

STATEMENT OF BASIS
WestRock – Demopolis Mill
Facility No. 105-0001
Title V Renewal

INTRODUCTION

WestRock – Demopolis Mill (WRD, the Mill) has applied for a renewal of its Major Source Operating Permit (MSOP) 105-0001. This proposed Title V Major Source Operating Permit is issued under the provisions of ADEM Admin. Code R. 335-3-16. The above-named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of the Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

The facility is located in Demopolis, Alabama (Marengo County), which is currently listed as in attainment or unclassifiable with the National Ambient Air Quality Standards (NAAQS). The facility began operations in 1957. The initial Title V MSOP was issued on January 1, 2004, and this is the fourth renewal. The current MSOP was issued on November 30, 2020, with an effective date of January 1, 2021, and expired on December 31, 2025. The fourth renewal application was received on June 17, 2025.

There are no current or ongoing enforcement actions against WRD necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at <https://echo.epa.gov/> (Search using Facility ID 110064120525).

There are a number of reports the Mill is required to submit quarterly, semiannually, annually, and every five years. The following reports are to be submitted quarterly: excess emissions report for all Continuous Emission Monitoring Systems (CEMS) / Continuous Opacity Monitoring Systems (COMS) and for 40 CFR Part 60 Subparts Db and BB. The following reports are to be submitted semi-annually: Maximum Achievable Control Technology (MACT) I compliance and monitoring report, MACT II compliance and monitoring report, Boiler MACT compliance and monitoring report, and Title V monitoring report. An annual compliance certification and Mill-wide emissions are to be submitted annually. In addition to the reports listed, the Mill must perform a number of performance tests every year, every three years, and/or every five years and submit a report following each performance test. Unit specific requirements are further detailed in the following sections.

BACKGROUND

The Mill is a kraft pulp and paperboard mill and market bleached kraft pulp mill. The Mill produces coated and uncoated paperboard and bleached pulp, which is sold as market pulp or is made into either bond or offset grades of paper. Operations at the Mill include wood storage and processing; kraft pulping; a board mill; pulp drying; wastewater treatment; landfilling; chemical recovery; recausticizing; and a power plant consisting of two power boilers and a recovery furnace.

The facility is located in Marengo County, which is classified as a Class II County with respect to particulate matter (PM) and a Category II County with respect to sulfur dioxide (SO₂). The Mill is a major source with respect to Title V, Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), and the MACT / New Emission Standards for Hazardous Air Pollutants (NESHAP) standards. The Mill is a major source for filterable PM, total PM less than 10 micrometers (PM₁₀), total PM less than 2.5 micrometers (PM_{2.5}), condensable PM, SO₂, nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), greenhouse gases (CO_{2e}), total hazardous air pollutants (HAPs), acetaldehyde, hydrochloric acid (HCl), and methanol.

The Mill has not had any PSD projects since the previous renewal. The following air permits will be incorporated into the Title V MSOP during this fourth renewal:

- 105-0001-X035 – Emergency Firewater Pump Engine – Replacement
- 105-0001-X036 – No. 3 Lime Kiln Emergency Drive Engine – Replacement

EMISSIONS UNITS

WOODYARD

The facility receives hardwood logs, bark, and biomass, as well as hardwood and softwood chips, by truck or rail. The logs are debarked and processed into chips. The chips are mechanically conveyed to storage piles, then to the screen room to be sorted into one of three storage silos. From there, they are conveyed to the digesters. Fines that pass through the screening process are conveyed to an outside storage pile or to the No. 4 Power Boiler.

Emission Limits and Proposed Periodic Monitoring:

The woodyard is a non-regulated source of fugitive emissions. Therefore, it is not subject to anything other than the general provisos of the Title V MSOP.

UTILITIES

The utilities area consists of the No. 4 and No. 5 Power Boilers. The utilities provide steam, power, and process heat for the facility.

No. 4 Power Boiler

The No. 4 Power Boiler is a fluidized bed boiler that was installed in 2016. The boiler is rated at 550.58 MMBtu/hr and is permitted to burn natural gas and biomass, which includes bark, chip thickness screening fines, wastewater treatment plant residuals, and pulp mill knots. Air Permit 105-0001-X033 was issued on July 9, 2014, and established PSD synthetic minor limits for PM₁₀, PM_{2.5}, NO_x, SO₂, and CO_{2e}. This permit was incorporated into the Title V permit issued on October 29, 2015.

Control Devices

The No. 4 Power Boiler is equipped with the following control devices: a fabric filter to control PM; a sorbent injection system to control SO₂, sulfuric acid mist (H₂SO₄, SAM), and HCl; a carbon

injection system to control mercury (Hg); and a selective non-catalytic reduction system to control NO_x. It is also used as a primary control device for incinerating non-condensable gases.

Emission Limits and Proposed Periodic Monitoring

The No. 4 Power Boiler is subject to:

- The applicable requirements of 40 CFR 60 General Provisions and Subpart Db for NO_x, and opacity.
- The applicable requirements of 40 CFR 63 Subpart DDDDD.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 for PSD synthetic minor limits for PM₁₀, PM_{2.5}, NO_x, SO₂, and CO_{2e}.

The No. 4 Power Boiler has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 0.0074 lb/MMBtu	MACT	40 CFR 63 Subpart DDDDD	N/A
PM ₁₀	≤ 0.024 lb/MMBtu	PSD Synthetic Minor	105-0001-X033	July 9, 2014
PM _{2.5}	≤ 0.023 lb/MMBtu	PSD Synthetic Minor	105-0001-X033	July 9, 2014
NO _x	≤ 0.20 lb/MMBtu (30-day rolling average)	NSPS	40 CFR 60 Subpart Db	N/A
NO _x	≤ 342.5 tons/12 month rolling period, combined from this unit and No. 5 Power Boiler	PSD Synthetic Minor	105-0001-X033	July 9, 2014
SO ₂	≤ 332 tons/12-month rolling period, combined from this unit and No. 5 Power Boiler	PSD Synthetic Minor	105-0001-X033	July 9, 2014
CO	≤ 310 ppmv corrected to 3% O ₂ (30 day rolling average)	MACT	40 CFR 63 Subpart DDDDD	N/A
CO _{2e}	≤ 194,619 tons/12-month rolling period, combined from this unit and No. 5 Power Boiler	PSD Synthetic Minor	105-0001-X033	July 9, 2014
Opacity	≤ 20 percent with one six-minute period up to 27 percent in any one-hour period	NSPS	40 CFR Subpart Db	N/A
Opacity	≤ 10 percent (daily block average)	MACT	40 CFR 63 Subpart DDDDD	N/A
HCl	≤ 0.020 lb/MMBtu	MACT	40 CFR 63 Subpart DDDDD	N/A

Pollutant	Limit	Limit Type	Origin	Original Date
Hg	$\leq 5.4 \times 10^{-6}$ lb/MMBtu	MACT	40 CFR 63 Subpart DDDD	N/A

In addition, no more than a combined total of 3,129 million standard cubic feet (MMSCF) of natural gas may be fired in the No. 4 and No. 5 Power Boilers during any 12-month period.

The No. 4 Power Boiler has the following emission monitoring, recordkeeping, and reporting requirements:

- A CEMS for measuring SO₂ shall be installed, calibrated, operated, and maintained in accordance with the requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F. Excess emissions reports shall be submitted quarterly.
- A CEMS for measuring NO_x shall be installed, calibrated, operated, and maintained in accordance with 40 CFR 60, Subpart Db, §60.48b. This CEMS shall be subject to the quality control and quality assurance requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F. Excess emission reports shall be submitted quarterly.
- Pursuant to 40 CFR 63.7525, a CEMS for measuring CO shall be installed, calibrated, operated, and maintained in accordance with the requirements of 40 CFR Part 60 Appendix B Specification 4, 4A, or 4B, and Appendix F. A record of all 30-day rolling average CO emissions in parts per million shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall be recorded as well.
- A COMS which meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1 shall be installed, operated, calibrated, and maintained to record the opacity discharged from the unit. Excess opacity emission reports shall be submitted quarterly.
- Equation 19-1 from 40 CFR 60, Appendix A, Method 19 shall be used to calculate 1-hour NO_x and SO₂ lb/MMBtu emission rates. This emission rate shall be multiplied by the boilers heat input as derived from the boiler steam flow meter to determine the 1-hour NO_x and SO₂ emissions, which shall be summed each day. This steam flow to heat input table shall be verified annually during the yearly emissions testing conducted on this boiler. Daily emissions will be summed each month to obtain the monthly total. Individual monthly totals will be summed together to obtain the tons per 12-month emitted. Excess emission reports shall be submitted quarterly.
- The quantity and heat input of fuels fired shall be monitored. Records of the monthly fuel use must be made and maintained in a form suitable for inspection for at least five years.
- When used to demonstrate compliance with the mercury and hydrogen chloride emission limits, the carbon and sorbent injection rate shall be monitored and recorded and the minimum injection value shall be set by a Department approved emissions test. Records of the 30-day rolling average carbon and sorbent injection rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall be recorded as well.
- A PM emissions test shall be performed and a report submitted at least once per year.
- For opacity periodic monitoring, if the average of any ten consecutive six-minute opacity averages exceeds 20 percent the cause is to be investigated and appropriate corrective action is to be taken. Six-minute average opacities will be continuously recorded and maintained in a form suitable for inspection for at least five years.

