

**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, Perry County, Mississippi

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: October 20, 2020

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Modified: March 29, 2022

Expires: September 30, 2025

Permit No.: 2200-00005

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SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit non-compliance 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 three (3) or more years. Such a reopening shall be completed no later than eighteen (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 the 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) Re-openings shall not be initiated before a notice of such intent is provided to the Title V source by the Mississippi Department of Environmental Quality (MDEQ) at least thirty (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 the 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – “Air Emissions Operating Permit Regulations for Purposes of Title V of the Federal Clean Air Act”.

- (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, 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 Operating Permit (TVOP). If the permittee submits a timely and complete application, the failure to have a TVOP 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 timeframe as provided in other regulations for emergencies] and the notification includes the following:
 - (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 MDEQ 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – “Permit Regulations for the Construction and/or Operation of Air Emissions Equipment” – and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 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 Part 51, 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, silvi-cultural 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 an Emergency Air Pollution Episode Alert imposed by the Executive

Director of the MDEQ and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within five hundred (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 fifty (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 non-compliance 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 Part (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 two (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, start-ups, 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 five (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 non-compliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than twenty-four (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) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B.(2)(a) through (e).
 - (3) Where an upset as defined in Rule 1.2 occurs during start-up 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 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.)

- 1.27 Regarding compliance testing (if applicable):

- (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
- (b) Compliance testing will be performed at the expense of the permittee.
- (c) Each emission sampling and analysis report shall include (but not be limited to) the following:
 - (1) Detailed description of testing procedures;

- (2) Sample calculation(s);
- (3) Results; and
- (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B.(3), (4), and (6).)

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	Facility-Wide (Leaf River Cellulose, LLC)
AA-001	<p>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).</p> <p>The following emission sources at the Woodyard have significant emissions:</p> <ul style="list-style-type: none"> • Debarker (WY-11) • Bark Shredder (WY-8)
AA-005	190 MMBTU / Hour Natural Gas-Fired Package Boiler (UT-19) [constructed in 1983 and used to produce steam]
AA-006	<p>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:</p> <ul style="list-style-type: none"> • Chip Bin Vent Scrubber Effluent Tank (PM-6) – emissions vented to LVHC NCG system (AA-025) • Chip Steaming Vessel (PM-7) – emissions controlled by the LVHC NCG system (AA-025) • Chip Bin (PM-7a) – emissions controlled by the HVLC NCG system (AA-043) when not operating on fresh steam • Six (6) Weak Black Liquor Spill Tanks (PM-12, PM-13, PM-14, PM-17, PM-18, and PM-19) • Continuous Digester (PM-40) – emissions vented to LVHC NCG system (AA-025) • No. 1C Flash Tank – pressurized tank that normally vents to the Chip Steaming Vessel (PM-7) • No. 2 Flash Tank – tank normally vents to the Chip Bin (PM-7a) <p><i>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.</i></p>

Emission Point	Description
AA-007	<p>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:</p> <ul style="list-style-type: none"> • Weak Black Liquor Spill Sump (PM-15a) • Pulp Mill Sewer Sump (PM-15b) • Atmospheric Diffusion Washer (PM-24a) – complying with Clean Condensate Alternative • No. 1 Atmospheric Diffuser Filtrate Tank (PM-23) – complying with Clean Condensate Alternative • Unscreened HD Storage Tank (PM-24) – emissions vent to the Atmospheric Diffusion Washer (PM-24a) • Knot Drainer (PM-25) – backup to secondary knotter • BL Drum Filter (PM-16) • Filtered Weak BL Tank Vacuum Drum Washer (PM-28) – emissions vent to HVLC NCG system (AA-043) • BSW Filtrate Tank (PM-29) – emissions vent to Vacuum Drum Washer (PM-28) • Knots and Rejects Tank (PM-30) • Brown Stock Decker (PM-31) • Decker Filtrate Seal Tank (PM-32) • Softwood Unbleached HD Storage (PM-33) • Hardwood Unbleached HD Tower (PM-34) • Tertiary Screen Rejects Drainer (PM-35) • Primary Screen Feed Tank (PM-36) • Primary Screen Rejects Tank (PM-37) • Secondary Screen Rejects Chest (PM-38) • Tertiary Screen Accepts Chest (PM-39) • Knotters (two primary and one secondary) – enclosed with no vent to atmosphere • Pressure Diffuser Washer (PM-26) – pressurized, enclosed vessel with no vent to atmosphere • No. 2 Pressure Diffuser Filtrate/Flash Tank (PM-26a) – pressurized, enclosed vessel with no vent to atmosphere • Open Knot Bin (PM-27) • No. 1, 2, 3, and 4 Primary Screens • Secondary Screen • Tertiary Screen <p><i>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. The requirements for the HVLC gases are also addressed under Emission Point AA-043.</i></p>

Emission Point	Description
AA-008	<p>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:</p> <ul style="list-style-type: none"> • Unbleached Stock Blend Chest (BP-1) • First Stage Tower (BP-2) – emissions vent to First Stage ClO₂ Scrubber (BP-19) • First Stage Washer (BP-3) – emissions vent to First Stage ClO₂ Scrubber (BP-19) • First Stage Seal Chest (BP-4) – emissions vent to First Stage ClO₂ Scrubber (BP-19) • First E(op) Tower (BP-5) – emissions vent to the First Stage ClO₂ Scrubber (BP-19) • First E(op) Washer (BP-6) - emissions vent to First Stage ClO₂ Scrubber (BP-19) • First E(op) Seal Chest (BP-7) - emissions vent to First Stage ClO₂ Scrubber (BP-19) • Second ClO₂ Tower (BP-8) – emissions vent to First Stage ClO₂ Scrubber (BP-19) • Second ClO₂ Washer (BP-9) – emissions vent to ClO₂ Gas Scrubber (BP-20) • Second ClO₂ Seal Chest (BP-10) – emissions vent to ClO₂ Gas Scrubber (BP-20) • Second Ep Tower (BP-11) – emissions vent to First Stage ClO₂ Scrubber (BP-19) • Second Ep Washer (BP-12) – emissions vent to ClO₂ Gas Scrubber (BP-20) • Second Ep Seal Chest (BP-13) – emissions vent to ClO₂ Gas Scrubber (BP-20) • Third ClO₂ Tower (BP-14) – emissions vent to First Stage ClO₂ Scrubber (BP-19) • Third ClO₂ Washer (BP-15) – emissions vent to ClO₂ Gas Scrubber (BP-20) • Third ClO₂ Seal Chest (BP-16) – emissions vent to ClO₂ Gas Scrubber (BP-20) • First Stage ClO₂ Scrubber (BP-19) • ClO₂ Gas Scrubber (BP-20) • Methanol Storage Tank (ER-1) • ClO₂ Tail Gas Scrubber (ER-2) – emissions vent to First Stage ClO₂ Scrubber (BP-19) <p><i>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.</i></p>
AA-009	<p>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.</p> <p><i>Dryer Exhaust Fan No.1 (PD-12)</i></p> <p><i>Dryer Exhaust Fan No.2 (PD-13)</i></p>

Emission Point	Description
AA-010	<p>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:</p> <ul style="list-style-type: none"> • Soap Collection Foam Breaker Tank (EV-7) • Soap Collection Overflow Tank (EV-7a) • Soap Collection Tank (EV-8) • Nos. 1, 2, and 3 Weak BL Tanks (EV-10, EV-15, EV-16) • Boilout/Spill Tank (EV-16a) • No. 3 Weak BL Soap Overflow Tank (EV-17) • No. 3 Weak BL Foam Breaker Tank (EV-18) • No. 3 Weak BL Soap Tank (EV-19) • Hogging Ejector (EV-27) • No. 1 and 2 Heavy BL Tanks (EV-29, EV-30) • BL Loading Racks (EV-34, EV-34a) • No. 1 and 2 Multiple-Effect Evaporators (EV-36, EV-36a) routed to the LVHC system for control <p><i>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.</i></p>
AA-011	<p>1,755.3 MMBTU / Hour Recovery Furnace [constructed in 1983] – The Recovery Furnace combusts black liquor and natural gas fuel and is equipped with an electrostatic precipitator (UT-9).</p>
AA-012	<p>Smelt Dissolving Tank [equipped with a cyclonic scrubber (UT-7)] – The smelt dissolving tank is used to dissolve smelt from the Recovery Furnace.</p>
AA-013	<p>138.6 MMBTU / Hour Lime Kiln [constructed in 1983 and used to convert lime mud (CaCO₃) 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).</p> <p><i>Note: The Lime Kiln is a control device for low volume, high concentration (LVHC) non-condensable gases (NCGs) and stripper off-gases (SOGs).</i></p>

Emission Point	Description
AA-014	<p>Recausticizing Area (RC) – The main function of the recausticizing area is to causticize green liquor with returned lime to form white liquor (“WL”) for the next cooking cycle. The recausticizing area includes the following significant sources of emissions:</p> <ul style="list-style-type: none"> • No. 1 Lime Slaker Scrubber Vent (RC-1) • No. 2 Lime Slaker Scrubber Vent (RC-2) • Lime Mud Pressure Filter Vent (RC-3) • WL Pressure Filter Vent (RC-4) • Lime Mud Filter Hood (RC-5) • Hot Lime Emergency Dump to Ground (RC-9) • Green Liquor Clarifier (RC-10a) • Dreg Filter Exhaust (RC-14) • No. 1, 2, and 3 WL Storage Tanks (RC-15a, RC-15b, RC-15c) • Precoat Filter Vacuum Exhaust (RC-16) • Precoat Filtrate Level Tank (RC-17) • Swing Tank/Weak Wash Tank (RC-19) • Scrubber Re-circulating Tank (RC-20) • Kiln NCG Bypass Vent (RC-21) • Kiln SOG Bypass Vent (RC-21a) • Kiln Chip Bin Gases Bypass Vent (RC-21b) • White Liquor Unloading (RC-25) • Polymer Storage Tank (RC-30) • Used Oil Tank (RC-31) • Causticizers (five) (RC-32)
AA-015	<p>846 MMBTU / Hour Power Boiler [constructed in 1983 and used for steam production] – The boiler is equipped with an electrostatic precipitator (UT-3).</p> <p><i>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.</i></p>
AA-016	<p>31.5 MMBTU / Hour Incinerator [constructed in 1994 and used to incinerate NCGs] – The incinerator is equipped with an SO₂ absorption tower (RC-22).</p> <p><i>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 NESHAP 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).</i></p>
AA-021	<p>Oxygen Delignification Process – Emissions are routed to the Recovery Furnace (Emission Point AA-011) or the Power Boiler (Emission Point AA-015)</p> <ul style="list-style-type: none"> • No. 2 Oxygen Reactor Blowtube (O2D-4) (venting emissions from the No. 1 and No. 2 Oxygen Reactors) • Filtrate Storage Tank (O2D-5) <p><i>For the Oxygen Delignification System, the Mill complies with 40 CFR 63, Subpart S requirements through use of the Clean Condensate Alternative.</i></p>
AA-023	<p>Oxygen Delignification Process Atmospheric Diffusion Washer (No. 02D-6) – Emission are routed to the Recovery Furnace (Emission Point AA-011) or the Power Boiler (Emission Point AA-015)</p> <p><i>For the Oxygen Delignification System, the Mill complies with the 40 CFR 63, Subpart S requirements through use of the Clean Condensate Alternative.</i></p>

Emission Point	Description
AA-025	<p>Kraft Pulping Process Low Volume High Concentration (LVHC) System – At this mill, the Kraft Pulping Process LVHC system includes the following equipment:</p> <p><u>Digester System:</u></p> <ul style="list-style-type: none"> • Continuous Digester (PM-40) • Chip Steaming Vessel (PM-7) • No. 1C Flash Tank • No. 2 Flash Tank <p><u>Evaporator System:</u></p> <ul style="list-style-type: none"> • No. 1 and 2 Multiple-Effect Evaporators (EV-36, EV-36a) <p>Turpentine Recovery System:</p> <ul style="list-style-type: none"> • Turpentine Decanter Underflow Tank (PM-20) • Turpentine Condenser <p><u>Steam Stripper System:</u></p> <ul style="list-style-type: none"> • No. 1 Foul Condensate Storage Tank (EV-31) • No. 2 Foul Condensate Storage Tank (EV-31a) • Methanol Condenser • Methanol Storage Tank • Methanol Rectification Column • Methanol Partial Condenser • Red Oil Decanter
AA-028	<p>Kraft Pulping System Process Condensates – For this Mill, condensates are collected from the following equipment:</p> <ul style="list-style-type: none"> • No. 1 Evaporator Surface Condenser • No. 1 Evaporator Fifth Effect • No. 1 Evaporator Surface Condenser • No. 2 Evaporator Fifth Effect • No. 2 Evaporator Surface Condenser • Digester System Condensates • Primary Turpentine Condenser • Secondary Turpentine Condenser • Turpentine Gas Cooler • Turpentine Decanter Underflow Tank • LVHC Collection System Condensates (including the No. 1 and 2 Condensate Recovery Pots) • Digester System Condensates – conveyed to Turpentine Recovery System Decanter • 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	<p>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).</p>

