

STATEMENT OF BASIS

WestRock – Mahrt Mill

Facility No. 211-0004

Title V Renewal

INTRODUCTION

WestRock – Mahrt Mill (WRM, the Mill) has applied for a renewal of its Major Source Operating Permit (MSOP) 211-0004. 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 Cottonton, Alabama (Russell County), which is currently listed as in attainment or unclassifiable with the National Ambient Air Quality Standards (NAAQS). The facility began operations in 1966. 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 will expire on December 31, 2025. There was a Significant Modification of the Title V Permit issued on August 11, 2025. The fourth renewal application was received on June 23, 2025.

There are no current or ongoing enforcement actions against WRM 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 110010380097).

There are a number of reports the Mill is required to submit quarterly, semiannually, annually, every three years, and every five years. The following reports are to be submitted quarterly: excess emission reports for all Continuous Emission Monitoring Systems (CEMS) / Continuous Opacity Monitoring Systems (COMS) and for 40 CFR Part 60 Subpart Db. The following reports are to be submitted semiannually: Maximum Achievable Control Technology (MACT) I compliance and monitoring report, MACT II compliance and monitoring report, Boiler MACT compliance and monitoring report, Title V monitoring report. An annual compliance certification and Mill-wide emissions report 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

WRM is a kraft pulp and paperboard mill. The Mill produces unbleached coated and uncoated paperboard utilizing virgin unbleached kraft fiber and unbleached recycled fiber. The paperboard products are mostly used for packaging. Operations at the Mill include wood storage and processing; kraft pulping; chemical recovery; tall oil production; recausticizing; condensate stripping; thermal oxidation; fiber recycling; papermaking; and a power plant consisting of one power boiler, three wood residue boilers, two recovery furnaces, and a combined cycle gas turbine.

The facility is located in Russell County, which is classified as a Class I 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. WRM is a major source for the following pollutants: 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 reduced sulfur (TRS), sulfuric acid mist (SAM), total hazardous air pollutants (HAPs), acetaldehyde, formaldehyde, hydrochloric acid (HCl), methanol, and phenol.

The Mill has not had any PSD projects since the previous renewal. No new air permits will be incorporated into the Title V during this fourth renewal.

The Mill went through a Significant Modification, issued on August 11, 2025. The following sections were changed as a result of the Significant Modification:

- No. 1 Smelt Tank (Emission Unit EU2500SDT1)
- No. 2 Smelt Tank (Emission Unit EU2500SDT2)

EMISSIONS UNITS

WOODYARD:

Pulp produced at WRM comes from either hardwood or softwood timber. The facility purchases either whole logs or chips. Whole logs are debarked and chipped onsite. All chips are screened and sorted before being conveyed to the chip storage piles and then to the pulp mill. Wood residue is purchased or produced onsite as a by-product of onsite activities and stored in a separate pile in the woodyard. Wastewater treatment sludge and paper recycling residuals generated onsite are added to the wood residue storage pile for blending prior to being fed to the wood residue boilers.

UTILITIES:

The utilities area is comprised of the No. 1 Power Boiler, the No. 1, No.2, and No. 3 Wood Residue Boilers, and a gas turbine with duct burners. These units are used to generate steam and electricity to support Mill operations.

No. 1 Power Boiler

The No. 1 Power Boiler is an existing Gas 1 natural gas-fired boiler that was installed in 1965. The boiler is rated at 428 MMBtu/hr and is permitted to burn No. 2 fuel oil during periods of gas curtailment or supply interruptions. Air Permit 211-0004-Z008 was issued on September 30, 1998, establishing a NAAQS limit for SO₂. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

The No. 1 Power Boiler is not equipped with any control devices.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Power Boiler is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-4-.03 (1) for PM.
- The applicable requirements of ADEM Admin. Rule 335-3-8-.71 for NOx.
- The applicable requirements of 40 CFR 63 Subpart DDDDD.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 for a NAAQS limit for SO₂.

The No. 1 Power Boiler has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 0.12 lbs/MMBtu heat input	SIP	Rule 335-3-4-.03 (1)	N/A
SO ₂	The fuel oil sulfur content ≤ 0.5%	Anti-PSD	211-0004-Z008	September 30, 1998
Opacity	≤ 20% with one six-minute period up to 40% in any one hour period	SIP	Rule 335-3-4-.01 (1)	N/A

The No. 1 Power Boiler has the following monitoring, recordkeeping, and reporting requirements:

- For SO₂ periodic monitoring, obtain fuel oil vendor certification of sulfur in fuel once per year and maintain them on site available for inspection for at least five years.
- Other than when fuel oil is fired solely for burner testing/clean-out, and is fired for a period of less than 30 minutes, for PM and opacity periodic monitoring, on any day when fuel oil is fired; once per day, (weather permitting) one-minute visible emissions readings of the stack's plume opacity shall be made and recorded (4 readings taken approximately every 15 seconds) by a person trained in, but not necessarily certified by, EPA Reference Method 9. If the opacity appears to be above 10 percent, immediate action to identify and correct the cause of the visible emissions is to be taken. After corrective action has been taken, another one-minute observation (weather permitting) shall be taken of the stack's opacity. If the opacity observed does not appear to be in excess of 10%, then no further action is needed. If visible emissions still appear to be in excess of 10%, a 6-minute visible emissions reading shall be conducted (weather permitting) before the end of the day by a person certified in EPA Reference Method 9 to determine if the opacity is 20% or less. If the observed opacity is 20% or less, no further action is needed. If the observed opacity is greater than 20% but no greater than 40% another six-minute visible emission reading shall be conducted by the certified person to determine if the opacity is 20% or less. If no Method 9 reading is conducted despite emissions appearing to be in excess of the limit after corrective action has been taken or the source exceeds the opacity limit, the source shall be considered out of compliance with the permitted opacity limit for that day except if the reading was prevented due to weather conditions. If the required Method 9 reading is not taken due to weather conditions, one shall be taken the next day that weather conditions permit. Records of when fuel oil is fired and daily one-minute visible emissions readings shall be made and maintained on file.