- The SO₂ CEMS shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed. The CEMS is subject to the reporting and recordkeeping requirements of 40 CFR 60, Appendix F.
- The NO_x CEMS shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed. The CEMS is subject to the reporting and recordkeeping requirements of 40 CFR 60, Appendix F.
- Performance tests for PM, HCl, and Hg shall be performed annually within 13 months of the previous test. If performance tests for at least 2 consecutive years show that the respective emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the boiler or air pollution control equipment that could increase emissions, performance tests may be conducted for the specific pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. A Notification of Intent to conduct a performance test must be submitted at least 60 days before the test is scheduled to begin. Results must be submitted within 60 days after the completion of the test.
- Pursuant to 40 CFR 63 Subpart DDDDD the permittee shall maintain opacity to less than or equal to 10 percent opacity or the highest hourly average opacity reading measured during the performance test run demonstrating compliance with the PM emission limitation (daily block average). If the operating limit exceedance is indicated, corrective action is to be taken within twenty-four hours. A record of the daily block average opacity shall be made and maintained on the file available for inspection for at least five years. Exceedances and corrective actions shall be recorded as well.
- Pursuant to §63.7500(a)(2) and Table 4, the facility shall maintain the 30-day rolling average operating load such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test. Records of the 30-day rolling average steaming rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall be recorded as well.
- A record of the 12-month rolling CO₂e emissions from the No. 4 and No. 5 Power Boilers must be made and maintained in a form suitable for inspection for at least five years.
- Pursuant to 40 CFR 63 Subpart DDDDD the permittee shall maintain the 30-day rolling average sorbent or carbon injection rate above the minimum hourly average sorbent or carbon injection rate as defined in 63.7575.
- The facility must demonstrate continuous compliance with each applicable emission limit, work practice standard, and operating limit of 40 CFR 63 Subpart DDDDD according to §63.7540(a) and Table 8.
- A site-specific monitoring plan shall be developed in accordance with 40 CFR Part 63.7505(d), kept on file, and be readily available for review.
- This source shall maintain all applicable records required under 40 CFR 63.7555. Records must be readily available for review according to 63.10(b)(1) for a period of five years.
- This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.

Changes During the Fourth Renewal

- Updated Subpart DDDDD limits for filterable PM, HCl, and Hg effective October 6, 2025.
- Under Applicability, added proviso for PSD synthetic minor limits.
- Under Applicability, removed reference to Rule 335-3-4-.01 as the applicable opacity limit comes from Subpart Db.
- Under Applicability, removed the reference to PM under Subpart Db as the PSD synthetic minor and Subpart DDDDD limits are more stringent.
- Under Applicability, condensed Subpart DDDDD provisos and updated the classification to “existing fluidized bed unit.” On August 24, 2020, the U.S. EPA proposed a rule change to 40 CFR 63 Subpart DDDDD. The final rule was issued on October 6, 2022. Among the changes was a redefinition of “new” and “existing sources”, where sources constructed after June 4, 2010, were to be classified as new sources. On September 3, 2024, the U.S. Court of Appeals for the District of Columbia Circuit ruled that this definition was a misinterpretation of “new source” as defined in the Clean Air Act (CAA), and the proposed definition was to be revised. The CAA states that a new source “means a stationary source the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emission standard applicable to such source.” Per the Court’s decision, the No. 4 Power Boiler would be considered an existing source as it was constructed or reconstructed prior to when the rule was first proposed on August 24, 2020. However, no new rule or amendments to Subpart DDDDD have been proposed by the EPA at this time to formalize this decision. For the purposes of this permit renewal, the limits for “existing” boilers were used in alignment with the Court’s decision and interpretation of the CAA.
- Under Emission Standards, clarified what types of materials are considered biomass for this boiler.
- Under Emission Standards, added provisos for maintaining and operating the boiler according to Boiler MACT.
- Under Compliance and Performance Test Methods and Procedures, removed all references to “alternative test methods”.
- Under Compliance and Performance Test Methods and Procedures, added compliance methods for Subpart DDDDD for PM, HCl, Hg.
- Under Compliance and Performance Test Methods and Procedures, added the COMS as means of determining compliance for opacity.
- Under Compliance and Performance Test Methods and Procedures, moved the boiler tune-up proviso to Emission Monitoring and rewrote to improve clarity and match the language for similar units.
- Under Emission Monitoring, moved annual PM test reporting to Recordkeeping and Reporting Requirements.
- Under Emission Monitoring, combined PM, HCl, and Hg testing into a single proviso.
- Under Emission Monitoring, added provisos for boiler MACT operating limits under Table 4 of Subpart DDDDD.
- Under Emission Monitoring and Recordkeeping and Reporting Requirements, added provisos for monitoring and recording fuel usage.
- Under Recordkeeping and Reporting Requirements, added a recordkeeping requirement for six-minute opacities.

- Under Recordkeeping and Reporting Requirements, added requirements for excess emission reporting of NO_x and SO₂ emissions combined with the No. 5 Power Boiler.
- Under Recordkeeping and Reporting Requirements, added proviso for tracking CO_{2e} emissions combined with the No. 5 Power Boiler.
- Under Recordkeeping and Reporting Requirements, replaced proviso for recordkeeping of three-hour rolling average oxygen values with 30-day rolling average CO emissions in parts per million. The oxygen values do not need to be recorded because this boiler has a CO CEMS. The CO recordkeeping is for the alternative CO CEMS monitoring under 40 CFR 63.7525. Under Recordkeeping and Reporting Requirements, a number of Boiler MACT requirements were added to more explicitly indicate the requirements of 40 CFR 63.7550 and 63.7555, which were previously only alluded to under the respective rules:
 - Records of daily block average opacity
 - Records of 30-day rolling average sorbent and carbon injection rate
 - Records of 30-day rolling average steaming rate
 - Records of fuel analyses
 - Notice of Intent and performance test reports
- Under Recordkeeping and Reporting Requirements, added provisos for boiler MACT compliance under Table 8 of Subpart DDDDD.
- Clarified that the monitoring and recordkeeping requirements for the carbon and sorbent injection systems shall only apply while these devices are being used to demonstrate compliance with the Hg and HCl emission limits pursuant to Table 4 of Subpart DDDDD.
- A number of citations to have been corrected to the appropriate regulation.

No. 5 Power Boiler

The No. 5 Power Boiler is a Gas 1 package boiler that was installed in 2015. The boiler is rated at 270 MMBtu/hr and is permitted to burn natural gas. Air Permit 105-0001-X034 was issued on July 9, 2014, and established PSD synthetic minor limits for NO_x, SO₂, and CO_{2e}. This permit was incorporated into the Title V issued on October 29, 2015.

Control Devices

The No. 5 Power Boiler is not equipped with any control devices. It is used as a backup control device for incinerating non-condensable gases.

Emission Limits and Proposed Periodic Monitoring

The No. 5 Power Boiler is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 for opacity.
- The applicable requirements of 40 CFR 60 General Provisions and Subpart Db for NO_x.
- The applicable requirements of 40 CFR 63 Subpart DDDDD.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 for PSD synthetic minor limits for NO_x, SO₂, and CO_{2e}.

The No. 5 Power Boiler has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
NO _x	≤ 0.20 lb/MMBtu (30-day rolling average)	NSPS	40 CFR 60 Subpart Db	N/A

Pollutant	Limit	Limit Type	Origin	Original Date
NO _x	≤ 342.5 tons/12 month rolling period, combined from this unit and No. 4 Power Boiler	PSD Synthetic Minor	105-0001-X034	July 9, 2014
SO ₂	≤ 332 tons/12-month rolling period, combined from this unit and No. 4 Power Boiler	PSD Synthetic Minor	105-0001-X034	July 9, 2014
CO ₂ e	≤ 194,619 tons/12-month rolling period, combined from this unit and No. 4 Power Boiler	PSD Synthetic Minor	105-0001-X034	July 9, 2014
Opacity	≤ 20 percent with one six-minute period up to 40 percent in any one-hour period	SIP	Rule 335-3-4.01(1)	N/A

In addition, no more than a combined total of 3,129 million standard cubic feet (MMSCF) of natural gas may be fired in the No. 4 and No. 5 Power Boilers during any 12-month period.