Emission Point	Description
AA-036	Petroleum Coke Operation – The two (2) petroleum coke silos are each equipped with a baghouse to control particulate matter emissions during unloading.
AA-037	340 HP Diesel-Powered Fire Pump (MS-9); 61 HP Lime Kiln Back-Up Diesel-Fired Engine (RC-34); 53 HP Back-Up Dump Tank Agitator Drive Diesel-Fired Engine (RC-35); and 210 HP Diesel-Powered Fire Pump (RC-36)
AA-038	250 HP Effluent Waste Lift Diesel-Fired Emergency Engine (WW-17)
AA-039	Road Fugitive Emissions
AA-040	<p>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:</p> <ul style="list-style-type: none"> • Turpentine Decanter Underflow Tank (PM-20) – vents to gas cooler, then to LVHC System for control • Turpentine Condenser – vents to gas cooler, then to LVHC System for control • Turpentine Storage Tank (PM-21) – vents to LVHC System for control • Turpentine Loading System (PM-22) – vents to LVHC System for control
AA-041	<p>Steam Strippers and Methanol Rectification System – Two (2) 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:</p> <ul style="list-style-type: none"> • No. 1 Steam Stripper (EV-STR) • No. 1 Foul Condensate Storage Tank (EV-31) • No. 2 Steam Stripper (EV-STRa) • No. 2 Foul Condensate Storage Tank (EV-31a) • Methanol Condenser • Methanol Storage Tank • Methanol Rectification Column • Methanol Partial Condenser • Red Oil Decanter <p><i>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.</i></p>

Emission Point	Description
AA-042	<p>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:</p> <ul style="list-style-type: none"> • Tall Oil Reactor (EV-2) with emissions controlled by a Scrubber (EV-1) • Brine Neutralization Tanks (EV-20) • Brine Receivers (EV-21) • No. 1, 2, 3, and 4 Decanters (EV-22, EV-23, EV-22a and EV-23a) • Soap Skimmer Tank (EV-25) • Soap Skimmer Standpipe (EV-26) • Tall Oil Soap Loading (EV-35)
AA-043	<p>Kraft Pulping Process High Volume Low Concentration (HVLC) System – The HVLC System include emissions from the following sources:</p> <p><u>Pulp Washing System:</u></p> <ul style="list-style-type: none"> • Atmospheric Diffusion Washer (PM-24a) • No. 1 Atmospheric Diffuser Filtrate Tank (PM-23) • Unscreened HD Storage Tank (PM-24) • Vacuum Drum Washer (PM-28) • BSW Filtrate Tank (PM-29) <p><u>Knotter System:</u></p> <ul style="list-style-type: none"> • Knot Drainer (PM-25) • Open Knot Bin (PM-27) • Knots and Rejects Tank (PM-30) • Knotters (two primary and one secondary) <p><u>Screen System:</u></p> <ul style="list-style-type: none"> • Tertiary Screen Rejects Drainer (PM-35) • Primary Screen Feed Tank (PM-36) • Primary Screen Rejects Tank (PM-37) • Secondary Screen Rejects Chest (PM-38) • Tertiary Screen Accepts Chest (PM-39) • Nos, 1, 2, 3 and 4 Primary Screens • Secondary Screen • Tertiary Screen <p><u>Decker System:</u></p> <ul style="list-style-type: none"> • Brown Stock Decker (PM-31) • Decker Filtrate Seal Tank (PM-32) <p><u>Oxygen Delignification System:</u></p> <ul style="list-style-type: none"> • No. 1 Oxygen Reactor • No. 2 Oxygen Reactor • No. 2 Oxygen Reactor Blowtube (No. 02D-4) • Filtrate Storage Tank (O2D-5) • Atmospheric Diffusion Washer (No. 02D-6) <p><u>Weak Liquor Storage Tanks:</u></p> <ul style="list-style-type: none"> • Filtered Weak BL Tank (PM-18) • Weak Black Liquor (BL) Spill Tank (PM-12) • Nos. 1, 2, and 3 Weak BL Tanks (EV-10, EV-15, and EV-16) • Boilout / Spill Tank (EV-16a) <p><u>Chip Bin (PM-7a)</u> (when not using fresh steam)</p>

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 or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process that exceeds forty percent (40%) opacity subject to the following exceptions:

- (a) Start-up operations may produce emissions, which exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) 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 (1) 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 or allow the discharge into the ambient air from any point source 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 Condition 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 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 gas-borne 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 AA-025 AA-028 AA-041 AA-043	40 CFR Part 63, Subpart S – NESHAP from the Pulp and Paper Industry 40 CFR 63.440, 63.453(q), and Table 1; Subpart S	3.B.1	HAPs	General Applicability
AA-011 AA-012 AA-013	40 CFR Part 63, Subpart MM – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfitic, and Stand-Alone Semi-chemical Pulp Mills 40 CFR 63.860 and Table 1; Subpart MM	3.B.2	HAP Metals	General Applicability
AA-006 AA-007 AA-010 through AA-013 AA-016 AA-041	40 CFR Part 60, Subpart BB – Standards of Performance for Kraft Pulp Mills 40 CFR 60.280; Subpart BB	3.B.3	TRS PM	General Applicability
AA-015	40 CFR Part 60, Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators 40 CFR 60.40(c); Subpart D	3.B.4	PM NO _x	General Applicability
AA-037 AA-038	40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6580, 63.6585, 63.6590, 63.6665, and Table 8; Subpart ZZZZ	3.B.5	HAPs	General Applicability
AA-038	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200(a)(2)(i), 60.4218, and Table 8; Subpart IIII	3.B.6	VOCs NO _x CO PM	General Applicability
AA-005 AA-015	40 CFR Part 63, Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63.7480, 63.7485, 63.7490, 63.7565, and Table 10; Subpart DDDDD	3.B.7	HAPs	General Applicability
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.B.8	PM (filterable)	$E = 4.1 \cdot (p^{0.67})$
AA-005 AA-011 AA-015	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.9	PM (filterable)	$E = 0.8808 \cdot (I^{-0.1667})$
	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-005	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued November 23, 1993	3.B.11	PM (filterable)	0.92 lbs. / hour
			SO ₂	0.11 lbs. / hour
			CO	7.2 lbs. / hour
			VOCs (as carbon)	0.53 lbs. / hour
			Hours of Operation	Do not operate Emission Point AA-005 simultaneously with Emission Points AA-011 and AA-015 for more than 1,000 hours / year (Rolling 365-Day Total).
			Fuel Restriction	Only Combust Natural Gas
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 (PSD Air Quality Limit)		NO _x	15.0 lbs. / hour
AA-006 AA-007 AA-010	40 CFR 60.283(a)(1); Subpart BB	3.B.12	TRS	Limited to 5 ppm by volume on a dry basis corrected to 10% oxygen unless: 1. Exhaust gases are combusted in the Lime Kiln; or 2. Exhaust gases are combusted in the Incinerator and subjected to a minimum temperature of 1200°F for at least 0.5 seconds
AA-008 AA-025	40 CFR 63.450; Subpart S	3.B.43	HAPs	Each enclosure and closed-vent system shall meet the requirements specified by 40 CFR 63.450.
	40 CFR 63.445(b) and (c); Subpart S	3.B.44		Bleaching system equipment (where chlorinated compounds are introduced) shall be enclosed and routed to a control device in accordance with certain requirements
	40 CFR 63.445(d)(1)(ii); Subpart S	3.B.45		Reduce the emission of chloroform to the atmosphere by complying with the applicable effluent limitation guidelines and standards specified in 40 CFR Part 430, Subpart B
AA-010 AA-012 AA-042	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	3.B.13	H ₂ S	1 grain / 100 standard cubic feet
AA-011	40 CFR 60.282(a)(1), 60.283(a)(2), and 60.284(e)(1); Subpart BB	3.B.14	Opacity	< 35% Periods of excess emissions (excluding SSM periods) shall not be ≥ 35% for more than 6% of the operating time within any quarterly period

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-011	40 CFR 60.282(a)(1), 60.283(a)(2), and 60.284(e)(1); Subpart BB	3.B.14	PM (filterable)	0.044 gr. / dscf (or 0.10 grams / 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
	40 CFR 63.864(k)(2)(i); Subpart MM	3.B.15	Opacity	Periods of excess emissions shall not exceed 35% for no more than 2% of the operating time within any semi-annual period when spent pulping liquor is being fed
	11 Miss. Admin. Code Pt. 2, R. 1.3.E.	3.B.16	PM (filterable)	4 lbs. / ton of equivalent air-dried Kraft pulp
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued January 12, 1982	3.B.17	SO ₂	300 ppm corrected to 8% oxygen
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued April 9, 1991	3.B.18	CO	300 ppm corrected to 8% oxygen (8-hr average)
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in PSD Permit to Construct issued February 1, 2018 (PSD BACT Limits)	3.B.19	NO _x	80 ppm corrected to 8% oxygen (8-hr average)
				Operate Equipment Using a Fourth Level of Combustion Air
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 (PSD Air Quality Limit)			227.5 lbs. / hour and 996.3 tpy
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(j), as established in PSD Permit to Construct issued February 1, 2018 (PSD BACT Limits)		GHG	208.1 lbs. / MMBTU; 365,318 lbs. / hour and 1,600,092 tpy
		CO ₂ e	208.5 lbs. / MMBTU 365,977 lbs. / hour and 1,602,979 tpy	
11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued February 1, 2018		Fuel Restriction	Black liquor is the primary fuel, but natural gas and ultra-low sulfur diesel fuel can be used as an auxiliary fuel	
			The fossil fuel annual capacity factor shall be 10% or less	
AA-011	40 CFR 63.862(a)(1)(i)(A) – (C), Subpart MM	3.B.20	HAP Metals (as PM)	0.044 gr. / dscf corrected to 8% oxygen
AA-012				0.20 lbs. / ton black liquor solids fired
AA-013				0.064 gr. / dscf corrected to 10% oxygen
AA-012 AA-013 AA-016	11 Miss. Admin. Code Pt. 2, R. 1.4.B(1).	3.B.21	SO ₂	500 ppmv

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-012	40 CFR 60.282(a)(2) and 60.283(a)(4); Subpart BB	3.B.22	PM (filterable)	0.2 lbs. / ton black liquor solids (dry weight)
			TRS	0.033 lbs. / ton black liquor solids (measured as H ₂ S)
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued April 9, 1991	3.B.23	SO ₂	36 ppm (stack gas)
AA-012 AA-013	40 CFR 63.864(j)(3) and (k)(2)(iv); Subpart MM	3.B.24	Parametric Monitoring	Limited to less than 6 parametric monitoring values based on a 3-hour block average that are outside of the established parameters within any 6-month reporting period when spent pulping liquor is being fed, (with the exception of pressure drop during periods of start-up and shutdown)
AA-013	40 CFR 60.282(a)(3)(i) – (ii); Subpart BB	3.B.25	PM (filterable)	0.066 gr. / dscf corrected to 8% oxygen, when <i>gaseous</i> fossil fuel is burned; 0.13 gr. / dscf corrected to 10% oxygen, when <i>liquid</i> fossil fuel is burned
	40 CFR 60.283(a)(5); Subpart BB 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued May 3, 2002		TRS	8 ppmvd corrected to 10% oxygen, not to exceed 2.81 lbs. / hour and 12.3 tpy
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued January 28, 2005	3.B.26	SO ₂	17.5 lbs. / hour and 76.9 tpy
	11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 (PSD Air Quality Limit)	3.B.27	NO _x	100 lbs. / hour and 438 tpy
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued January 28, 2005	3.B.28	CO	50.0 lbs. / hour and 220.0 tpy
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued January 28, 2005 and modified September 29, 2005	3.B.29	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
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Permit to Construct issued May 3, 2002	3.B.30	Fuel Restriction	Maximum annual fuel oil usage of 10,000 gallons / year for used oil generated on-site
Control Device			The Lime Kiln shall not operate without the use of the scrubber	

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-013 AA-015 AA-016 AA-042	40 CFR Part 64 – Compliance Assurance Monitoring 40 CFR 64.2(a); CAM	3.B.59	SO ₂ PM H ₂ S	Applicability
AA-015	40 CFR 60.42(a)(1) – (2); Subpart D	3.B.31	PM (filterable)	0.10 lbs. / MMBTU heat input from <u>fossil fuel and/or wood residue</u> combustion
	40 CFR 60.44(a)(2), Subpart D 11 Miss. Admin. Code Pt. 2, 2.2.B(10)., as established in PSD Permit to Construct issued January 12, 1982 and modified February 22, 1983	3.B.32	NO _x	0.30 lbs. / MMBTU heat input derived from <u>gaseous fossil fuel, liquid fossil fuel, and wood residue</u>
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(2).	3.B.33	PM (filterable)	0.30 gr. / dscf
	11 Miss. Admin. Code Pt. 2, 2.2.B(10)., as established in PSD Permit to Construct issued March 28 1995	3.B.34	CO	338.4 lbs. / hour
	40 CFR 63.7500(a), Table 2 (Items 1 and 7), and Table 4 (Item 4); Subpart DDDDD	3.B.35	HCl	0.022 lbs. / MMBTU of heat input
			Hg	0.0000057 lbs. / MMBTU of heat input
			CO	720 ppmv at 3% oxygen (30-day rolling average)
			PM (filterable)	0.037 lbs. / MMBTU of heat input
			Opacity	10% daily block average
	AA-016	11 Miss. Admin. Code Pt. 2, R. 1.3.H(1).	3.B.36	PM (filterable)
11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued August 9, 1994		3.B.37	SO ₂	9.0 lbs. / hour and 39.42 tpy
			CO	22.0 lbs. / hour and 96.36 tpy
			TRS	2.1 lbs. / hour and 9.2 tpy
			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
11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 (PSD Air Quality Limit)			NO _x	6.0 lbs. / hour and 26.3 tpy

