitor |
| CEMS | Continuous Emission Monitoring System |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| COM | Continuous Opacity Monitor |
| COMS | Continuous Opacity Monitoring System |
| EPA | United States Environmental Protection Agency |
| gr/dscf | Grains Per Dry Standard Cubic Foot |
| HP | Horsepower |
| HAP | Hazardous Air Pollutant |
| lbs/hr | Pounds per Hour |
| M or K | Thousand |
| MACT | Maximum Achievable Control Technology |
| MDEQ | Mississippi Department of Environmental Quality |
| MM | Million |
| MMBTUH | Million British Thermal Units per Hour |
| NA | Not Applicable |
| NAAQS | National Ambient Air Quality Standards |
| NESHAP | National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or<br>National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63 |
| NMVOC | Non-Methane Volatile Organic Compounds |
| $NO_x$ | Nitrogen Oxides |
| NSPS | New Source Performance Standards, 40 CFR 60 |
| O&M | Operation and Maintenance |
| PM | Particulate Matter |
| $PM_{10}$ | Particulate Matter less than 10 μm in diameter |
| ppm | Parts per Million |
| PSD | Prevention of Significant Deterioration, 40 CFR 52 |
| SIP | State Implementation Plan |
| $SO_2$ | Sulfur Dioxide |
| TPY | Tons per Year |
| TRS | Total Reduced Sulfur |
| VEE | Visible Emissions Evaluation |
| VHAP | Volatile Hazardous Air Pollutant |
| VOC | Volatile Organic Compound |

# APPENDIX B

## List of Regulations Referenced In this Permit

11 Miss. Admin. Code, Part 2, Ch. 1. – Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended November 10, 2016)

11 Miss. Admin. Code, Part 2, Ch. 2. – Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code, Part 2, Ch. 6. – Air Emission Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act (Amended June 28, 2012)

40 CFR 82, Protection of Stratospheric Ozone

40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators

40 CFR 60, Subpart BB, Standards of Performance for Kraft Pulp Mills

40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR 63, Subpart S, NESHAP from the Pulp and Paper Industry

40 CFR 63, Subpart MM, NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills

40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines

40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

40 CFR 64, Compliance Assurance Monitoring

# APPENDIX C

## COMPLIANCE ASSURANCE MONITORING (CAM) PLANS

| **Emission Point AA-042 – Tall Oil Reactor (EV-1)** | | |
|---|---|---|
| Control Device: Scrubber (for $H_2S$ emissions) | Emission Limit: $H_2S \leq 1$ grain/100scf | |
| | Indicator No. 1 | Indicator No. 2 |
| I. Indicator | Scrubbing Liquid pH | Scrubber Pump Operation Status (ON/OFF) |
| Measurement Approach | Scrubber liquid pH is monitored by pH meter. | Scrubber Recirculation Pump (ON/OFF). |
| Monitoring Frequency | Monitor and record pH once per shift. | Monitor pump (ON/OFF) continuously and record once per shift. |
| Justification | pH readings indicate that enough caustic is being added to minimize $H_2S$ emissions. | Liquid flow ensures sufficient gas/liquid contact. |
| II. Indicator Range | Scrubbing liquid pH minimum operating value may be established based on previous performance tests or additional performance testing and reported to MDEQ. | N/A |
| III. Performance Criteria | | |
| Data Representativeness | Manual pH from scrubber liquid effluent line. | Pump ON/OFF sensor located at the pump motor. |
| QA/QC | Calibrate, operate, and maintain instrument according to the manufacturer's specifications. | Calibrate, operate, and maintain instrument according to the manufacturer's specifications. |
| Data Collection Procedures | Scrubbing liquid pH is recorded at least once per shift on a log sheet. | An indication of scrubber liquid flow is recorded at least once per shift on a log sheet. |
| Averaging Period | pH is recorded once per shift on a log sheet. | Operation is recorded once per shift on a log sheet |
| APCD Bypass Monitoring | No bypass. Interlock prevents reactor from operating without the scrubber running. | |