- Pursuant to 40 CFR 63.7510 (g), the facility must conduct an annual tune-up of the boiler as specified in 40 CFR 63.7540(a)(10). Each annual tune up must be conducted no more than 13 months after the previous tune-up.
- The owners and operators, and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring and reporting requirements of ADEM Admin. Code R. 335-3-8-.72 for any control period during which a NO_x Budget Unit operates.
- Pursuant to ADEM Admin. Code R. 335-3-8-.72 (1)(d)5., a nitrogen oxide performance test shall be completed at least once every five years to verify historical NO_x concentration and flow rate factors used to compute NO_x mass emissions.
- The facility shall maintain all records found in ADEM Admin Code R. 335-3-8-.71 (6)(c) for a period of 5 years following the date the document is created.
- The facility must submit a monitoring protocol for review and approval by the Department for each NO_x Budget Unit. Whenever the monitoring is changed, the pre-existing monitoring requirements shall be met until a new monitoring protocol is approved by the Department.
- For each control period in which one or more NO_x Budget Units at a source are subject to the NO_x Budget Program, the NO_x authorized account representative of the source shall submit to the Department by November 30 of that year, a compliance certification report for each source covering all such units. The compliance report shall include the information found in ADEM Admin. Code R. 335-3-8-.72 (2)(a)1.
- This source shall maintain the records required under 40 CFR 63.7555(a) concerning initial notifications. Records must be readily available for review according to 63.10(b)(1) for a period of 5 years.

Changes During the Fourth Renewal

- Added provisos for monitoring, recordkeeping, and reporting related to the NO_x Budget Program. This unit meets the applicability criteria under Rule 335-3-8-.71(4) and is not subject to any exemptions.
- Under Applicability, clarified the SO₂ limit as being a NAAQS limit to match the language of the No. 1 Wood Residue Boiler. This limit was adopted for the No. 1 Power Boiler and No. 1 Wood Residue Boiler as part of an air quality modeling evaluation that would show compliance with the NAAQS.
- Under Emission Standards, moved the energy assessment and tune-up proviso to Emission Monitoring and clarified the required tune-up frequency as being every year. The boiler is equipped with an oxygen trim system, but the Mill has opted to conduct annual tune-ups.
- Under Compliance and Performance Test Methods and Procedures, removed a reference to “other approved method.”
- Under Recordkeeping and Reporting Requirements, clarified that all records required under 40 CFR 63.7555(a) must be kept on file available for inspection for at least five years.
- Under Recordkeeping and Reporting Requirements, clarified the required frequency of submissions for compliance reports documenting required tune-ups as being five years.
- A number of citations were corrected to the appropriate regulations.

No. 1 Wood Residue Boiler

The No. 1 Wood Residue Boiler is an existing hybrid suspension grate boiler that was installed in 1966 and modified or reconstructed in 1973. The boiler is rated at 337 MMBtu/hr and is permitted to burn wood residue from the woodyard, natural gas, crude tall oil and derivatives, paper recycling residuals, and wastewater treatment sludge. Air Permit 211-0004-Z009 was issued on July 17, 1991, establishing a Major Source limit on the oven-dried tons (ODT) of de-watered wastewater treatment solids that could be collectively fired in the No. 1, No. 2, and No. 3 Wood Residue Boilers. This limit was incorporated into the Title V issued on January 1, 2004, and revised as part of the third Title V renewal issued on November 30, 2020. Air Permit 211-0004-Z009 was reissued on September 30, 1998, and established a NAAQS limit for SO₂. This limit was incorporated into the Title V permit issued on January 1, 2004.

The Mill reported that the No. 1 Wood Residue Boiler has not burned fuel oil since 2016. A notification was submitted on January 19, 2016, regarding a 502(10)b project to install a new over fire air system in the boiler to comply with the CO emission limit under Subpart DDDDD. The fuel oil lines and burners were removed as part of the installation of the over fire air system. As part of this fourth renewal, fuel oil will be removed from the list of permitted fuels.

Control Devices

The No. 1 Wood Residue Boiler is equipped with cyclones and a venturi scrubber to control PM, HCl, and mercury (Hg). The material collected by the cyclones and scrubber is sent to the ash disposal sewer and then to the ash ponds.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Wood Residue Boiler is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-4-.03 (1) and Rule 335-3-4-.08 (2) for PM.
- The applicable requirements of 40 CFR 61 Subpart E for Hg.
- The applicable requirements of 40 CFR 63 Subpart DDDDD.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 for a NAAQS limit for SO₂.

The No. 1 Wood Residue Boiler has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	Shall not exceed: (a) 0.17 gr/dscf, adjusted to 50% excess air for combination gas and wood residue boilers. (b) 0.2 gr/dscf, adjusted to 50% excess air for combination oil and wood residue boilers. (c) 0.20 gr/dscf, adjusted to 50% excess air for boilers using wood residue only.	SIP	Rule 335-3-4-.08 (2)	N/A

Pollutant	Limit	Limit Type	Origin	Original Date
PM	$E=1.38H^{-0.44}$ Where: E = Emissions, lb/MMBtu H = Heat Input, MMBtu/hr	SIP	Rule 335-3-4-.03 (1)	N/A
HAPs	Filterable PM as a surrogate, 0.44 lb/MMBtu (0.55 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A
CO	3,500 ppm by volume on a dry basis corrected to 3% oxygen, or 3.5 lb/MMBtu of steam output, on a 3- hour average	MACT	40 CFR 63 Subpart DDDDD	N/A
SO ₂	The fuel oil sulfur content \leq 0.5%	NAAQS	211-0004-Z009	September 30, 1998
Opacity	\leq 20% with one six-minute period up to 40% in any one hour period.	SIP	Rule 335-3-4-.01 (1)	N/A
HCl	0.020 lb/MMBtu (0.023 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A
Hg	\leq 3200 grams per 24-hour period.	NESHAP	40 CFR 61 Subpart E	N/A
Hg	5.4E-06 lb/MMBtu (6.2E-06 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A

The No 1, No. 2, and No. 3 Wood Residue Boilers cannot collectively burn more than 225 ODT of de-watered wastewater treatment solids including rejected knots per day.

The No. 1 Wood Residue Boiler has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.
- At all times, except when firing natural gas only, for PM periodic monitoring, if any 30-day rolling average steaming rate is greater than 110 percent of the highest 1-hour average value set by a required periodic test that showed compliance or a test approved by the Department that showed compliance, the steaming rate is to be lowered until compliance is successfully demonstrated at the higher rate. Operation below the established maximum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. A record 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 also be recorded.
- At all times, except when firing natural gas only, for PM periodic monitoring, if any 30-day rolling average wet scrubber pressure drop or liquid flow rate is less than the respective lowest 1-hour average value set by the required complying periodic test or a complying test approved by the Department, investigate the cause and take corrective action within

twenty-four hours. Operation below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Records of the wet scrubber pressure drop and liquid flow rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.

- Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- In accordance with 40 CFR 63.7525(a), an oxygen analyzer system, as defined in 40 CFR 63.7575, shall be installed, operated, and maintained pursuant to 63.7500(a)(2) and Table 4. The 30-day rolling average oxygen level shall be set no lower than the lowest hourly average oxygen level measured during the most recent carbon monoxide performance test. A record of the rolling 30-day average oxygen content shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- A PM, HCl, Hg, and CO performance test shall be performed 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 performance test notification must be submitted at least 60 days before the test is scheduled to begin, and a test report must be submitted within 60 days after the test.
- Mercury re-testing is only required if changes are made in the operation that would potentially increase emissions above the level determined by the most recent sludge test.
- 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.
- Pursuant to 40 CFR 63.7510 (g), the facility must conduct an annual tune-up of the boiler as specified in 40 CFR 63.7540(a)(10). Each annual tune up must be conducted no more than 13 months after the previous tune-up.
- The quantity of oven dry tons of de-watered wastewater treatment solids burned per day shall be monitored and records must be made and maintained on file available for inspection for a period of five years.
- 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 5 years.
- This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.

Changes During the Fourth Renewal

- Removed fuel oil from the list of permitted fuels and several provisos related to fuel oil.
- On the Information Page, added a separate row for Rule 335-3-4-.03 (1) for PM.

- On the Information Page and under Emission Standards, updated the Subpart DDDDD HCl and Hg limits effective as of October 6, 2025.
- Under Emissions Standards, moved the energy assessment proviso to Emission Monitoring and rewrote to clarify the required frequency as every year. The Mill has opted to conduct annual tune-ups and to monitor the 30-day rolling average oxygen level.
- 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, clarified which methods are also required to demonstrate compliance with Subpart DDDDD.
- Under Emission Monitoring, updated the Subpart DDDDD performance test provisos by condensing into a single proviso and removing language referring to initial performance tests.
- Under Emission Monitoring, added proviso for monitoring the firing of de-watered wastewater treatment solids.
- Under Emission Monitoring, added MACT proviso for demonstrating continuous compliance.
- Under Emission Monitoring, changed the oxygen monitoring proviso from an oxygen trim system to the 30-day rolling average oxygen level.
- Under Recordkeeping and Reporting Requirements, added proviso for recording the rolling 30-day average oxygen content.
- Under Recordkeeping and Reporting Requirements, added MACT provisos for submitting Notification of Intent and performance test results.
- Under Recordkeeping and Reporting Requirements, added to last two provisos to match language of similar permits and records be maintained for at least five years.
- A number of citations have been corrected to the appropriate regulations.

No. 2 Wood Residue Boiler

The No. 2 Wood Residue Boiler is an existing hybrid suspension grate boiler that was installed in 1981 and modified or reconstructed in 1988. The boiler is rated at 550 MMBtu/hr and is permitted to burn wood residue from the woodyard, natural gas, paper recycling residuals, and wastewater treatment sludge. Air Permit 211-0004-Z010 was issued on October 13, 1988, establishing PSD/BACT limits for PM, SO₂, CO, SAM, and VOC. Air Permit 211-0004-Z010 was reissued on July 17, 1991, establishing a Major Source limit on the ODT of de-watered wastewater treatment solids that could be collectively fired in the No. 1, No. 2, and No. 3 Wood Residue Boilers. These limits were incorporated into the Title V permit issued on January 1, 2004. The wastewater treatment sludge limit was revised as part of the third Title V renewal issued on November 30, 2020. Air Permit 211-0004-Z010 was reissued on July 29, 2009, with revised limits for SO₂ and SAM, which were incorporated into the Title V permit issued on October 6, 2010.

Control Devices

The No. 2 Wood Residue Boiler is equipped with cyclones and a wet electrostatic precipitator (ESP) to control PM, HCl, and Hg emissions. The material collected by the cyclones and wet ESP are sent to the ash disposal sewer and then to the ash pond.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Wood Residue Boiler is subject to:

- The applicable requirements of 40 CFR 60 Subpart Db for PM, NO_x, and opacity.
- The applicable requirements of 40 CFR 61 Subpart E for Hg.
- The applicable requirements of 40 CFR 63 Subpart DDDDD.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for PM, SO₂, CO, VOC, and SAM.

The No. 2 Wood Residue Boiler has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 0.10 lbs/MMBtu heat input	NSPS	40 CFR 60 Subpart Db	N/A
PM	≤ 0.10 lbs/MMBtu heat input ≤ 55.0 lbs/hr	PSD	211-0004-Z010	October 13, 1988
Filterable PM	0.44 lb/MMBtu (0.55 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A
SO ₂	≤ 0.0096 lbs/MMBtu heat input	PSD	211-0004-Z010	October 13, 1988
SO ₂	≤ 5.3 lbs/hr when wood residue, natural gas or wood residue and natural gas are fired	PSD	211-0004-Z010	July 29, 2009
NO _x	≤ 0.3 lbs/MMBtu heat input 10% the annual capacity factor for natural gas	NSPS	40 CFR 60 Subpart Db	N/A
CO	≤ 0.4 lbs/MMBtu heat input	PSD	211-0004-Z010	October 13, 1988
CO	3,500 ppm by volume on a dry basis corrected to 3% oxygen, or 3.5 lb/MMBtu of steam output, on a 3- hour average	MACT	40 CFR 63 Subpart DDDDD	N/A
VOC	≤ 0.03 lbs/MMBtu heat input	PSD	211-0004-Z010	October 13, 1988
SAM	≤ 0.0064 lbs/MMBtu heat input and/or ≤ 3.5 lbs/hr when when wood residue, natural gas or wood residue and natural gas are fired	PSD	211-0004-Z010	July 29, 2009
Opacity	≤ 20% except for one six-minute period per hour ≤ 27%.	NSPS	40 CFR 60 Subpart Db	N/A
Hg	≤ 3200 grams per 24-hour period.	NESHAP	40 CFR 61 Subpart E	N/A
Hg	5.4E-06 lb/MMBtu (6.2E-06 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A

Pollutant	Limit	Limit Type	Origin	Original Date
HCl	0.020 lb/MMBtu (0.023 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A

The No. 1, No. 2, and No. 3 Wood Residue Boilers cannot collectively burn more than 225 ODT of de-watered wastewater treatment solids including rejected knots per day.