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-016	40 CFR 60.283(a)(1); Subpart BB	3.B.38	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 seconds
AA-021 AA-023	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in Title V Operating Permit issued October 20, 2020 and modified March 29, 2022	3.B.39	VOCs CO	Route exhaust to the Recovery Furnace (AA-011) or Power Boiler (AA-015) for at least 96% of the total process operating time within a semi-annual period
AA-025 AA-043	40 CFR 63.443(a) – (c); Subpart S	3.B.40	HAPs	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
	40 CFR 63.443(d); Subpart S	3.B.41		Control 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
	40 CFR 63.443(e); Subpart S	3.B.42		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: 1. 1% for control devices used to reduce the total emissions from the LVHC system; and 2. 4% for control devices used to reduce the total emissions from the HVLC system; and 3. 4% for control devices used to reduce the total emissions from both the LVHC and HVLC systems
AA-028	40 CFR 63.446(b) and (c)(3), Subpart S 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Title V Operating Permit issued November 23, 2009	3.B.46	HAPs	Collect condensate streams containing at least 11.1 lbs. / ton of Oven-Dried Pulp (ODP) from 85% of the condensate streams being collected on a 15-day rolling average
	40 CFR 63.446(d); Subpart S	3.B.47	HAPs	The pulping process condensates shall be conveyed in a closed collection system as specified in 40 CFR 63.446(d)(1) and (2)
	40 CFR 63.446(e)(5), Subpart S	3.B.48		Treat a total of at least 10.2 lbs. / ton ODP on a 15-day rolling average
	40 CFR 63.446(f) and 63.443(c) – (d); Subpart S	3.B.49		Control emissions as stated in 40 CFR 63.443(c) and (d)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-028	40 CFR 63.446(g); Subpart S	3.B.50	HAPs	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	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in PSD Permit to Construct issued January 28, 2005 and modified September 29, 2005	3.B.53	PM / PM ₁₀ (filterable only)	1.6 lbs. / hour and 7.1 tpy
			Operational Limitation	The baghouse must be operated at all times the ground petroleum coke silo is operated
AA-037 AA-038	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.54	PM (filterable)	0.6 lbs. / MMBTU
	40 CFR 63.6640(f)(1) – (3); Subpart ZZZZ 40 CFR 60.4211(f)(1) – (3); Subpart IIII	3.B.55	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
AA-037	40 CFR 63.6602, 63.6625(h) – (i), and Table 2c (Item 1); Subpart ZZZZ	3.B.56	Maintenance Requirements	Comply with the following requirements: <ol style="list-style-type: none"> 1. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil analysis program; 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; 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 start-up, the permittee shall minimize the engine's time spent at idle and minimize the engine's start-up time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
AA-038	40 CFR 60.4202(a)(2), 60.4205(b), and 60.4206; Subpart IIII	3.B.57	NMHC + NO _x	4.0 grams per kilowatt-hour
			CO	3.5 grams per kilowatt-hour
			PM	3.5 grams per kilowatt-hour
			Opacity (from smoke)	Applicable Standards
	40 CFR 60.4207(b); Subpart IIII	3.B.58	Fuel Requirement	15 ppm Sulfur Content (Max.); and 40 Cetane Index (Min.) or 35% Aromatic Content (Max. – by volume)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Limit / Standard
AA-043 (selected HVLC sources, see note in Limit / Standard column)	40 CFR 63.443(a)(1)(iii) and (v), 63.447; Subpart S 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10), as established in Title V Operating Permit issued November 23, 2009	3.B.51	HAPs	Collect a total mass of at least 2.0 lbs. / ton ODP from 15% of the condensate streams being collected on a 15-day rolling average Only the oxygen delignification system, the atmospheric diffusion washer, and the associated filtrate tank comply with the HVLC requirements in Subpart S by using the Clean Condensate Alternative
		3.B.52		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 permittee is subject to and shall comply with all applicable requirements found in 40 CFR 63, Subpart S – National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Pulp and Paper Industry and 40 CFR Part 63, Subpart A – General Provisions (as specified in Table 1 of Subpart S).

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 at all times.

The 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; Subpart S)

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

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 at all times. 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.

The 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; Subpart MM)

- 3.B.3 For Emission Points AA-006, AA-007, AA-010 through AA-013, AA-016, and AA-041, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart BB – Standards of Performance for Kraft Pulp Mills.

(Ref.: 40 CFR 60.280, Subpart BB)

- 3.B.4 For Emission Point AA-015, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators in which a steam generating unit commenced construction after August 17, 1971.

(Ref.: 40 CFR 60.40(c); Subpart D)

- 3.B.5 For Emission Points AA-037 and AA-038, the facility is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR Part 63, Subpart A – General Provisions (as specified in Table 8 of Subpart ZZZZ).

Emission Point AA-037 consists of existing emergency compression-ignition (CI) stationary RICE each rated at less than / equal to 500 brake HP and located at a major source of HAP emissions.

Emission Point AA-038 is a new emergency CI stationary RICE rated at less than / equal to 500 brake HP and 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; Subpart ZZZZ)

- 3.B.6 For Emission Point AA-038, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) and 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; Subpart IIII)

- 3.B.7 For Emission Points AA-005 and AA-015, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart DDDDD – NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

and 40 CFR Part 63, Subpart A – General Provisions (as specified in Table 10 of 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 40 CFR 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 40 CFR 63.7575.

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

- 3.B.8 For Emission Point AA-000 (Facility-Wide), except as otherwise specified or limited herein, the permittee shall not cause or allow the emission of particulate matter (PM) in total quantities in any one (1) hour from any manufacturing process (which includes any associated stacks, vents, outlets, or combination thereof) to exceed the amount determined by the following relationship:

$$E = 4.1 \cdot (p^{0.67})$$

where “*E*” is the emission rate in pounds per hour and “*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 particulate matter (PM) from the unit shall not exceed an emission rate as determined by the relationship:

$$E = 0.8808 \cdot (I^{-0.1667})$$

where “*E*” is the emission rate in pounds per million BTU (MMBTU) per hour heat input, and “*I*” is the heat input in MMBTU 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, unless otherwise specified herein, 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 MMBTU heat input.

(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.

In addition, 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.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued November 23, 1993)

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 – PSD Air Quality Limit)

3.B.12 For Emission Points AA-006, AA-007, and AA-010, the 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 five (5) parts per million (ppm) by volume on a dry gas basis corrected to ten percent (10%) oxygen unless one (1) of the following criteria is met:

- (a) The gases are combusted in the Lime Kiln (Emission Point AA-013) while operated in accordance with 40 CFR 60.283(a)(5), Subpart BB; 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 seconds.

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

3.B.13 For Emission Points AA-010, AA-012, and AA-042, the permittee shall not cause or allow the emission of any gas stream that contains hydrogen sulfide (H₂S) 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.14 For Emission Point AA-011, the permittee shall not discharge into the atmosphere any gases that exhibit thirty-five (35) percent opacity (on a 6-minute average) or greater. In addition, the total periods of excess emissions exhibiting opacity 35% or greater [excluding periods of start-up, shutdown, or maintenance (SSM)] shall not exceed six (6) percent 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 grains per dry standard cubic foot (gr. / dscm) [or 0.10 grams per dry standard cubic meter (dscm)] corrected to eight (8) percent oxygen.

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

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

- 3.B.15 For Emission Point AA-011, the permittee shall limit the total periods of emissions exhibiting an opacity greater than 35% to no more than two (2) percent of the operating time within any semi-annual 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 emission of filterable PM from the 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, the permittee shall not cause or allow SO₂ emissions to exceed 300 ppm corrected to 8% oxygen.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued January 12, 1982)

- 3.B.18 For Emission Point AA-011, the permittee shall not cause or allow carbon monoxide (CO) emissions to exceed 300 ppm corrected to 8% oxygen based on an 8-hour average.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in 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 Best Available Control Technology (BACT), the permittee is required to operate the Recovery Furnace and associated equipment using a fourth level of combustion air to meet the NO_x emission limitation as established in the PSD Permit to Construct issued February 1, 2018. The Recovery Furnace primarily combusts 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 ten (10) percent or less per calendar year. Please note that the criteria for calculation of the annual capacity factor are set forth in 40 CFR 60.44b(d), Subpart Db.

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.: 11 Miss. Admin. Code Pt. 2, Ch. 5., 40 CFR 52.21(j) and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 – PSD BACT Limits and PSD Air Quality Limit)

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in 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 (Emission Point AA-011) that contain a PM concentration in excess of 0.044 gr. / dscf (or 0.10 grams / dscm) corrected to 8% oxygen.

The permittee shall not discharge into the atmosphere any gases from the existing smelt dissolving tank (Emission Point AA-012) that contain a PM concentration in excess of 0.20 pounds per ton of black liquor solids fired (or 0.10 kilograms per megagram 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) that contain contain a PM concentration in excess of 0.064 gr. / dscf (or 0.15 grams / dscm) corrected to 10% oxygen.

(Ref.: 40 CFR 63.862(a)(1)(i)(A) – (C); Subpart MM)

- 3.B.21 For Emission Points AA-012, AA-013, and AA-016, the permittee shall not cause or allow the emission of gas containing sulfur oxides (measured as SO₂) in excess of 500 ppm (by volume).

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

- 3.B.22 For Emission Point AA-012, the permittee shall not discharge into the atmosphere any gases that contain PM in excess of 0.2 pounds per ton of black liquor solids by dry weight (0.1 grams per kilogram of 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 that contain TRS (measured as H₂S) in excess of 0.033 pounds per ton of black liquor solids (or 0.016 grams per kilogram black liquor solids).

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

- 3.B.23 For Emission Point AA-012, the permittee shall not cause or allow SO₂ emissions to exceed thirty-six (36) ppm in the stack gas.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued on April 9, 1991)

- 3.B.24 For Emission Points AA-012 and AA-013, the permittee shall be limited to less than six (6) 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), Subpart MM 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 start-up 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.25 For Emission Point AA-013, the permittee shall not cause to be discharged into the atmosphere from any Lime Kiln gases that contain PM in excess of 0.066 gr. / dscf (or 0.15 grams / dscm) corrected to 10% oxygen when gaseous fossil fuel is burned and 0.13 gr. / dscf (or 0.30 grams / dscm) corrected to 10% oxygen when liquid fossil fuel is burned.

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

(Ref.: 40 CFR 60.282(a)(3)(i) – (ii) and 60.283(a)(5); Subpart BB)

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued May 3, 2002)

- 3.B.26 For Emission Point AA-013, the permittee shall not cause or allow SO₂ emissions to exceed 17.5 pounds per hour and 76.9 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued January 28, 2005)

- 3.B.27 For Emission Point AA-013, the permittee shall not cause or allow NO_x emissions to exceed 100 pounds per hour and 438 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 – PSD Air Quality Limit)

- 3.B.28 For Emission Point AA-013, the permittee shall not cause or allow CO emissions to exceed 50.0 pounds per hour and 220.0 tons per year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued January 28, 2005)

- 3.B.29 For Emission Point AA-013, the permittee is authorized to combust natural gas, No. 6 fuel oil, used oil generated on-site, petroleum coke, rectified methanol, and tall oil as fuel. NCGs and SOGs (stripper off-gases) are controlled by the Lime Kiln and also have a fuel value.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued January 28, 2005 and modified September 29, 2005)

- 3.B.30 For Emission Point AA-013, the permittee shall be limited to a maximum annual fuel usage rate of 10,000 gallons per year for used oil generated on-site as a fuel. The used oil generated on-site 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 permittee will execute an orderly shutdown of the Lime Kiln.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued May 3, 2002)

- 3.B.31 For Emission Point AA-015, the permittee shall not discharge into the atmosphere any gases that contain PM in excess of 0.10 pounds per MMBTU heat input derived from *fossil fuel and/or wood residue*. For the purpose of this permit, 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 twenty (20) percent opacity except for one (1) 6-minute period per hour of not more than twenty-seven (27) percent opacity.

(Ref.: 40 CFR 60.42(a)(1) – (2); Subpart D)

- 3.B.32 For Emission Point AA-015, the permittee shall not discharge into the atmosphere any gases that contain NO_x in excess of 0.30 pound per MMBTU heat input derived from *gaseous fossil fuel and wood residue*.

(Ref.: 40 CFR 60.44(a)(2); Subpart D and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued January 12, 1982 and modified February 22, 1983)

- 3.B.33 For Emission Point AA-015, the permittee shall be allowed to emit PM up to 0.30 grains per standard dry cubic feet from a combination fuel boiler.

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

- 3.B.34 For Emission Point AA-015, the permittee shall not cause or allow CO emissions to exceed 338.4 pounds per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, 2.2.B(10)., as established in PSD Permit to Construct issued March 28, 1995)

- 3.B.35 For Emission Point AA-015, except during periods of start-up and shutdown, , the permittee must not exceed the following emission limits (or the alternative output-based limits) for an existing boiler capable of burning wet biomass as fuel:

- (a) Hydrogen chloride (HCl) is limited to 0.022 pounds per MMBTU of heat input – if using EPA Test Method M26A, collect a minimum of one (1) dscm per run; if using EPA Test Method M26, collect a minimum of 120 liters per run.
- (b) Mercury (Hg) is limited to 0.0000057 pounds per MMBTU of heat input – if using EPA Test Method M29, collect a minimum of three (3) dscm per run; if using EPA

Test Method M30A or M30B, collect a minimum sample as required by the specified method; if using ASTM D6784, collect a minimum of three (3) dscm.