The No. 5 Power Boiler has the following emission monitoring, recordkeeping, and reporting requirements:

- A CEMS for measuring SO₂ shall be installed, calibrated, operated, and maintained in accordance with the requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F. Excess emissions reports shall be submitted quarterly.
- A CEMS for measuring NO_x shall be installed, calibrated, operated, and maintained in accordance with 40 CFR 60, Subpart Db, §60.48b. This CEMS shall be subject to the quality control and quality assurance requirements of 40 CFR Part 60 Appendix B Specification 2 and Appendix F. Excess emission reports shall be submitted quarterly.
- The SO₂ CEMS shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed.
- The NO_x CEMS shall be audited at least once per calendar quarter. A relative accuracy test audit shall be performed at least once every four calendar quarters. A cylinder gas audit shall be performed in the calendar quarters when a relative accuracy test audit is not performed.
- The quantity and heat input of fuels fired shall be monitored. Records of the monthly fuel use must be made and maintained in a form suitable for inspection for at least five years.
- Pursuant to 40 CFR 63.7540(a)(12), boilers with a continuous oxygen trim system that maintains an optimum air to fuel ratio, must conduct a tune-up of the boiler every 5 years as specified in 63.7540(a)(10)(i) – (vi). Each tune-up must be completed no more than 61 months after the previous tune-up.
- A record of the 12-month rolling CO₂e emissions from the No. 4 and No. 5 Power Boilers must be made and maintained in a form suitable for inspection for at least five years.
- This source shall maintain all applicable records required under 40 CFR 63.7555. Records must be readily available for review according to 63.10(b)(1) for a period of five years.
- This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.

Changes During the Fourth Renewal

- Under Applicability, added proviso for PSD synthetic minor limits.
- Under Applicability, condensed Subpart DDDDD provisos and updated the classification to include the oxygen trim system.
- Corrected the opacity standard to match the state regulations, which allows for an opacity of 40% in one six-minute period in any sixty-minute period. Since this is a gas only boiler, it is not subject to the opacity standard under NSPS.
- Under Compliance and Performance Test Methods and Procedures, removed all references to alternative test methods.
- Under Compliance and Performance Test Methods and Procedures, clarified the applicability and requirements of the boiler tune-up proviso and moved to Emission Monitoring.
- Under Emission Monitoring and Recordkeeping and Reporting Requirements, added provisos for monitoring and recording fuel usage.
- Under Recordkeeping and Reporting Requirements, added requirements for excess emission reporting of NO_x and SO₂ emissions combined with the No. 4 Power Boiler.
- Under Recordkeeping and Reporting Requirements, added proviso for tracking CO_{2e} emissions combined with the No. 4 Power Boiler.
- Under Recordkeeping and Reporting Requirements, removed proviso for recordkeeping of three-hour rolling average oxygen values. This boiler is not subject to a CO limit under Subpart DDDDD, so this requirement does not apply.
- A number of citations to have been corrected to the appropriate regulation.

PULP MILL

The pulp mill consists of the K-1 and K-2 Digester Systems, Brown Stock Washer System, Bleaching System, and Chlorine Dioxide Generator. The pulp mill makes up the process of converting wood chips into pulp. The non-condensable gases (NCGs) from these units are collected from the pulp mill and incinerated in the No. 4 and No. 5 Power Boilers.

K-1 Digester System

The K-1 Digester is a Kamyr continuous digester that was installed in 1957 and processes softwood. Pre-steamed wood chips are treated in the digester with sodium hydroxide and sodium sulfide to break down the lignin that holds together the wood fibers. Once they are done cooking, they are released to a diffusion washer and blow tank where they explode, or defiberlize, and become softwood pulp. The digester has an operating capacity of 38,750 air-dry pounds of pulp per hour. The digester is not subject to any PSD synthetic minor or PSD/Best Available Control Technology (BACT) limits.

Control Devices

Non-condensable gases from the K-1 Digester are required to be treated under 40 CFR 63 Subpart S. The Mill has elected to control these emissions by routing them to the No. 4 or 5 Power Boilers for incineration, which is one of the listed control options in 40 CFR 63 Subpart S.

Emission Limits and Proposed Periodic Monitoring

The K-1 Digester is subject to:

- The applicable State Only requirements of ADEM Admin. Rule 335-3-5-.04 (5) for total reduced sulfur (TRS).
- The applicable requirements of 40 CFR 63 Subpart S.

The K-1 Digester has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	SIP (State Only)	Rule 335-3-5-.04 (5)	N/A
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The K-1 Digester has the following emission monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed-Vent Systems” for details.
- For TRS, periodic monitoring shall be performed at least once per day by mill personnel to determine if the gases are being incinerated as required and if the gases are not being incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file available for inspection for at least five years (State Only).

Changes During the Fourth Renewal

- Under Emission Standards (State Only), added “corrected to ten percent oxygen” to the TRS standard to match the language of the state regulations.
- A number of citations to Rule 335-3-14-.02 or General Provisions have been corrected.

K-2 Digester System

The K-2 Digester is a Kamyr continuous digester that was installed in 1992 and processes hardwood. Pre-steamed wood chips are treated in the digester with sodium hydroxide and sodium sulfide to break down the lignin that holds together the wood fibers. Once they are done cooking, they are released to a diffusion washer and blow tank where they explode, or defiberize, and become hardwood pulp. The digester has an operating capacity of 87,500 air dry pounds of pulp per hour. The digester is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

Non-condensable gases from the K-2 Digester are required to be treated under 40 CFR 63 Subpart S. The Mill has elected to control these emissions by routing them to the No. 4 or 5 Power Boiler for incineration, which is one of the listed control options in 40 CFR 63 Subpart S.

Emission Limits and Proposed Periodic Monitoring

The K-2 Digester is subject to:

- The applicable requirements of 40 CFR 60 General Provisions and Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart S.

The K-2 Digester has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	NSPS	40 CFR 60 Subpart BB	N/A
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The K-2 Digester has the following emission monitoring, recordkeeping, and reporting requirements:

- For TRS, periodic monitoring shall be performed at least once per day by mill personnel to determine if the gases are being incinerated as required and if the gases are not being incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file available for inspection for at least five years.
- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed-Vent Systems” for details.

Changes During the Fourth Renewal

- Under Emission Standards (State Only), added “by volume on a dry basis, corrected to ten percent oxygen” to the TRS standard to match the language of Subpart BB.
- Under Emission Monitoring, moved daily TRS incineration records to Recordkeeping and Reporting Requirements.
- Under Emission Monitoring, added a proviso for periodic monitoring of TRS incineration.
- A number of citations to Rule 335-3-14-.02 or General Provisions have been corrected.

Brown Stock Washer System

The Brown Stock Washer System consists of the hardwood pulp washing “A” Line originally installed in 1957 and the softwood pulp washing “B” Line originally installed in 1988. The washing system washes out residual cooking liquor from the pulp for chemical recovery and to save on bleaching chemicals. The washers have respective operating capacities of 87,500 air-dry pounds of pulp per hour and 38,750 air-dry pounds of pulp per hour. The washing system is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

Non-condensable gases from the Brown Stock Washer System are required to be treated under 40 CFR 63 Subpart S. The Mill has elected to control these emissions by routing them to the No. 4 or 5 Power Boiler for incineration, which is one of the listed control options in 40 CFR 63 Subpart S.

Emission Limits and Proposed Periodic Monitoring

The Brown Stock Washer System is subject to:

- The applicable requirements of 40 CFR 63 Subpart S.

The Brown Stock Washer System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The Brown Stock Washer System has the following emission monitoring, recordkeeping, and reporting requirements:

- See Provisos for “Enclosures and Closed Vent Systems” for details.