The No. 2 Wood Residue Boiler has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.
- At all times, except when firing natural gas only, for PM, SO₂, CO, VOC, SAM, and NO_x periodic monitoring, if any 30-day rolling average steam production rate is greater than 110 percent of the highest 1-hour average value set by the required complying periodic test or a complying test approved by the Department, the steaming rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of the steaming rate shall be made and maintained on record available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- The facility shall maintain the 30-day rolling average steaming rate such that it does not exceed 110 percent of the highest hourly average recorded during the performance test. Operation above the established maximum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Records of the steaming rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- At all times, except when firing natural gas only, for PM periodic monitoring, if any 30-day rolling average total secondary power value is less than the lowest 1-hour 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. Operation below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Records of the total secondary power shall be made and maintained on record available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- A SO₂ emission test shall be performed and a report submitted at least once every 5 years.
- A NO_x emission test shall be performed and a report submitted at least once every 5 years.
- The natural gas heat inputs in million Btus per calendar year shall be monitored. Records of the amount of natural gas fired shall be made and the annual capacity factor calculated for each calendar year and maintained on file available for inspection for at least five years.
- A CO emission test shall be performed and a report submitted at least once every 5 years.
- In accordance with 40 CFR 63.7525(a), an oxygen analyzer system, as defined in 40 CFR 63.7575, shall be installed, operated, and maintained pursuant to 63.7500(a)(2) and Table 4. The 30-day rolling average oxygen level shall be set no lower than the lowest hourly average oxygen level measured during the most recent carbon monoxide performance test.. A record of the rolling 30-day average oxygen content shall be made and maintained on

record available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.

- A PM, HCl, Hg, and CO performance test shall be performed 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 performance test notification must be submitted at least 60 days prior to when the test is scheduled, and a report must be submitted within 60 days after the test.
- Since this unit is controlled by a wet ESP, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- A VOC emission test shall be performed and a report submitted at least once every 5 years.
- A SAM emission test shall be performed and a report submitted at least once every 5 years, firing wood waste or wood waste and natural gas.
- Mercury re-testing is only required if changes are made in the operation that would potentially increase emissions above the level determined by the most recent sludge test.
- 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.
- Pursuant to 40 CFR 63.7510 (g), the facility must conduct an annual tune-up of the boiler as specified in 40 CFR 63.7540(a)(10). Each annual tune up must be conducted no more than 13 months after the previous tune-up.
- Records of the quantity of oven dry tons of de-watered wastewater treatment solids burned per day must be made and remain on file for inspection for a period of five years.
- A site-specific monitoring plan shall be developed in accordance with 40 CFR 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 5 years.
- This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.

Changes During the Fourth Renewal

- On the Information Page and under Emission Standards, updated the Subpart DDDDD HCl and Hg limits effective as of October 6, 2025.
- Under Emissions Standards, moved the energy assessment proviso to Emission Monitoring and rewrote to clarify the required frequency of tune-ups as every year. The Mill has opted to conduct annual tune-ups and to monitor the 30-day rolling average oxygen levels.
- 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, clarified which methods are also required to demonstrate compliance with Subpart DDDDD.

- Under Compliance and Performance Test Methods and Procedures, added Methods 6C, 18, 13, and 13A as alternate test methods.
- Under Emission Monitoring, updated the Subpart DDDDD performance test provisos by condensing into a single proviso and removing language referring to initial performance tests.
- Under Emission Monitoring, added proviso for monitoring the firing of de-watered wastewater treatment solids.
- Under Emission Monitoring, added proviso for demonstrating continuous compliance under Boiler MACT.
- Under Emission Monitoring, changed the oxygen monitoring requirement from an oxygen trim system to the 30-day rolling average oxygen level.
- Under Recordkeeping and Reporting Requirements, added provisos for recording the rolling 30-day average oxygen content and the amount of natural gas fired.
- Under Recordkeeping and Reporting Requirements, added MACT provisos for submitting Notification of Intent and performance test results.
- Under Recordkeeping and Reporting Requirements, added to last two provisos to match language of similar permits and require record maintenance for at least five years.
- A number of citations have been corrected to the appropriate regulations.

No. 3 Wood Residue Boiler

The No. 3 Wood Residue Boiler is an existing hybrid suspension grate boiler that was installed in 1990. The boiler is rated at 915 MMBtu/hr and is permitted to burn wood residue from the woodyard, natural gas, paper recycling residuals, and wastewater treatment sludge. Air Permit 211-0004-X014 was issued on October 13, 1988, establishing PSD/BACT limits for PM, SO₂, CO, SAM, and VOC. Air Permit 211-0004-Z010 was reissued on July 17, 1991, establishing a Major Source limit on the ODT of de-watered wastewater treatment solids that could be collectively fired in the No. 1, No. 2, and No. 3 Wood Residue Boilers. These limits were incorporated into the Title V permit issued on January 1, 2004. The wastewater treatment solids limit was revised as part of the third Title V renewal issued on November 30, 2020. Air Permit 211-0004-Z010 was reissued on July 29, 2009, with a revised PSD/BACT limit for SAM. This limit was incorporated into the Title V permit issued on October 6, 2010.

Control Devices

The No. 3 Wood Residue Boiler is equipped with cyclones and a venturi scrubber to control PM, HCl, and Hg emissions. The material collected by the cyclones and scrubber is sent to the ash disposal sewer and then to the ash ponds. The No. 3 Wood Residue Boiler itself is considered a control device and is used to control the high volume low concentration (HVLC) gases from the Mill.

Emission Limits and Proposed Periodic Monitoring

The No. 3 Wood Residue Boiler is subject to:

- The applicable requirements of 40 CFR 60 Subpart Db for PM, NO_x, and opacity.
- The applicable requirements of 40 CFR 61 Subpart E for Hg.
- The applicable requirements of 40 CFR 63 Subpart DDDDD.

- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for PM, SO₂, CO, VOC, and SAM.

The No. 3 Wood Residue Boiler has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 0.10 lbs/MMBtu heat input	NSPS	40 CFR 60 Subpart Db	N/A
PM	≤ 0.10 lbs/MMBtu heat input ≤ 91.5 lbs/hr	PSD	211-0004-X014	October 13, 1988
Filterable PM	0.44 lb/MMBtu (0.55 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A
SO ₂	≤ 0.0096 lbs/MMBtu heat input and/or ≤ 8.8 lbs/hr when wood residue, natural gas or wood residue and natural gas are fired	PSD	211-0004-X014	October 13, 1988
NO _x	≤ 0.3 lbs/MMBtu heat input 10% the annual capacity factor for natural gas	NSPS	40 CFR 60 Subpart Db	N/A
CO	≤ 0.4 lbs/MMBtu heat input	PSD	211-0004-X014	October 13, 1988
CO	3,500 ppm by volume on a dry basis corrected to 3% oxygen, or 3.5 lb/MMBtu of steam output, on a 3- hour average	MACT	40 CFR 63 Subpart DDDDD	N/A
VOC	≤ 0.03 lbs/MMBtu heat input	PSD	211-0004-X014	October 13, 1988
SAM	≤ 0.012 lbs/MMBtu heat input and/or ≤ 10.8 lbs/hr	PSD	211-0004-X014	July 29, 2009
Opacity	≤ 20% except for one six-minute period per hour ≤ 27%.	NSPS	40 CFR 60 Subpart Db	N/A
Hg	≤ 3200 grams per 24-hour period.	NESHAP	40 CFR 61 Subpart E	N/A
Hg	5.4E-06 lb/MMBtu (6.2E-06 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A
HCl	0.020 lb/MMBtu (0.023 lb/MMBtu of steam output)	MACT	40 CFR 63 Subpart DDDDD	N/A

The No 1, No. 2, and No. 3 Wood Residue Boilers cannot collectively burn more than 225 ODT of de-watered wastewater treatment solids including rejected knots per day.