- (c) CO is limited to 720 ppm by volume on a dry basis corrected to three (3) percent oxygen based a 30-day rolling average (when using a CEMS for CO).
- (d) Filterable PM is limited to 0.037 pounds per MMBTU of heat input by collecting a minimum of two (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 (based on a daily block average).

(Ref.: 40 CFR 63.7500(a), Table 2 (Items 1 and 7), and Table 4 (Item 4); Subpart DDDDD)

3.B.36 For Emission Point AA-016, the permittee shall not cause or allow PM emissions to exceed 0.2 grains per standard dry cubic foot of flue gas calculated to twelve (12) percent carbon dioxide (CO₂) by volume for products of combustion. CO₂ 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.37 For Emission Point AA-016, except as otherwise specified or limited herein, the permittee shall limit emissions as described below:

- (a) NO_x is limited to 6.0 pounds per hour and 26.3 tpy (to demonstrate compliance with the NAAQS);
- (b) CO is limited to 22.0 pounds per hour and 96.36 tpy;
- (c) SO₂ is limited to 9.0 pounds per hour and 39.42 tpy;
- (d) TRS is limited to 2.1 pounds per hour and 9.2 tpy; and
- (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.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Permit to Construct issued August 9, 1994)

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5. and 40 CFR 52.21(k), as established in PSD Permit to Construct issued February 1, 2018 – PSD Air Quality Limit)

3.B.38 For Emission Point AA-016, the permittee shall prohibit the emission of TRS in excess of five (5) ppm by volume on a dry basis (corrected to 10% oxygen) unless one (1) of the following criteria is met:

- (a) The gases are combusted with other waste gases in an incinerator or other device and subjected to a minimum temperature of 650°C (1200°F) for at least 0.5 seconds; or
- (b) The gases are combusted in a Lime Kiln / Recovery Furnace that is not subject to the 40 CFR Part 60 – Subpart BB and are subjected to a minimum temperature of 650°C (1200°F) for at least 0.5 seconds.

Please 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.39 For Emission Points AA-021 and AA-023, the permittee shall capture the exhaust gases generated by the Oxygen Delignification Process and the Oxygen Delignification Process Atmospheric Diffusion Washer and route them to either the Recovery Furnace (Emission Point AA-011) or the Power Boiler (Emission Point AA-015) for at least ninety-six (96) percent of the total process operating time within any semi-annual period. Additionally, the permittee may route the noted exhaust gases directly to the atmosphere for up to four (4) percent of the total process operating time within any semi-annual period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C, as established in Title V Operating Permit issued October 20, 2020 and modified March 29, 2022)

- 3.B.40 For Emission Points AA-025 and AA-043, each equipment system shall be enclosed, 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, Subpart S.

(Ref.: 40 CFR 63.443(a) – (c); Subpart S)

- 3.B.41 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) – (b), Subpart S shall meet one (1) of the following criteria:

- (a) Reduce the total HAP emissions by at least ninety-eight (98) percent by weight;
- (b) Reduce the total HAP concentration at the outlet of the thermal oxidizer to at least twenty (20) parts per million by volume (corrected to 10% oxygen on a dry basis);
- (c) Reduce the total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871°C (or 1600°F) and a minimum residence time of 0.75 seconds; or
- (d) Reduce the total HAP emissions using one (1) of the following options:
 - (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 (or 150 MMBTU per hour) by introducing the HAP emission stream with the combustion air.

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

3.B.42 For Emission Points AA-025 and AA-043, the periods of excess emissions reported under 40 CFR 63.455, Subpart S shall not be a violation of the limits and requirements specified in Condition 3.B.41 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) One (1) percent for control devices used to reduce the total HAP emissions from the LVHC system;
- (b) Four (4) percent for control devices used to reduce the total HAP emissions from the HVLC system; and
- (c) Four (4) percent 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.43 For Emission Points AA-008 and AA-025 [including each enclosure and closed vent system referenced in 40 CFR 63.443(c) and 63.445(b), Subpart S], 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), Subpart S. In addition, each enclosure or hood opening closed during the initial performance test specified in Condition 5.B.64 and detailed in 40 CFR 63.457(a), Subpart S 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), Subpart S 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), Subpart S].
- (c) Each bypass line in the closed vent system that could divert vent streams containing HAPs to the atmosphere without meeting the emission limitations specified in 40 CFR 63.443(c) and 63.445(b), Subpart S shall comply with one (1) of the following requirements:

- (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 fifteen (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.44 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, Subpart S) to a control device in accordance with one (1) of the following requirements:

- (a) Reduce the total mass of chlorinated HAPs in the vent stream entering the control device by at least ninety-nine (99) percent by weight;
- (b) Achieve a treatment device outlet concentration of no more than ten (10) parts per million by volume of total chlorinated HAPs; or
- (c) Achieve a treatment device outlet mass emission rate of 0.002 pounds of total chlorinated HAPs per ton of oven-dried pulp (ODP).

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

3.B.45 For Emission Point AA-008, the permittee shall reduce the emission of chloroform to the atmosphere by complying with the applicable effluent limitation guidelines and standards specified in 40 CFR 430, Subpart B – Bleached Papergrade Kraft and Soda Subcategory [specifically 40 CFR 430.24(a)(1), (e), and 40 CFR 430.26(a), (c)].

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

3.B.46 For Emission Point AA-028, the permittee shall collect pulping process condensates generated, produced, or associated with an equipment system containing at least 11.1 pounds of total HAPs per ton of ODP from eighty-five (85) percent of the condensate streams being collected (based on a 15-day rolling average).

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

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Title V Operating Permit issued November 23, 2009)

3.B.47 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, Subpart RR (National Emission Standards for Individual Drain Systems) except for closed vent systems and control devices designed and operated in accordance with 40 CFR 63.450 and 63.443(d), Subpart S instead of 40 CFR 63.693, Subpart DD [as specified in 40 CFR 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(5)(iii); Subpart RR]; and
- (b) If a condensate tank used is in a 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, vented into a closed-vent system that meets the requirements specified in 40 CFR 63.450 – Subpart S, and routed to a control device that meets the requirements of 40 CFR 63.443(d) – Subpart S; and
 - (2) Each opening shall be maintained in a closed, sealed position at all times that a 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.48 For Emission Point AA-028, the pulping process condensates shall be treated to remove at least 10.2 pounds of total HAPs per ton of ODP based on a 15-day rolling average.

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

- 3.B.49 For Emission Point AA-028, each HAP removed from a pulping process condensate stream during treatment and handling shall be controlled in accordance with the following requirements. Additionally, all equipment shall be enclosed with emissions collected and vented to a control device as follows:

- (a) Reduce the total HAP emissions by at least ninety-eight (98) percent by weight; or
- (b) Reduce the total HAP concentration at the outlet of the thermal oxidizer to at least twenty (20) parts per million or less by volume (corrected to 10% oxygen on a dry basis); or
- (c) Reduce the total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871°C (or 1600°F) (based on a 3-hr block average) and a minimum residence time of 0.75 seconds; or
- (d) Reduce the total HAP emissions using one (1) of the following options:

- (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 (or 150 MMBTU per hour) by introducing the HAP emission stream with the combustion air.

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

- 3.B.50 For Emission Point AA-028 [including each control device used to treat pulping process condensates to comply with the requirements of 40 CFR 63.446(e)(5), Subpart S], the periods of excess emissions reported under 40 CFR 63.455, Subpart S shall not be a violation of 40 CFR 63.446(d), (e)(3), and (f) – Subpart S provided that the time of excess emissions (including periods of start-up, shutdown, and malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed ten (1) percent.

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

- 3.B.51 For Emission Point AA-043, compliance with the Clean Condensate Alternative (CCA) shall be demonstrated through the collection of pulping condensate streams generated, produced, or associated with an equipment system that contains at least 2.0 pounds of total HAPs per ton of ODP from fifteen (15) percent of the condensate streams being collected (based on a 15-day rolling average).

Only the oxygen delignification system (Emission Points AA-021 and AA-023), the atmospheric diffusion washer (PM-24a), and the associated filtrate tank (PM-23) comply with the HVLC requirements found in Subpart S by using the Clean Condensate Alternative.

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

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in Title V Operating Permit issued November 23, 2009)

- 3.B.52 For Emission Point AA-043, compliance with the CCA shall be demonstrated through the treatment of pulping condensate streams to remove at least 1.8 pounds of total HAPs per ODP based on a 15-day rolling average.

Only the oxygen delignification system (Emission Points AA-021 and AA-023), the atmospheric diffusion washer (PM-24a), and the associated filtrate tank (PM-23) comply with the HVLC requirements in Subpart S by using the Clean Condensate Alternative.

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

- 3.B.53 For Emission Point AA-036, the permittee shall limit the emission of filterable PM and PM₁₀ to no more than 1.6 pound per hour and 7.1 tpy. In addition, the permittee is not authorized to operate the ground petroleum coke silo without the use of the associated baghouse.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in PSD Permit to Construct issued January 28, 2005 and modified September 29, 2005)

3.B.54 For Emission Points AA-037 and AA-038, the maximum permissible emission of ash and/or particulate matter (PM) from any fossil fuel burning installation of less than ten (10) MMBTU per hour heat input capacity shall not exceed 0.6 pounds per MMBTU per hour heat input.

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

3.B.55 For Emission Points AA-037 and AA-038, any operation of the engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If an engine is not operated in accordance with paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under the referenced regulation and shall meet all requirements for a corresponding non-emergency engine.

- (a) There is no limit on the use of an engine during an emergency situation;
- (b) An engine 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 a non-emergency situation as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed by this paragraph.
 - (1) An engine 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 the testing of an emergency engine beyond 100 hours per calendar year.
 - (2) An engine 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, Subpart A) (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) An emergency engine may be operated for periods where there is a deviation of voltage or frequency of five (5) percent or greater below standard voltage or frequency.

- (c) An engine 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 condition. 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)(1) – (3); Subpart ZZZZ)

(Ref.: 40 CFR 60.4211(f)(1) – (3); Subpart IIII)

3.B.56 For Emission Point AA-037, except during periods of start-up, the permittee shall meet the following maintenance requirements for each engine:

- (a) Change the oil and filter every five hundred (500) hours of operation or annually (whichever comes first).

The permittee also has the option of utilizing an oil analysis program in order to extend the noted oil change requirement in accordance with the following provisions:

- (1) The oil analysis shall be performed at the same frequency specified for changing the oil as outlined in paragraph (a) of this condition;
- (2) The analysis program shall (at a minimum) analyze the Total Base Number, viscosity, and percent water content. The condemning limits for each noted parameter are as follows:
 - (i) Total Base Number is less than thirty percent (30%) of the Total Base Number of the oil when new;
 - (ii) Viscosity of the oil has changed by more than twenty percent (20%) from the viscosity of the oil when new; and
 - (iii) Percent water content (by volume) is greater than 0.5.

If none of the condemning limits are exceeded, the permittee is not required to change the oil. However, if any of the limits are exceeded, the permittee shall change the oil within two (2) business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within two (2) business days or before commencing operation (whichever is later).

The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine.

Additionally, the analysis program shall be part of the maintenance plan for the engine.

- (b) Inspect the air cleaner every one thousand (1,000) hours of operation or annually (whichever comes first), and replace as necessary.
- (c) Inspect all hoses and belts every 500 hours of operation or annually (whichever comes first), and replace as necessary.

If the engine is operating during an emergency situation and it is not possible to perform the oil change on the required schedule or if performing the oil change on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the oil change can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The oil change should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee shall report any failure to perform the oil change on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.

Additionally, the permittee shall minimize the time spent at idle during engine start-up and minimize the start-up time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes, after which time the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6602, 63.6625(h) – (i), and Table 2c (Item 1); Subpart ZZZZ)

3.B.57 For Emission Point AA-038, the permittee shall comply with the following emission standards:

- (a) Non-Methane Hydrocarbons + Nitrogen Oxides (NMHC + NO_x): 4.0 grams per kilowatt-hour;
- (b) Carbon Monoxide (CO): 3.5 grams per kilowatt-hour;
- (c) Particulate Matter (PM): 3.5 grams per kilowatt-hour; and
- (d) Opacity (from smoke):
 - (1) Twenty (20) percent during acceleration mode;
 - (2) Fifteen (15) percent during lugging mode; and
 - (3) Fifty (50) percent during the peaks in either the acceleration or lugging mode.

The permittee shall operate and maintain the engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4202(a)(2), 60.4205(b), and 60.4206; Subpart IIII)

3.B.58 For Emission Point AA-038, the permittee shall only use diesel fuel that meets the following requirements (on a per-gallon basis):

(a) A maximum sulfur content of 15 parts per million (ppm); and

(b) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent (vol.%).