Changes During the Fourth Renewal

- On the Informational Page, condensed the HAP limits into one proviso.
- Under Emission Standards, removed proviso for TRS incineration because Subpart BB is not applicable and state regulations for TRS do not apply to brown stock washers. The “B” line washers were originally constructed in 1948 and 1956 at another kraft pulp mill and installed at WRD in 1988. The relocation or change of ownership of existing facilities is not considered a modification under 40 CFR 60.14, and the refurbishments of the washer did not qualify as a reconstruction under 40 CFR 60.15. Therefore, the “B” line did not become subject to NSPS. TRS emissions from the brown stock washers were previously subject to a PSD/BACT production limit in the initial issuance of the Title V MSOP on January 1, 2004, until the Subpart S incineration system became operational. The system became operational on October 31, 2004, which removed the limit. A Major Modification was issued on July 13, 2007, that formalized this change. In complying with Subpart S, the Mill will continue to collect TRS emissions in the Enclosures and Closed Vent Systems for incineration along with HAPs and conduct the associated monitoring, recordkeeping, and reporting.
- Updated “See Provisos for ‘Enclosures and Closed Vent Systems’” to include Pulping System Processes”.
- A number of citations have been corrected to the appropriate regulations.

Bleaching System

The Bleaching System consists of the No. 1 Bleach Plant installed in 1957 and the No. 2 Bleach Plant installed in 1992. The bleach plants mix the pulp with chlorine dioxide (ClO₂) to continue extracting lignin and brighten the pulp to a target brightness. The No. 1 Bleach Plant is part of the softwood line, and the No. 2 Bleach Plant is part of the hardwood line. The bleach plants have respective operating capacities of 58,333 pounds of bleached pulp per hour and 88,583 pounds of bleached pulp per hour. The bleach plants are not subject to any PSD synthetic minor or PSD/BACT limits. Air Permits 105-0001-X018 and X019 were issued on August 22, 1990, with State Only Air Toxics limits for chlorine (Cl₂) and ClO₂. These permits were incorporated into the Title V issued on January 4, 2004.

Control Devices

The Bleaching System is equipped with scrubbers to collect and treat chlorinated compounds.

Emission Limits and Proposed Periodic Monitoring

The Bleaching System is subject to:

- The applicable requirements of 40 CFR 63 Subpart S.

- The applicable State Only requirements of ADEM Admin. Rule 335-3-16-05 for Air Toxics, including Cl₂ and ClO₂.

The Bleaching System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
HAPs	Enclosed and vented to a closed vent system (per 63.450) and routed to a control device.	MACT	40 CFR 63 Subpart S	N/A
HAPs	≤ 10 ppmv of total chlorinated HAPs	MACT	40 CFR 63 Subpart S	N/A
ClO ₂ (No. 1)	≤ 2.38 lb/hr	SIP (State Only)	105-0001-X018	August 22, 1990
ClO ₂ (No. 2)	≤ 4.0 lb/hr	SIP (State Only)	105-0001-X019	August 22, 1990
Cl ₂ (No. 1)	≤ 8.12 lb/hr	SIP (State Only)	105-0001-X018	August 22, 1990
Cl ₂ (No. 2)	≤ 6.0 lb/hr	SIP (State Only)	105-0001-X019	August 22, 1990

The Bleaching System has the following emission monitoring, recordkeeping, and reporting requirements:

- For the enclosures and closed-vent system see the Emission Monitoring provisos for “Enclosures and Closed-Vent Systems”.
- A continuous monitoring system (CMS, as defined in 40 CFR 63.2) shall be installed, calibrated, certified, operated, and maintained according to the manufacturer’s specifications. The CMS shall include a continuous recorder.
- A CMS shall be operated to measure the following parameters for each gas scrubber used to comply with the bleaching system requirements of 40 CFR 63.445(c).
 - a. The pH or the oxidation/reduction potential of the gas scrubber effluent;
 - b. The gas scrubber liquid influent flow rate; and
 - c. The bleach plant exhaust gas fan rpm (See March 20, 2001, EPA Region IV letter granting approval of alternative monitoring.)
- The bleaching system scrubber shall be operated in accordance with the parameter value ranges established in accordance with 40 CFR 63.453(n).
- The owner or operator of this source shall comply with the recordkeeping and reporting requirements of 40 CFR 63.10, as shown in Table 1 Subpart S.
- A chlorinated HAP performance test shall be performed and a report submitted within 60 months from the date of the previous performance test.
- A ClO₂ and Cl₂ emissions test shall be performed and a report submitted at least once every five years to certify compliance and set periodic monitoring parameters for the No. 1 Bleach Line scrubber and the No. 2 Bleach Line scrubber (State Only).

Changes During the Fourth Renewal

- Under Emission Standards, removed alternative control device standards and clarified the limit as being only 10 parts per million by volume.
- Under Emission Standards, removed reference to 40 CFR 430.

- Under Emission Monitoring and Recordkeeping and Reporting Requirements, added provisos for chlorinated HAP testing and reporting every 60 months as required by Subpart S.
- Under Compliance and Performance Test Methods and Procedures (State Only), removed reference to alternative test methods.
- A number of citations have been corrected to the appropriate regulations.

Chlorine Dioxide Generator

The R-8 ClO₂ Generator was installed in 1991. Due to the instability of ClO₂ at room temperature and pressure, it is manufactured on-site as a gas from the reaction of sodium chlorate in an acidic solution under vacuum conditions with methanol as a reducing agent. The ClO₂ gas is extracted from the generator to the absorption tower where it is absorbed by chilled water and stored until use in the bleach plants. The generator has an operating capacity of 4,170 pounds per hour. The generator is not subject to any PSD synthetic minor or PSD/BACT limits. Air Permit 105-0001-X020 was issued on August 22, 1990, with State Only Air Toxics limits for Cl₂ and ClO₂. This permit was incorporated into the Title V issued on January 1, 2004.

Control Devices

The R-8 ClO₂ Generator is equipped with a scrubber that uses chilled water to absorb vent gases and is routed to the absorption tower.

Emission Limits and Proposed Periodic Monitoring

The R-8 ClO₂ Generator is subject to:

- The applicable State Only requirements of ADEM Admin. Rule 335-3-16-05 for Air Toxics, including Cl₂ and ClO₂.

The R-8 ClO₂ Generator has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Cl ₂	≤ 1.43 lb/hr	SIP (State Only)	105-0001-X020	August 22, 1990
ClO ₂	≤ 3.04 lb/hr	SIP (State Only)	105-0001-X020	August 22, 1990

The R-8 ClO₂ Generator has the following emission monitoring, recordkeeping, and reporting requirements:

- A Cl₂ emissions test shall be performed and a report submitted within once every five years to certify compliance and set periodic monitoring parameters (State Only).
- A ClO₂ emissions test shall be performed and a report submitted once every five years to certify compliance and set periodic monitoring parameters (State Only).
- At least once daily record chilled water flow rate and liquid temperature to the scrubber. If the chilled water flow rate is less than 90% of the chilled water temperature is more than 5 degrees Fahrenheit higher than the average respective value set by a required periodic test that showed compliance or a test approved by the Department that showed compliance, the cause is to be investigated and appropriate corrective action is to be taken within twenty-

four hours. Records of the flow rate and liquid temperature shall be made and maintained on file available for inspection for at least five years (State Only).

Changes During the Fourth Renewal

- Under Compliance and Performance Test Methods and Procedures (State Only), removed reference to alternative test methods.
- A number of citations have been corrected to the appropriate regulations.

RECOVERY SYSTEMS

The recovery system consists of the No. 3 Multiple-Effect Evaporator System, No. 3 Recovery Furnace, and No. 3 Smelt Dissolving Tank. The recovery system is used to recover some of the chemicals from the pulping process. The No. 3 Recovery Furnace also generates heat for steam and power generation.

No. 3 Multiple-Effect Evaporator System

The No. 3 Multiple Effect Evaporator System receives weak black liquor and evaporates the water to increase the concentration of solids from approximately 15% to approximately 70%. This is done with a seven-effect system, including two high solids concentrators. The evaporator was first installed in 1992 and modified in 1997. It has an operating capacity of 175,000 pounds of black liquor solids (BLS) per hour, or 4,200,000 pounds BLS per day. The evaporator is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

Non-condensable gases from the evaporator system are required to be treated under 40 CFR 63 Subpart S. The Mill has elected to control these emissions by routing them to the No. 4 or 5 Power Boiler for incineration, which is one of the listed control options in 40 CFR 63 Subpart S.

Emission Limits and Proposed Periodic Monitoring

The No. 3 Multiple Effect Evaporator System is subject to:

- The applicable requirements of 40 CFR 60 General Provisions and Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart S.

The No. 3 Multiple Effect Evaporator System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	NSPS	40 CFR 60 Subpart BB	N/A
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The No. 3 Multiple Effect Evaporator System has the following emission monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.
- For TRS, periodic monitoring shall be performed at least once per day by mill personnel to determine if the gases are being incinerated as required and if the gases are not being

incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file available for inspection for at least five years.