The No. 3 Wood Residue Boiler has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.

- At all times, except when firing natural gas only, for PM, SO₂, CO, VOC, SAM, and NO_x periodic monitoring, if any 30-day rolling average steam production rate is greater than 110 percent of the highest 1-hour average value set by the required complying periodic test or a complying test approved by the Department, the steaming rate is to be lowered until compliance is successfully demonstrated at the higher rate. A record of the steam production rate shall be made and maintained on file available for inspection for at least five years. Records of exceedances and corrective actions shall also be recorded.
- The facility shall maintain the 30-day rolling average steaming rate such that it does not exceed 110 percent of the highest hourly average recorded during the performance test. Operation above the established maximum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. A record of the steam production rate shall be made and maintained on file available for inspection for at least five years. Records of exceedances and corrective actions shall also be recorded.
- At all times, except when firing natural gas only, for PM periodic monitoring, if any 30-day rolling average wet scrubber pressure drop or liquid flow rate is less than the respective lowest 1-hour average value recorded at the time of 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 24 hours. Records of the pressure drop and liquid flow rate shall be made and maintained on file available for inspection for at least five years. Records of exceedances and corrective actions shall also be recorded. Operation below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of 40 CFR Part 63 Subpart DDDDD except during performance tests conducted to determine compliance with the emission limits or to establish new operating limits
- A SO₂ emission test shall be performed and a report submitted at least once every 5 years.
- A NO_x emission test shall be performed and a report submitted at least once every 5 years.
- The natural gas heat input in million Btus per calendar year shall be monitored. Records of the amount of natural gas fired shall be made and the annual capacity factor calculated for each calendar year and maintained on file available for inspection for at least five years.
- A CO emission test shall be performed and a report submitted at least once every 5 years.
- In accordance with 40 CFR 63.7525(a), an oxygen analyzer system, as defined in 40 CFR 63.7575, shall be installed, operated, and maintained pursuant to 63.7500(a)(2) and Table 4. The 30-day rolling average oxygen level shall be set no lower than the lowest hourly average oxygen level measured during the most recent carbon monoxide performance test. A record of the rolling 30-day average oxygen content shall be made and maintained on file available for inspection for at least five years. Records of exceedances and corrective actions shall also be recorded.
- A PM, HCl, Hg, and CO performance test shall be performed 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 performance test notification must be submitted at least 60 days before the test is scheduled, and a report must be submitted within 60 days after the test.

- Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- A VOC emission test shall be performed and a report submitted at least once every 5 years.
- A SAM emission test shall be performed and a report submitted at least once every 5 years, firing wood waste or wood waste and natural gas.
- Mercury re-testing is only required if changes are made in the operation that would potentially increase emissions above the level determined by the most recent sludge test.
- 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.
- Pursuant to 40 CFR 63.7510 (g), the facility must conduct an annual tune-up of the boiler as specified in 40 CFR 63.7540(a)(10). Each annual tune up must be conducted no more than 13 months after the previous tune-up.
- Records of the quantity of oven dry tons of de-watered wastewater treatment solids burned per day must be made and remain on file for inspection for a period of five years.
- 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 5 years.
- This source shall submit all applicable reports required under 40 CFR 63.7550 and Table 9.

Changes During the Fourth Renewal

- On the Information Page and under Emission Standards, updated the Subpart DDDDD HCl and Hg limits effective as of October 6, 2025.
- Under Emissions Standards, moved the energy assessment proviso to Emission Monitoring and rewrote to clarify the required tune-up frequency as every year. The Mill has opted to monitor the 30-day rolling oxygen level and conduct annual tune-ups.
- 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, clarified which methods are also required to demonstrate compliance with Subpart DDDDD.
- Under Compliance and Performance Test Methods and Procedures, added Methods 6C, 18, 13, and 13A as alternate test methods.
- Under Emission Monitoring, updated the Subpart DDDDD performance test provisos by condensing into a single proviso and removing language referring to initial performance tests.
- Under Emission Monitoring, added proviso for monitoring the firing of de-watered wastewater treatment solids.
- Under Emission Monitoring, added proviso for demonstrating continuous compliance under Boiler MACT.

- Under Emission Monitoring, changed the oxygen monitoring requirement from an oxygen trim system to the 30-day rolling average oxygen level.
- Under Recordkeeping and Reporting Requirements, added provisos for recording the rolling 30-day average oxygen content.
- Under Recordkeeping and Reporting Requirements, added MACT provisos for submitting Notification of Intent and performance test results.
- Under Recordkeeping and Reporting Requirements, added to last two provisos to match language of similar permits and to require maintenance of records for at least five years.
- A number of citations have been corrected to the appropriate regulations.

Gas Turbine and Duct Burner

The gas turbine is a combined cycle gas turbine with duct burner that was installed in 1998. The turbine is used to co-generate steam and electricity and is equipped with duct burners that provide supplemental firing to the heat recovery steam generator. It is rated at 25 MWe or 568 MMBtu/hr and is permitted to burn natural gas. Air Permit 211-0004-X022 was issued on March 12, 1997, establishing PSD/BACT limits for PM, NO_x, and CO. These limits were incorporated into the Title V issued on January 1, 2004.

Since the gas turbine and duct burners are permitted to fire natural gas only and the particulate matter emissions associated with the combustion of natural gas are expected to be minimal, the Department has determined that no additional periodic monitoring for opacity would be required. If excess opacity were to become an issue, the Department retains the authority to require the facility to test at any time and could modify the permit to require more stringent monitoring. This unit was constructed prior to January 14, 2003, and is therefore an existing stationary combustion turbine as defined in 40 CFR 63.6090(a)(1). According to 40 CFR 63.6090(b)(4), existing turbines do not have to meet the requirements of Subparts A or YYYY of Part 63. If this unit is reconstructed, it will become subject to Subparts A and YYYY.

Control Devices

The gas turbine and duct burner are not equipped with any control equipment. The gas turbine is equipped with a dry-low NO_x burner to limit the formation of NO_x emissions during gas firing, which does not meet the definition of a control device under 40 CFR 64.1.