(Ref.: 40 CFR 60.4207(b); Subpart III)

3.B.59 For Emission Points AA-013, AA-015, AA-016, and AA-042, the permittee is subject to and shall comply with all applicable requirements in 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	Pollutant / Parameter	Limit / Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM (filterable)	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 (PM) from any fossil fuel burning installation of less than ten (10) MMBTU per hour heat input shall not exceed 0.6 pounds per MMBTU 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 MMBTU 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 AA-012 AA-013	40 CFR 63.864(k); Subpart MM	3.D.3	Opacity Corrective Actions	Implement corrective actions when opacity monitoring indicates that the average of 10 consecutive 6-minute averages result in a measurement greater than 20%
			Parametric Monitoring Corrective Action	The permittee must implement corrective actions when any 3-hour block average parametric monitoring value is outside of the parameter values established
AA-011 AA-013	40 CFR 63.864(e)(1); Subpart MM	3.D.4	Work Practice Standard	Maintain proper operation of the automatic voltage control (AVC)
AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	3.D.5	Opacity	Operate such that there are no visible emissions (with the exception of water vapor)
AA-005 AA-015	40 CFR 63.7515(d), 63.7540(a)(10), (12), and (13); Subpart DDDDD	3.D.6	HAPs CO	Conduct routine boiler tune-ups
AA-015	40 CFR 63.7500(a) and Table 3 (Items 3, 5, and 6); Subpart DDDDD	3.B.7	Work Practice Standard	Operate all CMS during start-up and shutdown periods Comply with all applicable emission limits at all times, (except for start-up or shutdown periods that conform with this work practice)
AA-008 AA-025 AA-028	40 CFR 63.454(b); Subpart S	3.D.8	HAPs	Prepare and maintain a site-specific inspection plan

3.D.1 For Emission Point AA-000 (Facility-Wide), the permittee shall conduct quarterly (or more frequently as needed) inspections, maintenance, and cleaning of the following areas to prevent the generation of fugitive dust: 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; and
- (b) A 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 must be performed to ensure equipment is functioning properly and to prevent build-up 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 shall be required to implement corrective actions when the following monitoring exceedances occur (as applicable):

- (a) For Emission Point AA-011 – 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 – when any 3-hour block average parametric monitoring value is outside of the parameter values established in accordance with 40 CFR 63.864(j), Subpart MM.

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

3.D.4 For Emission Point 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 Point AA-014, the permittee shall operate the causticizing plant such that there are no visible emissions (with the exception of water vapor).

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

3.D.6 For Emission Points AA-005 and AA-015, the permittee shall complete tune-ups in accordance with paragraphs (a) – (f) of this condition.

If a boiler is not equipped with a continuous oxygen trim system, each tune-up shall be conducted annually and no more than thirteen (13) months after the previous tune-up. If a boiler is equipped with a continuous oxygen trim system, each tune-up shall be conducted every five (5) years and no more than sixty-one (61) months after the previous tune-up.

- (a) Inspect the burner (as applicable) and clean or replace any components of the burner

as necessary. The permittee may delay the burner inspection specified until the next scheduled or unscheduled unit shutdown but at least once every seventy-two (72) months (if the boiler has a continuous oxygen trim system). Additionally, if the boiler produces electricity for sale, the permittee may delay the burner inspection until the first outage not to exceed thirty-six (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 inspection, 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. The permittee may delay the inspection until the next scheduled unit shutdown. If the boiler produces electricity for sale, the permittee may delay the burner inspection until the first outage not to exceed thirty-six (36) months from the previous inspection.
- (d) Optimize the total emission of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications (if available) and with any nitrogen oxides (NO_x) 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.
- (f) The permittee shall maintain the following information for each boiler tune-up conducted:
 - (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 the typical operating load, before and after the tune-up of a boiler;
 - (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 twelve (12) months prior to the tune-up, but only if the boiler was physically and legally capable of using more than one (1) type of fuel during that period.

If a boiler is not operating on the required date for a tune-up, the tune-up shall be conducted within thirty (30) calendar days of start-up.

(Ref.: 40 CFR 63.7515(d), 63.7540(a)(10), (12), and (13); Subpart DDDDD)

- 3.D.7 For Emission Point AA-015, the permittee shall operate each continuous monitoring system (CMS) during periods of start-up and shutdown.

For any start-up period, the permittee shall use one (1) 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 or fires biomass/bio-based solids during a shutdown period, the permittee shall vent emissions to the main stack(s) and engage all of the applicable control devices. A start-up period ends when steam or heat is supplied for any purpose.

Additionally, the permittee shall comply with all applicable emissions limitations at all times, except for periods of start-up or shutdown that conform with this work practice standard.

(Ref.: 40 CFR 63.7500(a) and Table 3 (Items 3, 5, and 6); Subpart DDDDD)

- 3.D.8 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 for the applicable equipment and the following information:

- (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 fifteen (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 fifteen (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 of each year for the preceding calendar year. If the permit was reissued or modified during the course of the preceding calendar year, the certification of compliance shall address each version of the permit. 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 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 of each year 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 6.2.E.

For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semi-annual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e. April 30, July 31, October 31, and

January 31) and any required annual reports shall be submitted by January 31 following each calendar year.

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

(Ref.: 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5); Subpart A)

- 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. The report shall be made within five (5) working 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).)

- 5.A.8 Unless otherwise specified in Section 4, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding Permit to Construct and/or Operate upon permit issuance.

(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
AA-000 (Facility-Wide)	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.1	Fugitive Dust	Maintain records on all inspections, maintenance, and cleanings
		5.B.2	Monitoring Requirements	Monitor and record the appropriate operation and control equipment parameters during performance testing
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.3	Performance Testing	General Requirements
AA-005	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.4	Operating Hours	Maintain daily records on the hours of operation Calculate and record hours of simultaneous operation with Emission Points AA-011 and AA-015 (daily and rolling 365-day total)
		5.B.5	Fuel Consumption	Maintain monthly records on the annual fuel consumption rate and calculate a 12-month rolling total for each fuel used
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.6	PM SO ₂ NO _x CO VOCs	Conduct routine performance testing
AA-005 AA-015	40 CFR 63.7555; Subpart DDDDD	5.B.7	HAPs	Recordkeeping Requirements
AA-006 AA-007 AA-010 AA-041	40 CFR 60.284(d)(3); Subpart BB	5.B.8	TRS Combustion Temperature	Maintain records on any occurrence of excess emissions from the digester system, brown stock washer system, multiple effect evaporator system, and condensate stripper system.
AA-006 AA-007 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 on the time in which the Lime Kiln and the Incinerator combusts gases containing TRS
AA-013 AA-015 AA-016 AA-042	40 CFR 64.3(a) and (b), 64.6(c); CAM	5.B.10	Scrubbing Liquid pH Scrubbing Liquid Flow Rate Pump Operational Status	Monitoring Requirements
AA-011	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.11	Hours of Operation	Maintain daily records of the hours of active operation
		5.B.12	Fuel Usage	Maintain daily records on the type and amount of each fossil fuel combusted

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)(a)(2).	5.B.13	Heat Input	Maintain daily records of the actual heat input of fossil fuel to the Recovery Furnace
		5.B.14	Fuel Usage	Calculate and record monthly a fossil fuel annual capacity factor based on a rolling 12-month average
	40 CFR 63.866(c)(1); Subpart MM	5.B.15	Black Liquor Solids (BLS) Usage	Monitor the daily firing rate
	40 CFR 60.284(d)(1)(i); Subpart BB	5.B.16	TRS	Maintain records on any occurrence of excess TRS emissions from the Recovery Furnace
	40 CFR 63.864(d); Subpart MM	5.B.17	Opacity	Install, maintain, operate, and calibrate a COMS
	40 CFR 60.284(a)(1) and 60.284(d)(1)(ii); Subpart BB	5.B.18		Install, maintain, operate, and calibrate a CMS Maintain records on excess opacity emissions
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.19	PM	Maintain an Operation and Maintenance Plan for the ESP
11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.20	PM (filterable) SO ₂ NO _x CO	Conduct routine performance testing	
AA-012	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.21	PM (filterable) SO ₂ TRS	Conduct routine performance testing
	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
	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.
	40 CFR 63.864(e)(10); Subpart MM	5.B.24	Scrubber Pressure Drop 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. 2.2.B(11).	5.B.25	PM SO ₂ NO _x CO	Conduct routine performance testing

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-013	40 CFR 60.284(d)(2); Subpart BB	5.B.26	TRS	Maintain records of excess TRS emissions from the Lime Kiln
	40 CFR 63.866(c)(2); Subpart MM	5.B.27	CaO	Monitor the daily production rate
	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	Maintain records monthly of the amount of on-site generated used oil burned as fuel on a 12-month rolling total Perform and maintain an annual chemical analysis of the on-site generated used oil to ensure that it is not a hazardous waste
	40 CFR 60.284(b)(2)(ii), 60.284(c)(4), and 60.284(f); Subpart BB	5.B.29	Scrubber Flow Rate Supply Pressure	Monitor the scrubbing liquid flow rate once per operating shift
AA-011 AA-012 AA-013	40 CFR 63.864(j); Subpart MM	5.B.30	Parametric Monitoring	Establish / re-establish operating ranges during testing
	40 CFR 63.863(c) and 63.865, Subpart MM	5.B.31	HAP Metals (as PM)	Conduct routine performance testing
	40 CFR 63.866(b), Subpart MM	5.B.32	Corrective Actions	Maintain records on violations and any occurrence when corrective action(s) is required
	40 CFR 63.866(c)(3) – (5); Subpart MM	5.B.33	Parametric Monitoring	Maintain records required by 40 CFR 63.10(b)(2), parametric 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
AA-011 AA-013	40 CFR 60.284(a)(2); Subpart BB	5.B.34	TRS	Monitor the concentration on a dry basis using a CMS
	40 CFR 60.284(c)(1) and (3); Subpart BB	5.B.35		Calculate the concentration from the Recovery Furnace and Lime Kiln based on a 12-hour block average for two (2) consecutive periods each operating day
	40 CFR 60.284(a)(2); Subpart BB	5.B.36	Oxygen Content	Monitor and record the percent by volume on a dry basis in the gases discharged into the atmosphere from the Recovery Furnace and Lime Kiln using a CMS
	40 CFR 60.284(c)(2); Subpart BB	5.B.37		Calculate the concentration from the Recovery Furnace and Lime Kiln based on a 12-hour average, for two (2) consecutive periods each operating day

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-012 AA-013	40 CFR 60.284(b)(2)(ii) and 60.284(c)(4); Subpart BB	5.B.38	Scrubbing Liquid Supply Pressure	Monitor the scrubbing liquid supply pressure and pressure drop utilizing a CMS once per shift Liquid supply pressure monitoring device must be certified to an accuracy of $\pm 15\%$
	40 CFR 63.864(e); Subpart MM	5.B.39	Scrubber Flow Rate	Monitor the scrubber flow rate utilizing a CMS at least once every successive 15-minutes Flow monitoring device must be accurate to within $\pm 5\%$ of the design scrubber flow rate
AA-012 AA-013 AA-014 AA-016	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.40	Opacity	Perform and maintain visible emissions observations in accordance with a <i>tiered</i> inspection schedule
AA-015	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.41	PM (filterable) SO ₂ NO _x CO	Conduct routine performance testing
	40 CFR 60.45(a) and (c)(3); Subpart D	5.B.42	Opacity	Install, calibrate, maintain, and operate a CMS to measure opacity
	40 CFR 60.45(g) and (l); Subpart D	5.B.43		Maintain records on excess opacity emissions
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.44	PM	Maintain an OMP for the ESP
		5.B.45	Fuel Usage	Maintain daily records of the amount(s) and type(s) of fuel combusted
		5.B.46	Hours of Operation	Maintain daily records of the hours of active operation
	40 CFR 63.7510(a)(1) – (4); Subpart DDDDD	5.B.47	HCl Hg	Compliance Demonstration Requirements
	40 CFR 63.7515(a) and (b), Subpart DDDDD	5.B.48	Filterable PM (or TSM)	Conduct routine performance testing
	40 CFR 63.7525(a), Subpart DDDDD	5.B.49	CO	Install, operate, and maintain an oxygen analyzer system, or Install, certify, operate, and maintain a CEMS
	40 CFR 63.7535(a), Subpart DDDDD	5.B.50	HCl Hg	Monitoring / Data Collection Requirements Maintain a site-specific monitoring plan
40 CFR 63.7540(a)(1),(2)(ii), and(10) and 63.7540(b), Subpart DDDDD	5.B.51	Filterable PM (or TSM) CO	Continuous Compliance Requirements	

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-016	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.52	SO ₂ NO _x CO	Conduct routine performance testing
	40 CFR 60.284(b)(1), Subpart BB	5.B.53	Combustion Temperature	Monitor at the incineration point of effluent gases Monitoring device must be certified to be accurate within ±1% of the temperature being measured
	40 CFR 60.284(d)(3)(ii), Subpart BB	5.B.54		Maintain records of any period that exceeds 5 minutes in which the combustion temperature at the incineration point is less than 1200°F
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.55	Fuel Usage	Maintain records to demonstrate that only authorized fuels are combusted
		5.B.56	NCG Incineration	Monitor hours of incineration on a daily and rolling 12-month total basis
AA-021 AA-023	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.57	Hours Vented to Controls	Maintain daily records on the total process operating time and the time in which the Recovery Furnace or Power Boiler combust exhaust gases generated by the Oxygen Delignification Process and Washer
AA-008 AA-025	40 CFR 63.453(k); Subpart S	5.B.58	HAPs	Conduct, record, and maintain inspections on enclosures and closed-vent systems
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
	40 CFR 63.453(n)(1)-(n)(4); Subpart S	5.B.60	Operating Parameters	Establish / reestablish the value for each operating parameter
	40 CFR 63.453(o); Subpart S	5.B.61	Control Device Operation	Operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required
	40 CFR 63.454(b) and 63.454(g); Subpart S	5.B.62	HAPs	Maintain records on all information required by the site-specific inspection plan 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
AA-008 AA-028	40 CFR 63.457(a); Subpart S 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.64	HAPs	Conduct routine performance testing