Changes During the Fourth Renewal

- Under Applicability, clarified the applicability of 40 CFR 60 Subpart A, General Provisions.
- Under Emission Standards, added “by volume on a dry basis, corrected to 10 percent oxygen,” to the TRS limit to be consistent with the language of Subpart BB.
- A number of citations have been corrected to the appropriate regulations.

No. 3 Recovery Furnace

The No. 3 Recovery Furnace burns spent BLS to recover inorganic chemicals. The heat generated from this combustion is used to generate steam. The partially incinerated inorganic material forms a smelt, primarily consisting of sodium carbonate and sodium sulfide, that flows into the No. 3 Smelt Dissolving Tank. The furnace was installed in 1992 and modified in 2003. It has an operating capacity of 193,000 pounds of BLS per hour and is rated at 529.2 MMBtu/hr on fossil fuels. The furnace is permitted to burn natural gas and low sulfur No. 2 fuel oil as supplemental fuels. Air Permit 105-0001-X022 was issued on September 8, 1993, establishing PSD/BACT limits for PM, TRS, SO₂, NO_x, opacity, CO, VOC, and H₂SO₄. These limits were revised when Air Permit 105-0001-X022 was reissued on September 3, 2003. This permit was incorporated into the Title V issued on January 1, 2004.

Control Devices

The No. 3 Recovery Furnace is equipped with a dry electrostatic precipitator (ESP) to control PM emissions from the flue gases. The salt cake particles from the ESP are collected and mixed with concentrated black liquor prior to incineration.

Emission Limits and Proposed Periodic Monitoring

The No. 3 Recovery Furnace is subject to:

- The applicable requirements of 40 CFR 60 Subpart Db for NO_x when distillate oil or natural gas is fired.
- The applicable requirements of 40 CFR 60 General Provisions and Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-04 for PSD/BACT limits for PM, TRS, SO₂, NO_x, opacity, CO, VOC, and H₂SO₄.

The No. 3 Recovery Furnace has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 0.021 gr/DSCF at 8 % O ₂ and ≤ 44.9 lb/hr	PSD	105-0001-X022	September 3, 2003
TRS	≤ 5 ppmv at 8% O ₂ ≤ 11.0 lb/hr	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	105-0001-X022	September 3, 2003

Pollutant	Limit	Limit Type	Origin	Original Date
SO ₂	≤ 100 ppmv at 8% O ₂ and ≤ 252.9 lb/hr (Three-hour average) when black liquor is being fired ≤ 0.05% when fuel oil is fired	PSD	105-0001-X022	September 3, 2003
NO _x	≤ 110 ppmv at 8% O ₂ and ≤ 199.9 lb/hr when black liquor is fired	PSD	105-0001-X022	September 3, 2003
Opacity	≤ 20%	PSD	105-0001-X022	September 3, 2003
Opacity	≤ 35% for 2% or more of operating time while firing spent pulping liquor in any semiannual period	MACT	40 CFR 63 Subpart MM	N/A
CO	≤ 300 ppmv at 8% O ₂ and ≤ 331.9 lb/hr	PSD	105-0001-X022	September 3, 2003
VOC	≤ 0.04 lb/MMBtu and ≤ 43.2 lb/hr (as carbon)	PSD	105-0001-X022	September 3, 2003
H ₂ SO ₄	≤ 3.78 lbs/hr	PSD	105-0001-X022	September 3, 2003
HAPs	PM as a surrogate, ≤ 0.044 gr/dscf at 8% O ₂	MACT	40 CFR 63 Subpart MM	N/A

The No. 3 Recovery Furnace has the following emission monitoring, recordkeeping, and reporting requirements:

- A PM emissions test shall be performed and a report submitted at least once per year.
- For PM and opacity periodic monitoring, if the average of any ten consecutive six-minute opacity averages exceeds 20 percent when spent pulping liquor is being fed, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. Records of corrective action shall be made and maintained for at least five years. An excess opacity emissions report shall be submitted quarterly.
- For PM, SO₂, CO, VOC, and SAM periodic monitoring, if any three-hour block average liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of all three-hour block average liquor-firing rates shall be made and maintained on file available for inspection for at least five years. Liquor firing rates must also be recorded in terms of tons/day or Mg/day.
- A CEMS for the measurement of TRS, oxygen, NO_x, and opacity shall be installed, calibrated, operated and maintained. Excess emissions reports shall be submitted quarterly.
- A SO₂ emissions test shall be performed and a report submitted at least once every five years to certify compliance and set periodic monitoring parameters.
- For SO₂ periodic monitoring, obtain fuel oil receipts from the suppliers that certify sulfur content in fuel for every load received by the mill. Fuel receipts shall be maintained on site available for inspection for at least five years.

- Pursuant to 40 CFR Part 63, Subpart MM, the COMS shall meet the provisions of Performance Specification 1 in appendix B to 40 CFR Part 60, as well as 40 CFR 63.6(h), 63.8, and 63.864(d)(3) and (4). All six-minute average opacities will be continuously recorded while the unit is in operation. Records of all six-minute average opacities shall be made and maintained on file available for inspection for a period of five years.
- A CO emissions test shall be performed and report submitted at least once every five years to certify compliance and set periodic monitoring parameters.
- A VOC emissions test shall be performed and report submitted at least once every five years to certify compliance and set periodic monitoring parameters.
- A SAM emissions test shall be performed and report submitted at least once every five years to certify compliance and set periodic monitoring parameters.
- For compliance with 40 CFR 63, Subpart MM, a periodic PM performance test shall be performed, pursuant to 40 CFR 63.865, every 5 years. Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.
- The facility must maintain proper operation of the ESP's automatic voltage control (AVC). Records must be maintained demonstrating compliance with the requirements of 40 CFR 63.864(e)(1).
- As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.
- Records of the amount of fossil fuel fired shall be made and the annual capacity factor calculated for each calendar year and maintained on file available for review for at least five years.
- The NO_x CEMS audit report shall be submitted to the Department within thirty days of the end of each calendar quarter.
- Records and supporting documentation shall be kept for the compliance determinations, operating ranges, and parameter ranges established for this unit for at least five years.
- Pursuant to 40 CFR 63 Subpart MM, records of exceedances shall be made and maintained for any semiannual period, and an excess emission report shall be submitted semiannually.

Changes During the Fourth Renewal

- On the Information Page, updated operating capacity. This increase was linked to an upgrade project for the K-2 Digester that resulted in an increase in the production black liquor due to an increase in pulp production. A notification for this project was submitted in 2024, and the project was determined to be a Section 502(b)(10) change that did not require a new permit or modification of the Title V MSOP.
- On the Informational Page, added 40 CFR 63 Subpart MM limit for opacity.
- Under Applicability, clarified the PSD/BACT limit proviso and added opacity.
- Under Applicability, changed order of 40 CFR 60 General Provisions and Subpart Db to improve clarity.
- Under Compliance and Performance Test Methods and Procedures, removed all references to “alternative test methods”.

- Under Compliance and Performance Test Methods and Procedures, added the COMS as a means of determining compliance for opacity.
- Under Emission Monitoring, rephrased Subpart MM periodic PM testing proviso to remove past date.
- Under Recordkeeping and Reporting Requirements, added a requirement for quarterly excess opacity emission reports to demonstrate compliance with the PSD opacity limit.
- Under Recordkeeping and Reporting Requirements, clarified maintenance of records (Proviso 16) as being required for at least five years.
- A number of citations have been corrected to the appropriate regulations.

No. 3 Smelt Dissolving Tank

The No. 3 Smelt Dissolving Tank receives the smelt from the No. 3 Recovery Furnace. Weak wash from the recausticizing area and smelt tank scrubber dissolve the smelt to produce a green liquor solution. The green liquor is pumped to the recausticization area for further chemical recovery. The smelt tank was installed in 1992. It has an operating capacity of 193,000 pounds of BLS on a dry basis per hour. Air Permit 105-0001-X023 was issued on September 8, 1993, establishing PSD/BACT limits for PM, TRS, and SO₂. This permit was incorporated into the Title V issued on January 1, 2004.

Control Devices

The No. 3 Smelt Dissolving Tank is equipped with a vent scrubber to control air emissions.

Emission Limits and Proposed Periodic Monitoring

The No. 3 Smelt Dissolving Tank is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 for opacity.
- The applicable requirements of 40 CFR 60 General Provisions and Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 for PSD/BACT limits for PM, TRS, and SO₂.