Emission Limits and Proposed Periodic Monitoring

The gas turbine and duct burner are subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-8-.71 for NO_x.
- The applicable requirements of 40 CFR 60 Subpart Db for NO_x.
- The applicable requirements of 40 CFR 60 Subpart GG for NO_x.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for PM, NO_x, and CO.

The gas turbine and duct burner have the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	From the stationary gas turbine (firing natural gas) ≤ 2.5 lbs/hr and/or ≤ 0.0068 lbs/MMBtu heat input	PSD	211-0004-X022	March 12, 1997
PM	From the duct burner (firing natural gas) ≤ 0.01 lbs/MMBtu and/or ≤ 2.1 lbs/hr	PSD	211-0004-X022	March 12, 1997
NO _x	From the stationary gas turbine (firing natural gas) ≤ 25 ppmv at 15% O ₂ on a dry basis and/or ≤ 33.0 lbs/hr.	PSD	211-0004-X022	March 12, 1997
NO _x	From the duct burner (firing natural gas) ≤ 0.1 lbs/MMBtu heat input and/or ≤ 20.0 lbs/hr	PSD	211-0004-X022	March 12, 1997
CO	From the stationary gas turbine (firing natural gas) ≤ 28 ppmv @ 15% O ₂ on a dry basis and/or ≤ 22.0 lbs/hr	PSD	211-0004-X022	March 12, 1997
CO	From the duct burner (firing natural gas) ≤ 0.08 lbs/MMBtu heat input and/or ≤ 16.1 lbs/hr	PSD	211-0004-X022	March 12, 1997
Opacity	$\leq 20\%$ with one six-minute period up to 40% in any one hour period	SIP	Rule 335-3-4-.01 (1)	N/A

The gas turbine and duct burner have the following monitoring, recordkeeping, and reporting requirements:

- The duct burners shall not be operated when the gas turbine is not in operation and shall be equipped with an automatic shut-off device to prevent their operation at exhaust gas duct temperatures in excess of 1450 degrees Fahrenheit.
- A CEMS for the measurements of NO_x shall be installed, calibrated, operated and maintained. The CEMS shall be subject to the quality control and quality assurance requirements of 40 CFR Part 60 Appendix F. An excess emissions report must be submitted quarterly.
- A stationary gas turbine and a duct burner CO emission test shall be performed and a report submitted at least once every 5 years.
- For CO periodic monitoring, if any three-hour block average stationary gas turbine natural gas 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 stationary gas turbine natural gas or fuel oil firing rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of the natural gas firing rate shall be made and maintained on file available for inspection for at least five years.
- For CO periodic monitoring, if any three-hour block average duct burner natural gas 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 duct burner natural gas firing rate

is to be lowered until compliance is successfully demonstrated at the higher rate. Records of the natural gas firing rate shall be made and maintained on file available for inspection for at least five years.

- The owners and operators, and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring and reporting requirements of ADEM Admin. Code R. 335-3-8-.72 for any control period during which a NO_x Budget Unit operates.
- Pursuant to ADEM Admin. Code R. 335-3-8-.72 (1)(c)1 NO_x mass emissions during ozone season will be calculated using data from the continuous emission monitoring system and the total heat input consumed during ozone season.
- The facility shall maintain all records found in ADEM Admin Code R. 335-3-8-.71 (6)(c) for a period of 5 years following the date the document is created.
- The facility must submit a monitoring protocol for review and approval by the Department for each NO_x Budget Unit. Whenever the monitoring is changed, the pre-existing monitoring requirements shall be met until a new monitoring protocol is approved by the Department.
- For each control period in which one or more NO_x Budget Units at a source are subject to the NO_x Budget Program, the NO_x authorized account representative of the source shall submit to the Department by November 30 of that year, a compliance certification report for each source covering all such units. The compliance report shall include the information found in ADEM Admin. Code R. 335-3-8-.72 (2)(a)1.

Changes During the Fourth Renewal

- Added provisos for monitoring, recordkeeping, and reporting related to the NO_x Budget Program. This unit meets the applicability criteria under Rule 335-3-8-.71(4) and is not subject to any exemptions.
- On the Information Page, provided more detail about the operating capacity.
- Under Applicability, removed PM as an applicable limit under Subpart Db. The gas turbine and duct burner burn only natural gas, which is not subject to a PM limit.
- Under Applicability, removed references to Subpart YYYY as this unit, as an existing combustion turbine, is not required to meet the requirements of Subpart YYYY according to 40 CFR 63.6090(b)(4).
- Under Compliance and Performance Test Methods and Procedures, removed references to “other approved methods.”
- Under Compliance and Performance Test Methods and Procedures, added Method 17 as an alternative test method.
- Under Recordkeeping and Reporting Requirements, added a proviso requiring recordkeeping of daily opacity readings.
- A number of citations have been corrected to the appropriate regulation.

PULP MILL

The pulp mill is comprised of the Continuous and Batch Digesters, the Continuous and Batch Washing and Screening Systems, and the Condensate Stripper System. The pulp mill makes up the process of converting wood chips into pulp. The low volume high concentration (LVHC) non-condensable gases (NCGs) from these units are collected and incinerated in the NCG Thermal

Oxidation System or the lime kilns. The HVLC NCGs from these units are collected and incinerated in the No. 3 Wood Residue Boiler.

Continuous Digester System

The Continuous Digester System (CONT) was installed in 1966. The system is used to convert softwood chips into pulp. The chips first pass through a chip meter and low-pressure feeder. They are then steamed and passed through a high-pressure feeder into the digester. White liquor is continuously fed into the digester as the chips pass through several heated and pressurized zones in order to dissolve the lignin and separate the papermaking fibers. The pulp is then sent to the Continuous Washing and Screening System (CWS) for additional refinement. The CONT has an operating capacity of 129,000 machine dried pounds per hour. The system is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

NCGs from the CONT are required to be treated under 40 CFR 63 Subpart S and the SIP. The LVHC gases from the digesters are to be controlled by incineration in either the NCG Thermal Oxidization System or the No. 1 Lime Kiln.

Emission Limits and Proposed Periodic Monitoring

The CONT is subject to:

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

The CONT 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 CONT has the following monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed-Vent Systems” for details.

Changes During the Fourth Renewal

- A number of citations were corrected to the appropriate regulation.

Continuous Washing and Screening System

The CWS is comprised of refiners and screens that further reduce the pulp from the continuous digester to individual fibers and remove debris. The three stage vacuum drum pulp washing system separates spent pulping liquor and sends it to the recovery area. Papermaking fibers are sent to high density storage tanks prior to use in papermaking.