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-008	40 CFR 63.453(c); Subpart S	5.B.65	Scrubber Liquid Flow Rate ORP Fan Amperage	Install, calibrate, certify, operate, and maintain a CMS
AA-041	40 CFR 63.453(g); Subpart S	5.B.66	Waste Water Feed Rate Steam Feed Rate Stripper Column Feed Temperature	Install, calibrate, certify, operate, and maintain a CMS
AA-028	40 CFR 63.453(i); Subpart S	5.B.67	Foul Condensate Collection	Install, calibrate, certify, operate, and maintain a CMS
	40 CFR 63.453(l)(1); Subpart S	5.B.68	HAPs	Monitor and inspect each pulping process condensate closed collection system
	40 CFR 63.453(l)(2); Subpart S	5.B.69	Operational Requirements	Each condensate tank used in the closed collection system shall be operated with no detectable leaks as measured routinely
AA-028 AA-041	40 CFR 63.453(l)(3); Subpart S	5.B.70	HAPs	Conduct corrective actions if an inspection identifies a visible defect or if an instrument read of 500 ppm above background is measured
AA-036	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.71	Opacity	Perform a monthly visible emissions evaluation during unloading operations
		5.B.72	PM	Perform a monthly (or more often as needed) inspection and maintenance on the baghouse
AA-037	40 CFR 63.6605(b); Subpart ZZZZ	3.B.73	HAPs	General Duty Clause
	40 CFR 63.6625(e)(2); Subpart ZZZZ	5.B.74	Operational Requirements	Operate and maintain in accordance with the manufacturer's recommendations or develop a maintenance plan.
	40 CFR 63.6625(f), 63.6655(a)(1), (2), (4), (5), and (d) – (f); Subpart ZZZZ	5.B.75	Operational Requirements	Recordkeeping Requirements
AA-038	40 CFR 60.4209(a); Subpart IIII	5.B.76	Operational Requirements	Install a non-resettable hour meter prior to start-up of the engine.
	40 CFR 60.4214(b), Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.77	Emergency Engine Status	Monitor hours of operation in emergency and non-emergency service
	40 CFR 60.4211(a) and (c); Subpart IIII	5.B.78	NMHC + NOX	Install and operate a certified engine
	40 CFR 60.4211(g)(2); Subpart IIII	5.B.79	CO PM	Alternative emission limitations and testing

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring / Recordkeeping Requirement
AA-013 AA-015 AA-016 AA-042	40 CFR 64.7(b) and (c); CAM	5.B.80	Operation and 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; 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 Emission Point AA-000 (Facility-Wide), the permittee shall maintain records on all inspections, maintenance, and cleanings conducted in accordance with Condition 3.D.1.

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

5.B.2 For Emission Point AA-000 (Facility-Wide), the permittee shall document (as required to determine operational 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, electrostatic precipitator field electrical data, firebox temperature, opacity, the production rate of air-dried pulp, and/or the production rate of calcium oxide (CaO) from the Lime Kiln (Emission Point AA-013).

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

5.B.3 For Emission Point AA-000 (Facility-Wide), unless otherwise specified herein, the permittee shall conduct performance testing in accordance with the following requirements:

- (a) Each test shall be conducted in accordance with an applicable EPA Test Method found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the EPA prior to the testing event.
- (b) The permittee shall conduct a minimum of three (3) separate test runs for a performance test for a duration of at least one (1) hour.
- (c) As applicable, the permittee shall conduct a performance stack test at representative load conditions. For the purpose of this permit, “*representative load conditions*” is defined as the operation of the unit under heat input rates that will be typical in the future.

The MDEQ may require the permittee to conduct a subsequent performance stack test if the heat input rate of the unit increases by more than ten percent (10%) of the average rate established during the previously completed test.

- (d) As applicable, the permittee shall monitor and record the usage of each fuel combusted during each test run.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

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

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

- 5.B.5 For Emission Point AA-005, the permittee shall maintain records on the fuels combusted and the annual fuel consumption rate (for each fuel) based on a monthly and rolling 12-month total basis.

(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 demonstrate compliance with the filterable PM, SO₂, NO_x, CO, and VOC emission limitations specified in Condition 3.B.11 by conducting performance testing no later than April 20, 2022. Thereafter, subsequent performance testing shall be conducted biennially and no later than twenty-four (24) months after the previously completed test. All testing shall be performed in accordance with Condition 5.B.3.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.B.7 For Emission Points AA-005 and AA-015, the permittee shall maintain the appropriate documentation for each applicable recordkeeping requirement found in 40 CFR 63.7555, Subpart DDDDD. The documentation shall include (at a minimum) the following information:

- (a) A copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting a Notification of Compliance Status or a submitted semi-annual compliance report;
- (b) All performance tests, fuel analyses, other specified 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 on any occurrence of excess emissions from the digester system, the

brown stock washer system, the multiple effect evaporator system, and the condensate stripper system.

For the purpose of this permit, “excess emissions” shall be defined as follows:

- (a) Any TRS concentration (based on a 12-hour average) above five (5) ppm by volume unless the provisions of 40 CFR 60.283(a)(1)(i), (ii), or (iv) – Subpart BB apply; or
- (b) Any total period of excess of five (5) minutes in which the combustion temperature at the point of incineration is less than 1200°F.

(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 monitor and maintain the amount of time that the Lime Kiln (Emission Point AA-013) and the Incinerator (Emission Point AA-016) are used to combust gases containing TRS on a daily basis.

(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 monitoring requirements specified in the CAM Plans found in Appendix C of this permit:

- (a) For Emission Points AA-013 and AA-016, the permittee shall monitor the scrubbing liquid pH and the scrubbing liquid flow rate;
- (b) For Emission Point AA-015, the permittee shall monitor the opacity of emissions from the ESP; and
- (c) For Emission Point AA-042, the permittee shall monitor the scrubbing liquid pH and scrubbing liquid flow as determined by operation of the pump (i.e. if it is “on” or “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 monitor and maintain the hours of active operation on a daily basis.

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

5.B.12 For Emission Point AA-011, the permittee shall monitor and maintain the type and amount of each fossil fuel (e.g. natural gas or fuel oil) combusted on a daily basis.

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

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

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

- 5.B.14 For Emission Point AA-011, the permittee shall calculate and record an annual capacity factor for each fossil fuel (e.g. natural gas or fuel oil) combusted. The annual capacity factor shall be based on a rolling 12-month average with a new annual capacity factor calculated at the end of each calendar month.

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

- 5.B.15 For Emission Point AA-011, the permittee shall monitor and maintain the rate (in tons per day) in which black liquor solids (BLS) are combusted on a daily basis.

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

- 5.B.16 For Emission Point AA-011, the permittee shall maintain records on any occurrence of excess TRS emissions from the Recovery Furnace. For the purpose of this permit, “excess emissions” shall be defined as any 12-hour block average in which the TRS concentration is above five (5) ppm by volume.

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

- 5.B.17 For Emission Point AA-011, the permittee shall 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.

Additionally, the permittee shall calculate and record each successive 6-minute average opacity calculated as the average of thirty-six (36) or more data points equally spaced over each 6-minute period using the procedures specified in 40 CFR 63.6(h) and 63.8, Subpart A.

(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 CMS 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 in accordance with 40 CFR 60.284, Subpart BB and the span of this system shall be set at seventy (70) percent opacity. Additionally, the procedures specified in 40 CFR 60.13, Subpart A shall be followed for evaluation and operation of the monitoring system.

The permittee shall maintain records of excess opacity emissions from the recovery furnace. For the purpose of this permit, “excess emissions” shall be defined as any 6-minute average opacity that exceeds 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 Plan (OMP) for the electrostatic precipitator (ESP) control device. The OMP shall be maintained on-site and include (but not limited to) the following information:

- (a) An operational checklist (i.e., fields energized, minimum voltage level);
- (b) The operational procedures; and
- (c) The maintenance schedules and maintenance activity performed.

The permittee shall maintain records on any operational and/or maintenance activities associated with the OMP.

(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 demonstrate compliance with the short-term filterable PM, SO₂, NO_x, and CO emission limitations specified in Conditions 3.B.14 and 3.B.16 through 3.B.19 by conducting a performance test no later than April 20, 2022. Thereafter, subsequent performance testing shall be conducted biennially and no later than twenty-four (24) months after the previously completed test.. All testing shall be conducted in accordance with Condition 5.B.3 and the following requirements:

- (a) The permittee shall monitor and record rate of the black liquor solids fired during each test run.
- (b) The permittee shall monitor and record the rate of equivalent air-dried Kraft pulp produced during each test run.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.B.21 For Emission Point AA-012, the permittee shall demonstrate compliance with the PM, TRS, and SO₂ emission limitations specified in Conditions 3.B.22 and 3.B.23 by conducting performance testing no later than April 20, 2022. Thereafter, subsequent performance testing shall be conducted biennially and no later than twenty-four (24) months after the previously completed test. All testing shall be conducted in accordance with Condition 5.B.3. Additionally, the permittee shall monitor and record rate of the black liquor solids fired during each test run.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.B.22 For Emission Points AA-012, the permittee shall install, calibrate, maintain, and operate a device that continuously monitors 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 gauge pressure of ± 2 inches water gauge pressure (or ± 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 device that continuously monitors the scrubber liquid supply pressure to the scrubber. The monitoring device must be certified by the manufacturer to an accuracy of ± 15 percent 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 specified in 40 CFR 63.8(c), Subpart A. The pressure drop monitoring device must be certified by the manufacturer to be accurate to within ± 2 inches water gauge pressure (or ± 500 Pascals). Additionally, 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 demonstrate compliance with the short-term PM, SO₂, NO_x, and CO emission limitations specified in Conditions 3.B.25 through 3.B.28 by conducting performance testing no later than April 20, 2022. Thereafter, subsequent performance testing shall be conducted biennially and no later than twenty-four (24) months after the previously completed test. All testing shall be conducted in accordance with Condition 5.B.3 and while controlling non-condensable gases (NCGs).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.B.26 For Emission Point AA-013, the permittee shall maintain records of any occurrence of excess TRS emissions from the Lime Kiln. For the purpose of this permit, "excess emissions" shall be defined as any 12-hour block average in which TRS concentration is above eight (8) ppm by volume.

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

- 5.B.27 For Emission Point AA-013, the permittee shall monitor and record the daily calcium oxide (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 monitor and record the type(s) and amount(s) of fuel combusted on a daily basis. Additionally, the permittee shall monitor and record the amount of used oil generated on-combusted as a fuel and both on a monthly and rolling 12-month total.

The permittee shall conduct a chemical analysis of the used oil generated on-site on in accordance with Mississippi Hazardous Waste Management Regulations (i.e. 40 CFR Part 279.11) an annual basis to determine if the material may be a hazardous waste. However, this analysis is only required if the used oil is combusted at any time during the year. The sample that is analyzed should be representative of what is normally combusted.

The permittee shall not combust any used oil within the Lime Kiln that can be considered “hazardous waste”.

(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. The 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), Subpart BB. Additionally, the monitoring of the scrubbing liquid flow rate shall be conducted as set forth in 40 CFR 60.13, Subpart A.

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

- 5.B.30 For Emission Points AA-011, AA-012, and AA-013, , the permittee shall either establish operating ranges for the monitoring parameters specified in 40 CFR 63.864(j), Subpart MM during an initial or periodic performance test (as appropriate) or utilize one of the following options:

- (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 / have been obtained using the test methods required by 40 CFR Part 63, Subpart MM.

The permittee shall 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.

The permittee may establish expanded or replacement operating ranges for the monitoring parameter values specified in 40 CFR 63.864, Subpart MM during subsequent performance tests using the test methods established in 40 CFR 63.865, Subpart MM.

- (b) The permittee shall 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. Operation outside of 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.

- (c) New, expanded, or replacement operating limits for the monitoring parameter values listed in 40 CFR 63.864(e)(1), (2), and (e)(10) – (14), Subpart MM (as applicable) should be determined in accordance with 40 CFR 63.864(j)(5)(i) – (ii), Subpart MM.

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

- 5.B.31 For Emission Points AA-011, AA-012 and AA-013, the permittee shall demonstrate compliance with the HAP metals (as PM) emission limitations specified in Condition 3.B.20 by conducting routine performance testing once every five (5) years [no later than sixty (60) months after the previously completed test] in accordance with the test methods and procedures outlined in 40 CFR 63.7, Subpart A and 40 CFR 63.865(b), Subpart MM. The permittee shall submit the performance test data to EPA through CEDRI within sixty (60) days of the performance test completion.

(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 shall maintain documentation on any occurrence in which corrective action is required under 40 CFR 63.864(k)(1), Subpart MM and when a violation is noted under 40 CFR 63.864(k)(2), Subpart MM. The following conditions shall be considered violations:

- (a) For Emission Point AA-011 – when opacity is greater than 35% for at least two (2) percent of the total operating time within any semi-annual period;
- (b) For Emission Point AA-013 – when opacity is greater than 20% for at least three (3) percent of the total operating time within any semi-annual period;
- (c) For Emission Point AA-012) and Emission Point AA-013 – when at least six (6) 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), Subpart MM.

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

- 5.B.33 For Emission Points AA-011, AA-012, and AA-013, the permittee shall maintain documentation that details the following information:

- (a) Records on the parameter monitoring data required under 40 CFR 63.864, Subpart MM that also includes 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) – (e), Subpart MM; and
- (c) Records on 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 thirty (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 the TRS concentration from the Lime Kiln and the Recovery Furnace based on a 12-hour block average for two (2) consecutive periods each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate twelve (12) contiguous 1-hour average TRS concentrations provided by the continuous monitoring system(s).