The No. 3 Smelt Dissolving Tank has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 0.12 lb/ton BLS (dry basis) ≤ 8.3 lb/hr	PSD	105-0001-X023	September 8, 1993
TRS	≤ 0.033 lb/ton BLS ≤ 2.3 lb/hr	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	105-0001-X023	September 8, 1993
SO ₂	≤ 5 lb/hr	PSD	105-0001-X023	September 8, 1993
Opacity	≤ 20% with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01	N/A
HAPs	PM as a surrogate for HAPs, ≤ 0.20 lbs/ton of BLS	MACT	40 CFR 63 Subpart MM	N/A

The No. 3 Smelt Dissolving Tank has the following emission monitoring, recordkeeping, and reporting requirements:

- A PM emissions test shall be performed and report submitted at least once per year.
- A TRS emissions test shall be performed and report submitted at least once every five years to certify compliance and set periodic monitoring parameters.
- A SO₂ emissions test shall be performed and report submitted at least once every five years to certify compliance and set periodic monitoring parameters.
- For PM, TRS, and SO₂ periodic monitoring, if any three-hour block average liquor firing rate is greater than 110 percent of its value set by the required complying periodic test or a complying test approved by the Department, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of all three-hour block average liquor firing rates shall be made and maintained on file available for inspection for at least five years.
- For PM, TRS, and SO₂ periodic monitoring, if any three-hour block average wet scrubber liquid supply flow rate to the fan is less than 90 percent of its respective average value set by the required complying periodic test or a complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. Records of all three-hour block average wet scrubber liquid supply flow rates shall be made and maintained on file available for inspection for at least five years.
- Pursuant to 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber total liquid supply flow rate (combined flow to the fan and lower zone spray nozzles) and the fan rpm during times when spent pulping liquor is fed. Fan amperage may be used, if fan rpm is not available. The parametric monitoring system shall meet the requirements listed in 40 CFR 63.8(c).

Monitoring of the flow rate and fan rpm is an approved alternative to the requirements listed in 40 CFR 63.864(e)(10).

This unit shall not have 6 or more 3-hour average parameter values within any 6-month reporting period that are below the minimum operating limits established in accordance with 40 CFR 63.864(j) during times when spent pulping liquor is fed, with the exception of wet scrubber total liquid supply flow rate during periods of startup and shutdown.

No more than one exceedance will be attributed in any given 24-hour period.

Records of all flow rates and fan rpm shall be made and maintained on file available for inspection for at least five years. Records of exceedances and corrective action shall also be maintained.

- Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- Pursuant to 40 CFR 63.865, a periodic PM performance test shall be performed, pursuant to 40 CFR 63.865, every 5 years.

Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.

- As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.

- Pursuant to 40 CFR 63 Subpart MM, records of exceedances shall be made and maintained for any semiannual period, and an excess emission report shall be submitted semiannually.

Changes During the Fourth Renewal

- On the Information Page, updated operating capacity to correspond with the increased operating capacity of the No. 3 Recovery Furnace. This increase was linked to an upgrade project for the K-2 Digester that resulted in an increase in the production black liquor due to an increase in pulp production. A notification for this project was submitted in 2024, and the project was determined to be a Section 502(b)(10) change that did not require a new permit or modification of the Title V MSOP.
- Under Applicability, clarified the PSD/BACT limit proviso.
- Under Compliance and Performance Test Methods and Procedures, removed all references to alternative test methods.
- Under Emission Monitoring, rephrased Subpart MM periodic PM testing proviso to remove past date.
- A number of citations have been corrected to the appropriate regulations.

RECAUSTICIZING SYSTEMS

The recausticizing systems include the No. 3 Lime Kiln. This system is used to produce reburned lime from lime mud. Reburned lime is used for additional chemical recovery by transforming green liquor into white liquor that can be used in the digesters.

No. 3 Lime Kiln and Recausticization System

The No. 3 Lime Kiln produces reburned lime that is mixed with the green liquor from the No. 3 Smelt Tank. The solution is sent to the causticizers and clarifiers to produce white liquor to be stored until use in the pulping process. This process also produces lime mud, which is diluted and dewatered before cooking in the lime kiln to produce reburned lime. The lime kiln was installed in 1995. It has an operating capacity of 54,167 pounds of lime as quicklime (CaO) per hour. The lime kiln is permitted to burn natural gas, No. 2 fuel oil, and No. 5 fuel oil. Air Permit 105-0001-X026 was issued on January 31, 1994, establishing PSD/BACT limits for filterable PM, TRS, SO₂, NO_x, CO, VOC, and H₂SO₄. This permit was incorporated into the Title V issued on January 1, 2004.

Control Devices

The No. 3 Lime Kiln is equipped with an ESP to control PM emissions.

Emission Limits and Proposed Periodic Monitoring

The No. 3 Lime Kiln is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 for opacity.
- The applicable requirements of 40 CFR 60 General Provisions and Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 for PSD/BACT limits for filterable PM, TRS, SO₂, NO_x, CO, VOC, and H₂SO₄.

The No. 3 Lime Kiln has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM (gas)	< 0.035 gr/dscf at 10% O ₂ and/or < 22 lbs/hr	PSD	105-0001-X026	January 31, 1995
Filterable PM (oil)	< 0.064 gr/dscf at 10% O ₂ and/or < 42 lbs/hr	PSD	105-0001-X026	January 31, 1995
TRS	< 8 ppmdv at 10% O ₂ < 3.1 lbs/hr	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	105-0001-X026	January 31, 1995
SO ₂	< 44 ppmdv at 10% O ₂ and/or < 32.1 lbs/hr	PSD	105-0001-X026	January 31, 1995
Opacity	< 20% with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01	N/A
Opacity	< 20% for 3% or more of operating time in any semiannual period	MACT	40 CFR 63 Subpart MM	N/A
NO _x	< 175 ppmdv at 10% O ₂ and/or < 91.8 lbs/hr	PSD	105-0001-X026	January 31, 1995
CO	< 80 ppmdv at 10% O ₂ and/or < 25.5 lbs/hr	PSD	105-0001-X026	January 31, 1995
VOC	< 0.69 lb/ton as CaO and/or < 18.8 lbs/hr as carbon	PSD	105-0001-X026	January 31, 1995
H ₂ SO ₄	< 1.2 lbs/hr	PSD	105-0001-X026	January 31, 1995
HAPs	PM as a surrogate, < 0.064 gr/dscf at 10% O ₂	MACT	40 CFR 63 Subpart MM	N/A

The No. 3 Lime Kiln has the following emission monitoring, recordkeeping, and reporting requirements:

- A PM emissions test shall be performed and report submitted at least once per year.
- A PM emissions test shall be performed within thirty days of commencement of operations of a fuel oil system. At least once every five years thereafter, the annual performance test shall be performed while firing fuel oil. A Notification of Intent shall be submitted at least thirty days prior to commencement of operations of a fuel oil system. Records of the amount of fuel oil fired shall be made and maintained on file available for inspection for at least five years.
- For PM, SO₂, SAM, NO_x, CO and VOC periodic monitoring, if any three-hour block average lime mud feed rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the lime mud feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of all three-hour block average lime mud flow rates shall be made and maintained on file available for inspection for at least five years. Records shall also be made of lime production rates in tons/day or Mg/day.
- For PM and opacity periodic monitoring, if the average of any ten consecutive six-minute opacity averages exceeds 20 percent during times when lime mud is being fed, the cause

is to be investigated and appropriate corrective action is to be taken. Records of all six-minute average opacities shall be made and maintained on file available for inspection for a period of five years.

- A TRS CEMS shall be installed, calibrated, maintained and operated in accordance with 40 CFR 60.284. Excess emission reports shall be submitted quarterly.
- A CEMS for the measurement of opacity shall be installed, operated and maintained. Excess opacity emission reports shall be submitted quarterly.
- A SO₂ emissions test shall be performed and a report submitted at least once every five years.
- For SO₂ periodic monitoring obtain fuel receipts from the fuel oil supplier that certify sulfur content in fuel for every load received by the mill. Fuel receipts shall be maintained on site available for inspection for at least five years.
- A NO_x emissions test shall be performed and a report submitted at least once every five years.
- A CO emissions test shall be performed and a report submitted at least once every five years.
- A SAM emissions test shall be performed and a report submitted at least once every five years.
- A VOC emissions test shall be performed and a report submitted at least once every five years.
- Pursuant to 40 CFR Part 63, Subpart MM, the COMS shall meet the provisions of Performance Specification 1 in appendix B to 40 CFR Part 60, as well as 40 CFR 63.6(h), 63.8, and 63.864(d)(3) and (4). The facility shall maintain records of all 6-minute periods when the opacity is greater than 20%.
- As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.
- For compliance with 40 CFR 63 Subpart MM, a periodic PM performance test shall be performed, pursuant to 40 CFR 63.865, every 5 years.
Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.
- The facility must maintain proper operation of the ESP's AVC. Records must be maintained demonstrating compliance with the requirements of 40 CFR 63.864(e)(1).
- Pursuant to 40 CFR 63 Subpart MM, records of exceedances shall be made and maintained for any semiannual period, and an excess emission report shall be submitted semiannually.