The CWS was installed in 1966. A modification in 1996 resulted in the first stage of the system becoming subject to NSPS. The CWS has an operating capacity of 129,000 machine dried pounds per hour. The system is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

NCGs from the CWS are required to be treated under 40 CFR 60 Subpart BB and 40 CFR 63 Subpart S. HVLC gases from the continuous washing and screening operations are to be controlled by incineration in the No. 3 Wood Residue Boiler or No. 1 Recovery Furnace.

Emission Limits and Proposed Periodic Monitoring

The CWS is subject to:

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

The CWS 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 CWS has the following monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.

Changes During the Fourth Renewal

- Under Emission Standards, removed reference to VOCs in Proviso 1. Subpart BB only has standards for PM and TRS. The standard for TRS was also clarified to match the rule.
- A number of citations were corrected to the appropriate regulation.

Batch Digester System

The Batch Digester System (BATH) is comprised of five digesters installed in 1990 and one digester installed in 1995. The system is used to convert softwood or hardwood chips into pulp. The system works in six stages: chip filling and steam packing; pre-steaming; white liquor addition; temperature ramp-up; cooking; and blowing. The resulting pulp is then sent to the Batch Washing and Screening System (BWS) for additional refinement. The BATH has an operating capacity of 117,000 machine dried pounds per hour. Air Permit 211-0004-X015 was issued on October 13, 1988. The BATH was subject to a PSD/BACT review for TRS that was satisfied through compliance with 40 CFR 60 Subpart BB. This permit was reissued on October 11, 1995, to add the sixth unit and then incorporated into the Title V issued on January 1, 2004.

Control Devices

NCGs from the BATH are required to be treated under 40 CFR 60 Subpart BB and 40 CFR 63 Subpart S. LVHC gases from the digesters are to be controlled by incineration in either the NCG Thermal Oxidization System or the No. 2 Lime Kiln.

Emission Limits and Proposed Periodic Monitoring

The BATH is subject to:

- The applicable requirements of 40 CFR 60 Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart S.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT limit for TRS.

The BATH has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X015	October 13, 1988
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The BATH has the following monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.

Changes During the Fourth Renewal

- A number of citations were corrected to the appropriate regulation.

Batch Washing and Screening System

The BWS was installed in 1990 and modified in 1995. The system is comprised of refiners and screens that further reduce the pulp from the batch digester to individual fibers and remove debris. The Chemi-washer or brown stock washer separates spent pulping liquor and sends it to the recovery area. Papermaking fibers are sent to high density storage tanks for use in papermaking. The BWS has an operating capacity of 117,000 machine dried pounds per hour. Air Permit 211-0004-X017 was issued on October 13, 1988. The BWS was subject to a PSD/BACT review for TRS that was satisfied through compliance with 40 CFR 60 Subpart BB. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

NCGs from the BWS are required to be treated under 40 CFR 60 Subpart BB and 40 CFR 63 Subpart S. HVLC gases from the batch washing and screening operations are to be controlled by incineration in the No. 3 Wood Residue Boiler or No. 2 Recovery Furnace.

Emission Limits and Proposed Periodic Monitoring

The BWS is subject to:

- The applicable requirements of 40 CFR 60 Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart S.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT limit for TRS.

The BWS has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X017	October 13, 1988
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The BWS has the following monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.

Changes During the Fourth Renewal

- A number of citations were corrected to the appropriate regulation.

Condensate Stripper System

The Condensate Stripper System was installed in 2000. The condensate stripper collects condensate from the pulping systems and pumps it through a system-heated stripping column to remove TRS, VOCs, and organic HAPs. The system has an operating capacity of 225,000 pounds per hour. Air Permit 211-0004-X027 was issued on November 3, 1999. The condensate stripper was subject to a PSD/BACT review for TRS that was satisfied through compliance with 40 CFR 60 Subpart BB. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

NCGs from the condensate stripper are required to be treated under 40 CFR 60 Subpart BB and 40 CFR 63 Subpart S. LVHC gases from the condensate stripper are to be controlled by incineration in either the NCG Thermal Oxidization System or the lime kilns.

Emission Limits and Proposed Periodic Monitoring

The Condensate Stripper System is subject to:

- The applicable requirements of 40 CFR 60 Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart S.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT limit for TRS.

The Condensate Stripper System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X027	November 3, 1999
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

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

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for additional requirements.

Changes During the Fourth Renewal

- A number of citations were corrected to the appropriate regulation.

Non-Condensable Gas Thermal Oxidation System

The NCG Thermal Oxidation System was installed in 2000. The thermal oxidizer is used to incinerate LVHC and condensate stripper gases from the pulping system. The thermal oxidizer has an operating capacity of 250,500 pounds of machine-dried pulp per hour and is permitted to burn natural gas. The thermal oxidizer was originally permitted as a control device under Air Permits 211-0004-Z001, Z007, X015, X016, and X017, which were reissued on January 19, 1995, establishing PSD/BACT limits for filterable PM, SO₂, NO_x, and SAM. These permits were reissued on November 3, 1999, with a revised NO_x limit. These permits were incorporated into the Title V issued on January 1, 2004.

Control Devices

The NCG Thermal Oxidizer is equipped with wet scrubbers to control PM, SO₂, and SAM emissions. The thermal oxidizer acts as a control device for LVHC emissions from the digester systems, evaporator systems, and the condensate stripper.

Emission Limits and Proposed Periodic Monitoring

The NCG Thermal Oxidation System is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of 40 CFR 63 Subpart S.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for PM, SO₂, NO_x, and SAM.

The NCG Thermal Oxidation System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 3.2 lbs/hr	PSD	211-0004-X016	January 19, 1995
SO ₂	≤ 8.9 lbs/hr	PSD	211-0004-X016	January 19, 1995
NO _x	≤ 34.25 lbs/hr	PSD	211-0004-X016	November 3, 1999
SAM	≤ 1.5 lbs/hr	PSD	211-0004-X016	January 19, 1995
Opacity	≤ 20% as determined by six-minute average. During one six-minute period in any sixty-minute period, a person may discharge into the atmosphere	SIP	Rule 335-3-4-.01 (1)	N/A

Pollutant	Limit	Limit Type	Origin	Original Date
	from any source of emission, particulate of an opacity \leq 40%			
HAPs	Operate at a minimum temperature of 1600 degrees Fahrenheit and a minimum residence time of 0.75 seconds	MACT	40 CFR 63 Subpart S	N/A

The NCG Thermal Oxidation System has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once every year.
- For PM, SO₂, and SAM periodic monitoring, if any three-hour block average wet scrubber liquid recirculation flow rate is less than 90 percent of its respective average value recorded at the time of 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 liquid recirculation flow shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- Since a wet scrubber controls this unit, opacity periodic monitoring will be satisfied through PM emission periodic monitoring.
- A SO₂ emission test shall be performed and a report submitted at least once every 5 years.
- For SO₂ periodic monitoring, if any three-hour block average wet scrubber liquid recirculation pH is less than 90 percent of its respective average value recorded at the time of 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 liquid recirculation pH values shall be made and maintained on file for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- A NO_x emission test shall be performed and a report submitted at least once every 5 years.
- A SAM emission test shall be performed and a report submitted at least once every 5 years.
- For HAP periodic monitoring a continuous monitoring system shall be operated to measure the temperature in the NCG Incinerator firebox or in the ductwork immediately downstream of the firebox and before any substantial heat exchange occurs. Records of the exhaust gas duct temperatures shall be made and maintained on file for inspection for at least five years. Exceedances and corrective actions shall also be recorded.