For Emission Point AA-011, the 12-hour TRS concentration shall be corrected to 8% oxygen. For Emission Point AA-013, 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 the oxygen concentration from the Recovery Furnace and Lime Kiln based on a 12-hour average, for two (2) consecutive periods each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate twelve (12) contiguous 1-hour average oxygen concentrations provided by the CMS. Additionally, 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 Points 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 percent 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 Points 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 outlined in 40 CFR 63.8(c), Subpart A and 40 CFR 63.864(e), Subpart MM. The monitoring device must be certified by the manufacturer to an accuracy of ± 5 percent of the design scrubbing liquid flow rate.

Alternative monitoring (i.e. the liquid supply pressure in lieu of pressure drop) was identified in the initial performance test for Subpart MM conducted on April 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), and AA-016, the permittee shall conduct a weekly inspection to evaluate visible emissions. If visible emissions are detected during a one-minute interval (with the exception of steam plumes), the permittee shall conduct a minimum of one (1) 6-minute observation in accordance with EPA Test Method 9.

Upon observation of visible emissions from a source, the frequency of observations for that shall become daily until no emissions are observed for seven (7) consecutive days. After 7 consecutive days of no visible emissions observed, 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 all documentation and information specified by EPA Test Method 22 and/or EPA Test Method 9, any corrective actions taken, and the date / time when each observation was conducted.

(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 demonstrate compliance with the PM, SO₂, NO_x, and CO emission limitations specified in Conditions 3.B.31 through 3.B.34 by conducting a performance test no later than April 20, 2022. Thereafter, subsequent

performance testing shall be conducted biennially and no later than twenty-four (24) months after the previously completed test. All testing shall be conducted in accordance with Condition 5.B.3. Additionally, the permittee shall determine the maximum fuel-firing rate and monitor the oxygen concentration in the stack during each test run.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 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 source. 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 documentation on any occurrence of excess opacity emissions. For the purpose of this permit, "excess emissions" shall be defined as any 6-minute period during which the average opacity of emissions exceed twenty (20) percent, except for one (1) 6-minute period in any one (1) hour in which opacity exceeds twenty-seven (27) percent (which 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 Operation and Maintenance Plan (OMP) for the electrostatic precipitator (ESP) control device.. The OMP shall be maintained on-site. The OMP shall include (but is not limited to) the following information:

- (a) An operational checklist (i.e. fields energized, minimum voltage level);
- (b) The operational procedures;
- (c) The maintenance schedules and maintenance activity performed;

The permittee shall maintain records on any operational and/or maintenance activities associated with the OMP.

(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 monitor and maintain the type(s) and amount(s) of each fuel combusted on a daily basis.

(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 monitor and maintain hours of operation on a daily basis.

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

5.B.47 For Emission Point AA-015, the permittee shall demonstrate compliance with the applicable limitations specified in Condition 3.B.35 by conducting testing in accordance to the following requirements:

- (a) Conduct performance tests in accordance with 40 CFR 63.7520 and Table 5 in Subpart DDDDD.
- (b) Conduct a fuel analysis for each type of fuel burned in the boiler in accordance with 40 CFR 63.7521 and Table 6 in Subpart DDDDD [except as specified 63.7510(a)(2)(i) – (iii), Subpart DDDDD].
- (c) Establish operating limits according to 40 CFR 63.7530 and Table 7 in Subpart DDDDD.
- (d) Conduct CMS performance evaluations according to 40 CFR 63.7525, Subpart DDDDD.

(Ref.: 40 CFR 63.7510(a)(1) – (4); Subpart DDDDD)

5.B.48 For Emission Point AA-015, the permittee shall conduct all applicable performance tests required by Condition 5.B.47 in accordance with 40 CFR 63.7520, Subpart DDDDD on an annual basis [and no more than thirteen (13) months after the previously completed performance test] except as specified in 40 CFR 63.7515(b) – (e), (g), and (h), Subpart DDDDD.

If the performance tests for an applicable pollutant for at least two (2) consecutive years show that emissions are at or below seventy-five (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 subsequent performance test for the pollutant once every three (3) years [and no later than thirty-seven (37) months after the previously completed performance test].

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

5.B.49 For Emission Point AA-015, the permittee shall either install, operate, and maintain an oxygen analyzer system (as defined in 40 CFR 63.7575, Subpart DDDDD) or install, certify, operate, and maintain a continuous emission monitoring systems (CEMS) for CO and oxygen in accordance with the procedures outlined in 40 CFR 63.7525(a)(1) – (6), Subpart DDDDD.

(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 emission limitations specified Condition 3.B.35, the applicable work practice standards, and the applicable operating limits in accordance with the following methods and 40 CFR 63.7540(a)(1) – (19), Subpart DDDDD:
- (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) Maintain records on 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 Condition 3.D.4.
 - (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), (10), and 63.7540(b); Subpart DDDDD)

- 5.B.52 For Emission Point AA-016, the permittee shall conduct demonstrate compliance with the short-term SO₂, NO_x, and CO emission limitations specified in Condition 3.B.37 by conducting a performance test no later than April 20, 2022. Thereafter, subsequent performance testing shall be conducted biennially and no later than twenty-four (24) months after the previously completed test. All testing shall be conducted in accordance with Condition 5.B.3 while controlling non-condensable gases (NCGs).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 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 incineration point for effluent gases 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), Subpart BB apply). The monitoring device is to be certified by the manufacturer to be accurate within ± 1 percent 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 documentation on any period of excess emissions. For the purpose of this permit, a “periods of excess emissions” is

defined as any period that exceeds five (5) minutes during which the combustion temperature at the incineration point is less than 1200 °F (or 650 °C).

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

- 5.B.55 For Emission Point AA-016, the permittee shall maintain applicable documentation to demonstrate that only authorized fuels are 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 monitor and maintain the hours in which NCGs are incinerated on both a daily and rolling 12-month total basis.

(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 monitor and maintain the following operational data on a daily basis:

- (a) The total operating time (in hours) for the units associated with the Oxygen Delignification Process and Oxygen Delignification Process Atmospheric Diffusion Washer; and
- (b) The amount of time (in hours) the Recovery Furnace (Emission Point AA-011) or the Power Boiler (Emission Point AA-015) are used to combust the exhaust gases generated by the Oxygen Delignification Process and the Oxygen Delignification Process Atmospheric Diffusion Washer.

The permittee shall use these values to calculate the percentage of time in which the exhaust gases are combusted in any semi-annual reporting period.

(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 perform the following compliance demonstrations for each enclosure and closed-vent system used to comply with 40 CFR 63.450(a), Subpart S:

- (a) For each enclosure opening, the permittee shall perform a visual inspection of the closure mechanism (as specified in 40 CFR 63.450(b), Subpart S) at least monthly with at least fifteen (15) days elapsed time between each inspection to ensure the opening is maintained in the closed position and sealed.
- (b) For each closed-vent system required by 40 CFR 63.450(a), Subpart S, the permittee shall perform a visual inspection visually inspected monthly with at least fifteen (15) days elapsed time between each inspection and as necessary to ensure proper function. A visual inspection shall include the inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.

- (c) For each positive pressure closed-vent system or portions of closed-vent system, the permittee shall demonstrate that there were no detectable leaks (as specified in 40 CFR 63.450(c), Subpart S) to be measured annually in accordance with the procedures outlined in 40 CFR 63.457(d), Subpart S.
- (d) The permittee shall demonstrate that each applicable enclosure opening is maintained at negative pressure annually [as specified in 40 CFR 63.457(e), Subpart S].
- (e) The valve or closure mechanism (as specified in 40 CFR 63.450(d)(2), Subpart S) shall be inspected at least monthly with at least fifteen (15) days elapsed time between inspections, to ensure that the valve is maintained in the closed position and the gas stream of the stream is not diverted through the bypass line.
- (f) If an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers (as required by 40 CFR 63.450, Subpart S), if an instrument reading of at least 500 ppm by volume above background is measured; or, if enclosure openings are not maintained at negative pressure, 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 five (5) calendar days after the problem is identified.
 - (2) The repair or corrective action shall be completed no later than fifteen (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. The 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, the permittee must obtain prior approval from the MDEQ if the permittee elects to use a control device, technique, or an alternative parameter other than those specified herein. Additionally, 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 specifically detailed in 40 CFR 63.453(n), Subpart S by following the outlined procedures:

- (a) During the initial or subsequent performance testing required by 40 CFR 63.457(a) – Subpart S, continuously record the applicable operating parameter;
- (b) A determination shall be based on the control performance and parameter data monitored during the performance test and supplemented (if necessary) by engineering assessments and the manufacturer's recommendations;
- (c) The permittee shall submit the rationale for selecting the applicable monitoring parameters for approval by the MDEQ; and
- (d) The permittee shall submit the rationale for the selected operating parameter value, the monitoring frequency, and the averaging time for approval by the MDEQ. Includd within this submittal shall be the 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) – (4); Subpart S)

- 5.B.61 For Emission Points AA-008, AA-025 and AA-028, the permittee shall operate each applicable control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure.

Except as provided in 40 CFR 63.443(e) or 63.446(g) – Subpart S, the operation of a control device below the established minimum operating parameter value(s), above the established maximum operating parameter value(s); or the failure to perform required procedures outlined in 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 documentation that details the information required by the site-specific inspection plan developed in accordance with Condition 3.D.6.

The permittee shall also maintain records on 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), Subpart S that includes 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 a CMS (as defined in 40 CFR 63.2, Subpart A) in accordance with the manufacturer's specifications to measure the temperature in either the firebox or 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 applicable requirements found in 40 CFR 63.443(d)(1) – (3), Subpart S.

As an alternative to monitoring thermal oxidizer temperature when complying with the HAP concentration requirements specified in 40 CFR 63.443(d)(2) – Subpart S, the permittee may install a CMS to monitor the total HAP outlet concentration or the methanol concentration.

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

- 5.B.64 For Emission Points AA-008 and AA-028, the permittee shall conduct repeat performance tests on the noted sources unless the sources are controlled by a combustion device that is designed and operated in accordance with 40 CFR 63.443(d)(3) – (4), Subpart S.

Repeat performance tests shall be conducted at five-year intervals and no later than sixty (60) months after the most previously completed test.

(Ref.: 40 CFR 63.457(a)(2); Subpart S)

(Ref.: 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 a CMS (as defined in 40 CFR 63.2, Subpart A) in accordance with the manufacturer's specifications to measure the following parameters for each bleach plant gas scrubber used to comply with the bleaching system requirements specified in 40 CFR 63.445(c), Subpart S:

- (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) (as allowed in the EPA alternative approval letter dated 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, a CMS (as defined in 40 CFR 63.2, Subpart A) in accordance with the manufacturer's specifications to measure the following parameters for each steam stripper used to comply with the treatment requirements specified in 40 CFR 63.446(e)(3), Subpart S:

- (a) The process waste water feed rate (i.e. the 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, the permittee shall install, calibrate, certify, operate, and maintain a CMS in accordance with the manufacturer's specifications to measure foul condensate collection (as allowed in a MDEQ approval letter dated May 28, 2003) to demonstrate compliance with the condensate applicability requirements specified in 63.446(c), Subpart S.

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

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

- (a) For each pulping process condensate closed collection system, the permittee shall conduct a visual inspection once every thirty (30) days and shall comply with the inspection and monitoring requirements specified in 40 CFR 63.96, Subpart RR with the following exceptions:
- (1) The permittee shall comply with the recordkeeping requirements specified in 40 CFR 63.454, Subpart S instead of the requirements specified in 40 CFR 63.964(a)(1)(vi) and (b)(3), Subpart RR.
 - (2) 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), Subpart S instead of the requirements specified in 40 CFR 63.964(a)(2), Subpart RR.

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

- 5.B.69 For Emission Point AA-028, the permittee shall measure for detectable leaks from each condensate tank used in the closed collection system on an annual basis and in accordance with procedures outlined in 40 CFR 63.457(d), Subpart S to validate operation with no detectable leaks [as specified in 40 CFR 63.446(d)(2)(i), Subpart S].

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

- 5.B.70 For Emission Points AA-028 and AA-041, the permittee shall conduct the applicable corrective actions specified in 40 CFR 63.964(b), Subpart RR **if** an inspection required by Condition 5.B.68 identifies a visible defect in the closed collection system or if an instrument reading of at least 500 ppm above background is measured for the condensate tanks.

(Ref.: 40 CFR 63.453(1)(3); Subpart S)

- 5.B.71 For Emission Point AA-036, the permittee shall perform a visible emission observation in accordance with EPA Test Method 9 monthly during unloading operations.

The permittee shall maintain all documentation and information specified by EPA Test Method 9, any corrective actions taken, and the date / time when each observation was conducted.

(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 an inspection and maintenance actions on a monthly basis (or more often as needed) to ensure proper operation of the baghouse is maintained.

(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 operate and maintain each engine (including associated air pollution control equipment and monitor equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times.

The general duty to minimize emissions does not require the permittee to make you to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. The 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 an engine.

(Ref.: 40 CFR 63.6605(b); Subpart ZZZZ)

- 5.B.74 For Emission Point AA-037, the permittee shall comply with one of the following work practice options:

- (a) Operate and maintain the engine and the after-treatment control device (if any) according to the manufacturer's emission-related written instructions; or
- (b) Develop a site-specific maintenance plan, which shall provide to the extent practicable for the maintenance and operation of an engine in a manner consistent with good air pollution control practice for minimizing emissions.