Changes During the Fourth Renewal

- On the Information Page, added row for MACT II opacity limit.
- Under Applicability, clarified the PSD/BACT limits proviso.
- Under Compliance and Performance Test Methods and Procedures, removed all references to alternative test methods.
- Under Compliance and Performance Test Methods and Procedures, added the COMS and CEMS as means of determining compliance for opacity and TRS respectively.

- Under Compliance and Performance Test Methods and Procedures, added Conditional Test Methods 13, 13A, and 13B as means of determining compliance for SAM.
- Under Emission Monitoring, created a separate proviso for testing while burning fuel oil. Since the fuel oil system is not operational and would take substantial maintenance and inspections to ensure proper and safe operation, PM testing would not need to be conducted for fuel oil until the system becomes operational. If the fuel oil system resumes operation, the Mill will be required to perform an initial performance test and five-year PM testing thereafter while burning fuel oil to demonstrate compliance.
- Under Emission Monitoring, rephrased Subpart MM periodic PM testing proviso to remove past date.
- Under Recordkeeping and Reporting Requirements, added requirements for submitting a notification if a fuel oil system will begin operation and maintaining records of the amount of fuel oil fired.
- A number of citations have been corrected to the appropriate regulations.

MACT I SOURCES

Pulping System Processes

Control Devices:

Non-condensable gases from the pulping systems are collected and incinerated in the No. 4 or 5 Power Boiler. The gases must be conveyed in a closed system that meets the requirements of 40 CFR 63.450.

Changes During the Fourth Renewal

- Under Emission Standards, removed proviso that exempts periods of startup, shutdown, and malfunction from meeting MACT emission standards. This language was removed from Subpart S in 2012.
- A number of citations to have been corrected to Rule 335-3-11-06 (18).

Process Condensates

Control Devices

Process condensates from the digesters and evaporator system are collected in a closed-collection system that meets the requirements of 40 CFR 63.446 and pumped to the aeration pond of the wastewater treatment facility for biological treatment of HAPs. The condensates must be conveyed in a closed system that meets the requirements of 40 CFR 63.450.

Emission Limits and Proposed Periodic Monitoring

The Mill is required to collect at least 11.1 pounds of HAPs per oven dried ton of pulp (ODTP) and treat at least 10.2 pounds of HAPs per ODTP.

The Process Condensate System has the following monitoring, recordkeeping, and reporting requirements:

- A continuous monitoring system (CMS, as defined in 40 CFR Part 63 Subpart A General Provisions 63.2) shall be installed, calibrated, certified, operated, and maintained according to the manufacturer's specifications. The CMS shall include a continuous recorder.

- A CMS shall be operated to measure the appropriate parameters determined according to the procedures specified in Proviso 4 of this section to comply with the condensate applicability requirements specified in 40 CFR 63.446(c). The CMS shall calculate a fifteen-day rolling average of the pounds of methanol collected per ODTP.
- Each owner or operator using an open biological treatment system to comply with 40 CFR 63.446(e)(2) shall perform the daily monitoring procedures specified in either Proviso 3(a) or (b) of this section and shall conduct a performance test each quarter using the procedures specified in Proviso 3 (c) of this section.
- Each owner or operator using an enclosure and/or closed-vent system to comply with 40 CFR 63.446(e)(1) shall monitor the daily flow of process condensate to the enclosure and/or closed-vent system and shall conduct an annual performance test as specified in 40 CFR 63.475(c) and (g) within 45 days after the beginning of each calendar year. HAP collected and conveyed through a closed-vent system to a lime kiln, recovery furnace, or power boiler is 100 percent controlled except during periods of closed-vent system bypass venting, when no control is counted toward compliance with 40 CFR 63.446(e)(1) or (e)(5).
- The total HAP treated to satisfy the requirements of 40 CFR 63.446(e)(5) shall be the sum of the HAP treated in the enclosure and/or closed-vent system and the HAP treated in the open biological treatment system.
- To establish or reestablish, the value for each operating parameter required to be monitored by this section or to establish appropriate parameters for Proviso 3 (b) of this section.
- Each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under Provisos 1 through 4 of this section and established under this subpart. Except as provided in Proviso 8 of this section, 40 CFR 63.443(e), or 63.446(g), operation of the control device below minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.
- The procedures of this proviso apply to each owner or operator of an open biological treatment system complying with Proviso 3 of this section whenever a monitoring parameter excursion occurs, and the owner or operator chooses to conduct a performance test to demonstrate compliance with the applicable emission limit. A monitoring parameter excursion occurs whenever the monitoring parameters specified in Proviso 3 (a)(i)(A) through (C) of this section or any of the monitoring parameters specified in Proviso 3 (b) of this section are below minimum operating parameter values or above maximum operating parameter values established in Proviso 5 of this section.
- See the Recordkeeping and Reporting Requirements provisos for “Enclosures and Closed-Vent Systems” for additional requirements.

Changes During the Fourth Renewal

- A number of citations have been corrected to the appropriate regulations.

Enclosures and Closed-Vent Systems

The Enclosures and Closed-Vent Systems serve to enclose and transport low volume high concentration (LVHC) and high volume low concentration (HVLC) gases from the pulping systems and process condensates to their corresponding control devices. The system is subject to the requirements found in 40 CFR 63.450.

Emission Limits and Proposed Periodic Monitoring

The Enclosure and Closed-Vent Systems have the following monitoring requirements

- Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified in bullets (a) through (f) of this section.
 - a. For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least once per calendar month with at least 21 days between inspections to ensure the opening is maintained in the closed position and sealed.
 - b. Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected at least once per calendar month with at least 21 days between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.
 - c. For positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks as specified in 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).
 - d. Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e).
 - e. The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once each calendar month, with at least 21 days elapsed time between inspections to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.
 - f. If an inspection required by bullets (a) through (e) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR 63.450, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.
 - i. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.
 - ii. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.
- Each pulping process condensate closed collection system used to comply with 40 CFR 63.446(d) shall comply with the requirements specified in provisos 2(a) through 2(c) of this section.

- a. Each pulping process condensate closed collection system shall be visually inspected at least once each calendar month, with at least 21 days elapsed time between inspections and shall comply with the inspection and monitoring requirements specified in 40 CFR 63.964 of Subpart RR of 40 CFR Part 63, except:
 - i. Owners or operators shall comply with the recordkeeping requirements of 40 CFR 63.454 instead of the requirements specified in 40 CFR 63.964(a)(1)(vi) and (b)(3) of Subpart RR of 40 CFR Part 63.
 - ii. Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in provisos (a) and (k) of 40 CFR 63.453 instead of the requirements specified in 40 CFR 63.964(a)(2) of Subpart RR of 40 CFR Part 63.
- b. Each condensate tank used in the closed collection system shall be operated with no detectable leaks as specified in 40 CFR 63.446(d)(2)(i) measured initially and annually by the procedures specified in 40 CFR 63.457(d).
- c. If an inspection required by this section identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, then corrective actions specified in 40 CFR 63.964(b) of Subpart RR of 40 CFR Part 63 shall be taken.
- For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan.
- The owner or operator shall record the CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in Proviso 1 of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.

Changes During the Fourth Renewal

- A number of citations have been corrected to the appropriate regulations.

RICE UNITS

The Mill operates five stationary Reciprocating Internal Combustion Engine (RICE) units that provide emergency power. Four of the units are compression ignition engines driven by diesel fuel, and one of the units is a spark ignition engine driven by propane. These units are identified and described by the following:

- X031A – Chlorine Dioxide Plant Emergency Power Generator; 2012; 93 hp
- X031B – First Aid Emergency Power Generator; 2012; 79 hp
- X032 – Log Scales Emergency Generator; 2010; 32 hp
- X035 – Emergency Firewater Pump Engine; 2021; 350 hp
- X036 – No. 3 Lime Kiln Emergency Drive Engine; 2024; 156 hp

Emission Limits and Proposed Periodic Monitoring

All RICE units are subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 for opacity.
- The applicable requirements of 40 CFR 63 Subpart ZZZZ.

Units X031, X035, and X036 are subject to:

- The applicable requirements of 40 CFR 60 Subpart III to meet the requirements of Subpart ZZZZ.

Unit X032 is subject to:

- The applicable requirements of 40 CFR 60 Subpart JJJ to meet the requirements of Subpart ZZZZ.