| **Emission Point AA-013 – Lime Kiln (RC-6)** | | |
|---|---|---|
| Control Device: Scrubber (for $SO_2$ emissions) | Emission Limit: 17.5 lb/hr and 76.9 tpy $SO_2$ | |
| | Indicator No. 1 (while buring Pet Coke only) | Indicator No. 2 |
| I. Indicator | Scrubbing Liquid pH | Scrubber Liquid Flow Rate |
| Measurement Approach | Scrubber liquid pH is monitored by pH meter. | Liquid flow meter |
| Monitoring Frequency | Monitor and record pH once per shift. | Monitor and record continuously. |
| Justification | pH readings indicate that enough caustic is being added to minimize $SO_2$ emissions. | Liquid flow ensures sufficient gas/liquid contact. |
| II. Indicator Range | Scrubbing liquid pH minimum operating value may be established based on previous performance tests or additional performance testing and reported to MDEQ. | Scrubbing liquid flow rate minimum operating value may be established based on previous performance tests or additional performance testing and reported to MDEQ. |
| III. Performance Criteria | | |
| Data Representativeness | pH meter in the scrubber liquid effluent line. | Liquid flow meter in the scrubbing liquid recirc line. |
| QA/QC | Calibrate, operate, and maintain instrument according to the manufacturer's specifications. | Calibrate, operate, and maintain instrument according to the manufacturer's specifications. Flow accuracy must be within ±5% of design flow rate. |
| Data Collection Procedures | Scrubbing liquid pH is recorded at least once per shift on a log sheet. | Scrubbing liquid flow rate is recorded once every 15 minute period and 3-hour block average on a strip chart or data acquisition system. |
| Averaging Period | pH is recorded once per shift on a log sheet. | 3-hour block average |
| APCD Bypass Monitoring | No bypass of the scrubber is possible. | |

| **Emission Point AA-016 – NCG Incinerator (RC-22)** | | |
|---|---|---|
| Control Device: Scrubber (for $SO_2$ emissions) | Emission Limit: 9.0 lb/hr and 39.42 tpy $SO_2$ | |
| | Indicator No. 1 | Indicator No. 2 |
| I. Indicator | Scrubbing Liquid pH | Scrubber Liquid Flow Rate |
| Measurement Approach | Scrubber liquid pH is monitored by pH meter. | Liquid flow meter |
| Monitoring Frequency | Monitor and record pH once per shift. | Monitor continuously and record once per shift. |
| Justification | pH readings indicate that enough caustic is being added to minimize $SO_2$ emissions. | Liquid flow ensures sufficient gas/liquid contact. |
| II. Indicator Range | Scrubbing liquid pH operating range to be established based on previous performance tests or can conduct additional performance tests for the specific purpose of establishing operating ranges and reported to MDEQ. | Scrubbing liquid flow rate operating range to be established based on previous performance tests or can conduct additional performance tests for the specific purpose of establishing operating ranges and reported to MDEQ. |
| III. Performance Criteria | | |
| Data Representativeness | pH meter in the scrubber liquid effluent line. | Liquid flow meter in the scrubbing liquid recirc line. |
| QA/QC | Calibrate, operate, and maintain instrument according to the manufacturer's specifications. | Calibrate, operate, and maintain instrument according to the manufacturer's specifications. |
| Data Collection Procedures | Scrubbing liquid pH is recorded at least once per shift on a log sheet. | Scrubbing liquid flow rate is recorded at least once per shift on a log sheet. |
| Averaging Period | pH is recorded once per shift on a log sheet. | Flow rate is recorded once per shift on a log sheet. |
| APCD Bypass Monitoring | No bypass of the scrubber is possible. | |

| **Emission Point AA-015 – Power Boiler (UT-3)** | |
|---|---|
| Control Device: ESP (for PM emissions) | Emission Limit: 0.30 gr/dscf ; $E = 4.1(p)^{0.67}$ ; $E = 0.8808 * I^{-0.1667}$ |
| | Indicator No. 1 |
| I. Indicator | Opacity |
| Measurement Approach | Opacity is monitored by a Continuous Opacity Monitor (COM). |
| Monitoring Frequency | Continuous |
| Justification | Opacity is good indicator of ESP performance. Low opacity indicates low particulate breakthrough. |
| II. Indicator Range | An excursion is defined as the daily block average opacity above 10% (or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM emission limitation in 40 CFR 63, Subpart DDDDD) |
| III. Performance Criteria | |
| Data Representativeness | The COM is installed on the boiler stack. |
| QA/QC | The equipment is maintained and operated to suggested manufacturer's recommendations. |
| Data Collection Procedures | Data is collected continuously by the COMS except during periods of calibration and maintenance. |
| Averaging Period | The COMS records every 6-minute average which is averaged for each calendar day. |
| APCD Bypass Monitoring | No bypass of the ESP is possible. |