(Ref.: 40 CFR 63.6625(e)(2); Subpart ZZZZ)

- 5.B.75 For Emission Point AA-037, the permittee shall maintain the following documentation:

- (a) Records of all maintenance conducted on monitoring equipment and/or in accordance with the requirements outlined in Condition 3.B.56.
- (b) The hours of operation (via a non-resettable hour meter) for emergency service and non-emergency service in addition to applicable information that details why each occurrence is either an emergency or a non-emergency situation;

- (c) A copy of each notification and report submitted to comply with Subpart ZZZZ (including all documentation supporting any Notification of Compliance Status);
- (d) Records that detail each occurrence and duration of a malfunction of the engine in addition to the action(s) taken during these periods of malfunction to minimize emissions, including corrective actions to restore the affected source to its usual manner of operation.
- (e) A copy of either the manufacturer's emission-related written instructions for the engine or the site-specific maintenance plan developed for an engine as outlined in Condition 5.B.74.

(Ref.: 40 CFR 63.6625(f), 63.6655(a)(1), (2), (4), (5), and (d) – (f); 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 III)

5.B.77 For Emission Point AA-038, the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation for each engine about emergency and non-emergency service on a monthly basis. Additionally, the permittee shall detail what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 60.4214(b); Subpart III)

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

5.B.78 For Emission Point AA-038, the permittee shall demonstrate compliance with the emission standards outlined in Conditions 3.B.57 by performing the following work practices:

- (a) Operate and maintain each engine and control device (if any) according to the manufacturer's emission-related written instructions;
- (b) Change only those emission-related settings that are permitted by the manufacturer; and
- (c) Meet the requirements of 40 CFR Part 1068 (as applicable).

If the permittee does not comply with the noted requirements, the permittee shall demonstrate compliance in accordance with Condition 5.B.79.

(Ref.: 40 CFR 60.4211(a) and (c); Subpart III)

5.B.79 For Emission Point AA-038, if the permittee does not operate and maintain the engine according to the manufacturer's emission-related written instructions or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance through the following actions

- (a) Keep a maintenance plan, records of conducted maintenance, and (to the extent practicable) maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
- (b) Conduct an initial performance test in accordance with 40 CFR 60.4212, Subpart III to demonstrate compliance with the emission standards outlined in Condition 3.B.57 within one (1) year of start-up, within one (1) year after the engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within one (1) year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer.

(Ref.: 40 CFR 60.4211(g)(2); Subpart III)

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:* The permittee shall maintain the monitoring, including (but not limited to) maintaining necessary parts for routine repairs of the monitoring equipment at all times.
- (b) *Continued operation:* Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities [including calibration checks and required zero adjustments, and required span adjustments (as applicable)], 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. The 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)].

(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 start-up, 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).

The 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 (in addition to the excursion threshold outlined in each CAM Plan), the MDEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) that contains the elements specified in 40 CFR 64.8(b).

The QIP shall be developed and implemented within one hundred eighty (180) days of written notification from the 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. The 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, the records of monitoring data and monitoring performance data should include the 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	Reporting Requirement
AA-005	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.1	Operating Hours	Semi-annual report summarizing the hours of operation
		5.C.2	Fuel Consumption	Semi-annual report of the annual fuel consumption rate for natural gas based on a 12-month rolling total
AA-005 AA-011 AA-015	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.3	Operating Hours	Semi-annual report summarizing the total hours of simultaneous operation
AA-005 AA-008 AA-011 AA-012 AA-013 AA-015 AA-016 AA-028	40 CFR 63.867(a)(1), Subpart MM 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.4	PM SO ₂ NO _x CO VOCs HAP Metals (as PM) TRS Opacity	Pretest notifications and stack test report requirements.
AA-006 AA-007 AA-010 AA-041	40 CFR 60.284(d) and (e), Subpart BB	5.C.5	TRS or Combustion Temperature	Semi-annual report on any periods of excess emissions that occurred (as indicated in Condition 5.B.9)
AA-006	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.6	Hours Vented to Controls	Semi-annual report summarizing the amount of time the Lime Kiln and the Incinerator are used to combust TRS gases from the digester system
AA-011 AA-012 AA-013	40 CFR 63.867(c), Subpart MM	5.C.7	HAPs	Semi-annual report on excess emissions
AA-011	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.8	Fuel Usage	Semi-annual report summarizing the fossil fuel usage and heat input to the boiler
		5.C.9	Fossil Fuel Capacity Factor	Semi-annual report on the fossil fuel annual capacity factor calculations
	40 CFR 60.284(d) and (e); Subpart BB	5.C.10	TRS	Semi-annual report on excess emissions
AA-013	40 CFR 60.284(d) and (e), Subpart BB	5.C.11	TRS	Semi-annual report on excess emissions
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.12	Fuel Usage	Semi-annual report summarizing the amount(s) and type(s) of fuels combusted
		5.C.13	Used Oil Combusted	Semi-annual report on the amount of used oil generated on-site burned as fuel on both a monthly and rolling 12-month total basis

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Reporting Requirement
AA-015	40 CFR 60.45(g); Subpart D	5.C.14	Opacity	Semi-annual report on excess emission and monitoring system performance
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.15	Fuel Usage	Semi-annual report summarizing the amount(s) and type(s) of fuels combusted
AA-016	40 CFR 60.284(d) and (e); Subpart BB	5.C.16	Combustion Temperature	Semi-annual report on periods of excess emissions where the combustion temperature at the point of incineration is less than 1200°F in excess of 5 minutes
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.17	NCGs	Semi-annual report on the hours in which NCGs are incinerated
		5.C.18	Fuel Usage	Semi-annual report summarizing the amount(s) and type(s) of fuels combusted
AA-008 AA-025 AA-028 AA-043	40 CFR 63.455(a) and 63.455(g); Subpart S 40 CFR 63.10(e)(3); Subpart A	5.C.19	CMS and/or Control Device	Semi-annual report on excess emissions and malfunctions
AA-005 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 Submit a Notification of Intent to conduct a performance test
	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 Submit each compliance report as provided in 40 CFR 63.7550(b) and must contain information detailed in 40 CFR 63.7550(c)
AA-021 AA-023	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.22	Hours Vented to Controls	Semi-annual report summarizing the total process operating time, the time the Recovery Furnace or the Power Boiler combust exhaust gases generated by the Oxygen Delignification Process and Washer and the percentage of time the exhaust gases were combusted
AA-037	40 CFR 63.6640(b), 63.6650(f), and Table 2c; Subpart ZZZZ	5.C.23	Reporting Requirements	Semi-annual report of any deviations
	40 CFR 63.6640(e); Subpart ZZZZ	5.C.24		Semi-annual report of deviations
AA-038	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.25	Hours of Operation	Annual report of hours of emergency and non-emergency operations for previous calendar year
AA-013 AA-015 AA-016	40 CFR 64.9(a), CAM	5.C.26	CAM Reporting	Semi-annual reporting of excess emissions or excursions

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter	Reporting Requirement
AA-042	40 CFR 64.7(e), CAM	5.C.27	CAM Modification	Promptly notify the 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 shall submit a semi-annual report in accordance with Condition 5.A.4 that summarizes the hours of operation.

(Ref.: 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 semi-annual report in accordance with Condition 5.A.4 that details the annual fuel consumption rate for natural gas based on a rolling 12-month total.

(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 semi-annual report in accordance with Condition 5.A.4 that summarizes the hours of simultaneous operation from the three (3) emission sources.

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

5.C.4 For Emission Points AA-005, AA-008, AA-011, AA-012, AA-013, AA-015, AA-016, and AA-028, 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.

- (e) The permittee shall submit a summary of the results of any periodic and/or parametric monitoring required to be monitored and recorded by Section 5.B during performance testing.
- (f) The performance test results must be submitted to MDEQ within sixty (60) days following completion of each 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. 2.2.B(11).)

- 5.C.5 For Emission Points AA-006, AA-007, AA-010, and AA-041, the permittee shall submit a semi-annual report on any periods of excess emissions recorded as required by Condition 5.B.8. Each excess emission report shall be submitted in accordance with 40 CFR 60.7(c), Subpart A.

Periods of excess emissions will not be considered indicative of a violation of 40 CFR 60.11(d), Subpart A provided that the MDEQ determines that the affected source (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.8 are exempt from the deviation 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 semi-annual report in accordance with Condition 5.A.4 that summarizes the amount of time the Lime Kiln (Emission Point AA-013) and the amount of time the incinerator (Emission Point AA-016) are used to combust TRS gases from the digester system.

(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) – (c)(5), Subpart MM. The permittee must submit semi-annual excess emission reports following the procedures specified in 40 CFR 63.867(d)(2), Subpart MM [as specified in 40 CFR 63.10(e)(3)(v), Subpart A] 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 shall submit the report to the Administrator at all the

appropriate addresses listed in 40 CFR 63.13, Subpart A. Once the form has been available in CEDRI for 1 year, the permittee must begin submitting all subsequent reports via CEDRI.

The reports shall be submitted by the deadlines specified in Subpart MM regardless of the method in which the reports are submitted. Each report shall also be submitted to the MDEQ in accordance with Condition 5.A.4.

Periods of excess emissions allowed by Conditions 3.B.15 and 3.B.24 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 a semi-annual report in accordance with Condition 5.A.4 that summarizes the fossil fuel usage and heat input.

(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 a semi-annual report in accordance with Condition 5.A.4 that details the monthly annual capacity factor calculations based on a rolling 12-month total.

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

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

- (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 respectively allowed for TRS and opacity by Conditions 5.B.16 and 5.B.18 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, the permittee shall submit a semi-annual report in accordance with 40 CFR 60.7(c), Subpart A that indicates 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), Subpart A if the MDEQ determines that the affected source (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 semi-annual report in accordance with Condition 5.A.4 that summarizes the amount(s) and type(s) of fuels combusted.

(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 semi-annual report in accordance with Condition 5.A.4 that details the amount of used oil generated on-site that is burned as fuel based on both a monthly and rolling 12-month total.

(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 semi-annual report that details excess opacity emissions and monitoring system. These report shall be postmarked by the 30th 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 semi-annual report in accordance with Condition 5.A.4 that summarizes the amount(s) and type(s) of fuels combusted.

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

- 5.C.16 For Emission Point AA-016, the permittee shall submit semi-annual report\ in accordance with 40 CFR 60.7(c), Subpart A on the periods of excess emissions in which the combustion temperature at the incineration point is less than 1200°F 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), Subpart A if the permittee can demonstrate that the affected source (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 semi-annual report in accordance with Condition 5.A.4 that summarizes the hours in which NCGs are incinerated (via the incinerator).

(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 semi-annual report in accordance with Condition 5.A.4 that summarizes the amount(s) and type(s) of fuels combusted.

(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 semi-annual report in accordance with Condition 5.A.4 that contains the information required in 40 CFR 63.10(e)(3), Subpart A.

The report shall include the number, duration and a brief description of each type of malfunction that occurred during the reporting period and caused / 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), Subpart S (including actions taken to correct a malfunction).

Periods of excess emissions allowed by Condition 3.B.42 and 3.B.50 are exempt from the deviation 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 shall submit to the MDEQ all of the notifications specified in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) – (h), Subpart A 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 shall submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. The permittee shall submit each compliance report as provided in 40 CFR 63.7550(b), Subpart DDDDD.

Each compliance report shall be submitted in accordance with Condition 5.A.4. Additionally, each compliance report shall contain the information detailed in 40 CFR 63.7550(c), Subpart DDDDD (contingent upon how the permittee chooses to comply).

(Ref.: 40 CFR 63.7550(a) – (c); Subpart DDDDD)

- 5.C.22 For Emission Points AA-021 and AA-023, the permittee shall submit a semi-annual report in accordance with Condition 5.A.4 that summarizes the following information:

- (a) The total process operating time (in hours) of the units associated with the Oxygen Delignification Process and the Oxygen Delignification Process Atmospheric Diffusion Washer; and
- (b) The amount of time (in hours) the Recovery Furnace (AA-011) or the Power Boiler (AA-015) are used to combust the exhaust gases generated by the Oxygen Delignification Process and the Oxygen Delignification Process Atmospheric Diffusion Washer; and
- (c) The percentage of operating time the exhaust gases were combusted in either the Recovery Furnace or Power Boiler.

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

- 5.C.23 For Emission Point AA-037, the permittee shall submit a semi-annual report in accordance with Condition 5.A.4 that details each instance in which the work practice standards were not met.

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; Subpart ZZZZ)

- 5.C.24 For Emission Point AA-037, the permittee shall submit a semi-annual report in accordance with Condition 5.A.4 that details each instance when the applicable requirements found in Table 8 of Subpart ZZZZ were not met.

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

- 5.C.25 For Emission Point AA-038, the permittee shall submit an annual report by January 31 of each calendar year for the preceding calendar year that summarizes the hours in which the engine operated in emergency and non-emergency service.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.C.26 For Emission Points AA-013, AA-015, AA-016, and AA-042, the permittee shall submit a semi-annual report in accordance with Condition 5.A.4 with the following information (as applicable):

- (a) Summarized information on the number, duration, and cause [including an unknown cause, if applicable] of excursions or exceedances (as applicable) and the corrective actions taken;
- (b) Summarized 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)];
- (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.27 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
	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 Semicheical 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 ₂ S emissions)		Emission Limit: H ₂ S ≤ 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 ₂ S 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	Scrubbing liquid flow rate is recorded at least once

	shift on a log sheet.	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.