The RICE units have the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Opacity (All Units)	≤ 20% as determined by six-minute average, with one six-minute period up to 40% in any one-hour period.	SIP	Rule 335-3-4.01	N/A
NMHC + NO _x , CO, and PM (X031)	Non-Methane Hydrocarbons (NMHC) + NO _x : 4.7 g/kW-hr CO: 5.0 g/kW-hr PM: 0.40 g/kW-hr	NSPS	40 CFR 60 Subpart III	N/A
HC + NO _x , CO (X032)	Hydrocarbons (HC) + NO _x : 10 g/hp-hr CO: 387 g/hp-hr	NSPS	40 CFR 60 Subpart JJJ	N/A
NMHC + NO _x , CO, and PM (X035)	NMHC + NO _x : 3.0 g/hp-hr CO: 2.6 g/hp-hr PM: 0.15 g/hp-hr	NSPS	40 CFR 60 Subpart III	N/A
NMHC + NO _x , CO, and PM (X036)	NMHC + NO _x : 4.0 g/kW-hr CO: 5.0 g/kW-hr PM: 0.30 g/kW-hr	NSPS	40 CFR 60 Subpart III	N/A
SO ₂ (X031, X035, X036)	≤ 15 ppm fuel oil sulfur content Cetane index > 40 or aromatic content ≤ 35% by volume	NSPS	40 CFR 60 Subpart III	N/A

The RICE units are subject to the following monitoring, recordkeeping, and reporting requirements:

- Pursuant to 40 CFR 60.4209, the facility must install a non-resettable hour meter on Units X031, X035, and X036 and monitor all compression ignition units according to the requirements of 40 CFR 60.4211(f).
- The facility must install a non-resettable hour meter on Unit X032, pursuant to 40 CFR 60.4237(c), and monitor the spark ignition units according to the requirements of 40 CFR 60.4243(d).
- To demonstrate compliance with the operational limitations, the permittee shall maintain records of the date, time, duration, and purpose of operation each time these units are operated. These records shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of five (5) years from the date of generation of each record.

- To demonstrate compliance with the fuel limitations, the permittee shall only purchase fuels subject to meeting the fungible specifications for diesel fuel. Records of these fuel purchases shall be maintained in a permanent form suitable for inspection and shall be readily available for inspection upon request. These records shall be retained for a period of five (5) years from the date of generation of each record.

Changes During the Fourth Renewal

- Units X035 and X036 were replaced in 2021 and 2024 respectively with new RICE engines. The Informational Page has been updated to reflect the new installation dates, operating capacity, operating schedule, and emission limits.
- Under Applicability, clarified the source of the opacity emission rate limits.
- Under Applicability, clarified that all units are subject to Subpart ZZZZ.
- Under Applicability, added Unit X035 and X036 to the applicability proviso for Subpart III.
- On the Informational Page and under Emission Standards, removed the proviso for Subpart ZZZZ emission standards for Units X035 and X036.
- On the Informational Page and under Emission Standards, moved the provisos for operation and maintenance to Compliance and Performance Test Methods and Procedures. These are compliance requirements, not emission limits.
- On the Informational Page and under Emission Standards, added emission limits for all RICE units as required by Subparts III and JJJJ. These limits were already applicable under the respective Subparts.
- On the Informational Page and under Emission Standards, added Units X035 and X036 to the sulfur content proviso.
- On the Informational Page, updated the yearly usage hours to reflect the limits prescribed under Subpart III and JJJJ.
- Under Compliance and Performance Test Methods and Procedures, combined the provisos for meeting the requirements of Subpart ZZZZ by meeting the requirements of Subpart III and JJJJ with Applicability Provisos 4 and 5.
- Under Compliance and Performance Test Methods and Procedures, added a unit-specific proviso from Air Permit 105-0001-X035 adhering to 40 CFR 89, 94, and/or 1068.
- Under Compliance and Performance Test Methods and Procedures, added provisos to clarify engine usage during emergencies, maintenance and testing, and non-emergencies under Subpart III and JJJJ.
- Under Compliance and Performance Test Methods and Procedures, added proviso for Method 9 for opacity, as required by Rule 335-3-4-.01(2).
- Under Emission Monitoring, replaced provisos for Subpart ZZZZ with provisos specific to Subpart III and JJJJ since compliance with Subpart ZZZZ is determined through NSPS.
- A number of citations have been corrected to the appropriate regulations.

SOURCES SUBJECT ONLY TO THE GENERAL PROVISOS

Description	Regulation
Wood Handling (fugitives)	General Provisos
Brown Stock High Density Storage Chests	General Provisos
Dregs Filter Hood	General Provisos

Description	Regulation
Pulp Dryer	General Provisos
No. 1 Board Mill	General Provisos
Weak Black Liquor Storage Tanks	General Provisos
White Liquor Clarifier	General Provisos
Lime Slaker and Caustizers	General Provisos
Green Liquor Clarifier	General Provisos
Soap Skimmer Tank	General Provisos
Soap Storage Tanks	General Provisos
Salt Cake Mix Tank	General Provisos
Landfill (fugitives)	General Provisos
Wastewater Treatment Lagoons (fugitives)	General Provisos
Heavy Black Liquor Storage Tank	General Provisos
Methanol Storage Tank	General Provisos
Lime Mud Precoat Filters	General Provisos
Lime Mud Precoat Filter Vacuum Pumps	General Provisos
Lime Handling System with Dust Collector	General Provisos
No. 4 Power Boiler Sorbent Silo with Dust Collector	General Provisos
No. 4 Power Boiler Activated Carbon Silo with Dust Collector	General Provisos
No. 4 Power Boiler Fly Ash Silo with Dust Collector	General Provisos

CAM

Compliance Assurance Monitoring (CAM) applies to pollutant specific emission units that are subject to an emission limitation or standard where a control device is used to achieve compliance with an applicable emission limitation. The CAM rule requires facilities to monitor compliance indicators for emission units to provide reasonable assurance for compliance with regulatory emission limitations. This facility has units that are subject to CAM, as detailed below.

These are the exemptions that apply to one or more emission units operated by the mill:

- The requirements of Part 64 shall not apply to emission limitations or standards proposed by EPA after November 15, 1990, pursuant to section 111 or 112 of the Clean Air Act (40 CFR 64.2(b)(1)(i)).
- The requirements of Part 64 shall not apply to emission limitations or standards for which a Part 70 or 71 permit specifies a continuous compliance determination method (40 CFR 64.2(b)(1)(vi)).

Several units that may be subject to CAM have been determined to be exempt because these units are subject to either an NSPS or MACT standard proposed after November 15, 1990:

- No. 4 Power Boiler (PM, CO, HCl, Hg) – subject to 40 CFR 63 Subpart DDDDD
- K-1 Digester System (HAPs) – subject to 40 CFR 63 Subpart S
- K-2 Digester System (HAPs) – subject to 40 CFR 63 Subpart S
- Brown Stock Washer System (HAPs) – subject to 40 CFR 63 Subpart S
- No. 1 Bleaching System (Cl) – subject to 40 CFR 63 Subpart S
- No. 2 Bleaching System (Cl) – subject to 40 CFR 63 Subpart S
- No. 3 Recovery Furnace (PM, HAPs) – subject to 40 CFR 63 Subpart MM

- No. 3 Smelt Dissolving Tank (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- No. 3 Lime Kiln (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- RICE Engines (PM, NO_x, CO) – subject to 40 CFR 60 Subpart IIII and Subpart JJJJ
- RICE Engines (HAPs) – subject to 40 CFR 63 Subpart ZZZZ

Several units that may be subject to CAM have been determined to be exempt because these units are subject to continuous compliance determination as part of a Part 70 permit:

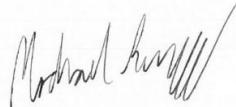
- No. 4 Power Boiler (SO₂, NO_x) – CEMS required
- No. 5 Power Boiler (SO₂, NO_x) – CEMS required
- K-2 Digester System (TRS) – periodic monitoring to ensure gases are being incinerated
- Chlorine Dioxide Generator (Cl) – periodic monitoring of chilled water flow rate and temperature
- No. 3 Smelt Dissolving Tank (TRS) – periodic monitoring of three-hour block average liquor firing rate and wet scrubber flow rate

FUGITIVE DUST PLAN

A fugitive dust plan was submitted with the application on June 17, 2025, and will be incorporated into the Title V MSOP during the fourth renewal as Appendix A.

RECOMMENDATIONS

The renewal Major Source Operating Permit 105-0001 shall be issued with the requirements above pending resolution of any comments received during a 30-day public comment period and a 45-day EPA review.



Michael Bragg
Industrial Chemicals Section
Chemical Branch
Air Division
MAB/mab

January 20, 2026

Date