Changes During the Fourth Renewal

- Under Applicability, added proviso for opacity.
- Under Compliance and Performance Test Methods and Procedures, removed references to “other methods”.
- Under Compliance and Performance Test Methods and Procedures, added Methods 6C, 13, and 13A as alternative test methods.
- Under Compliance and Performance Test Methods and Procedures, added proviso for opacity compliance determination.
- Under Recordkeeping and Reporting Requirements, added statements about recording exceedances and corrective actions to parametric monitoring provisos.

- A number of citations were corrected to the appropriate regulation.

PAPER MACHINES

No. 1 Paper Machine and Coaters

Hardwood and softwood pulp from the washers and high-density storage is screened and cleaned and sent to the headboxes of the paper machine. The slurry is discharged onto the fourdrinier wire for initial formation and to remove and recycle the water by gravity and vacuum boxes. The stock is then compressed to squeeze out any remaining water and dried by making contact with steam-heated drying cylinders. A starch solution is added in the calendar section to improve smoothness. Water-based coatings are then applied to the finished paperboard and dried by non-contact dryers.

The No. 1 Paper Machine was installed in 1966 and modified in 1996 and 2019. The paper machine has an operating capacity of 586,000 machine dried tons per year. Air Permit 211-0004-X021 was issued on October 9, 1996, establishing a PSD/BACT work practice standard limit for VOCs. This permit was incorporated into the Title V permit issued on January 1, 2004. Air Permit 211-0004-X102 was issued on October 23, 2017, that established an operating limit of 586,000 machine-dried tons per year on a 12-month rolling total. This permit was incorporated into the Title V issued on November 30, 2020.

Control Devices

The No. 1 Paper Machine is not equipped with any control devices.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Paper Machine is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT work practice standard limit for VOC.

The No. 1 Paper Machine has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
VOC	Emissions shall be controlled by using only mill supply water, non-direct contact condensates, clean condensates, well water, or white water as water sources.	PSD	211-0004-X012	October 9, 1996

The production rate of the No. 1 Paper Machine shall be monitored and a record shall be made and maintained in a form suitable for inspection for at least five years.

Changes During the Fourth Renewal

- References and citations to PSD/BACT were changed to match similar permits.
- Added provisos for monitoring and maintaining records of the No. 1 Paper Machine's production rate.

No. 2 Paper Machine and Coaters

Hardwood and softwood pulp from the washers and high-density storage is screened and cleaned and sent to the headboxes of the paper machine. The slurry is discharged onto the fourdrinier wire for initial formation and to remove and recycle the water by gravity and vacuum boxes. The stock is then compressed to squeeze out any remaining water and dried by making contact with steam-heated drying cylinders. A starch solution is added in the calendar section to improve smoothness. Water-based coatings are then applied to the finished paperboard and dried by non-contact dryers.

The No. 2 Paper Machine was installed in 1990 and modified in 1995. The paper machine has an operating capacity of 150,000 machine dried pounds per hour, or 1,800 machine dried tons per day. Air Permit 211-0004-X021 was issued on October 9, 1996, establishing a PSD/BACT work practice standard limit for VOCs. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

The No. 2 Paper Machine is not equipped with any control devices.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Paper Machine is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT work practice standard limit for VOC.

The No. 2 Paper Machine has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
VOC	Emissions shall be controlled by using only mill supply water, non-direct contact condensates, clean condensates, well water, or white water as water sources.	PSD	211-0004-X012	October 9, 1996

The No. 2 Paper Machine has no additional requirements other than those listed in the general provisos.

Changes During the Fourth Renewal

- References and citations to PSD/BACT were changed to match similar permits.

RECOVERY SYSTEMS

The recovery system is comprised of the No. 1 and No. 2 recovery lines, each of which includes an Evaporator System, Recovery Furnace, and Smelt Dissolving Tank. The recovery system is used to recover some of the inorganic chemicals used in the pulping process from spent black liquor. This process generates steam for energy production from burning heavy black liquor and black liquor solids (BLS). Green liquor is also produced and sent to the recausticizing system for further chemical recovery.

No. 1 Evaporator System

The No. 1 Evaporator System is a multiple effect evaporator that was installed in 1966. Weak black liquor from the washers is exposed to excess heat from the steam chest in order to boil off excess water. The concentrated heavy black liquor is sent to the No. 1 Recovery Furnace for combustion. The evaporator has an operating capacity of 125,000 pounds of BLS per hour. The evaporator is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

NCGs from the No. 1 Evaporator System are required to be treated under 40 CFR 63 Subpart S and SIP. LVHC gases from the evaporators are to be controlled by incineration in either the NCG Thermal Oxidization System or the No. 1 Lime Kiln. Foul condensates are sent to the steam stripper to remove the VOC and HAP content.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Evaporator System is subject to:

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

The No. 1 Evaporator System has the following limits:

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

The No. 1 Evaporator System has the following monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for details.

Changes During the Fourth Renewal

- On the Information Page, clarified the TRS limit as being “State Only.”
- A number of citations have been corrected to the appropriate regulations.

No. 1 Recovery Furnace

Heavy black liquor from the No. 1 Evaporator System is combusted in the No. 1 Recovery Furnace. The organic compounds are oxidized to create steam for power generation, and the inorganic compounds create a smelt that is sent to the No. 1 Smelt Dissolving Tank. The No. 1 Recovery Furnace was installed in 1966 and underwent a PSD/BACT review in 1996. The review was for a low odor conversion project that involved the replacement of parts of the recovery furnace. The replacement of the parts did not meet the definition of modification or reconstruction under 40 CFR 60.14 or 60.15 respectively. Therefore, this unit did not become subject to NSPS.

The recovery furnace has an operating capacity of 125,000 lb of BLS per hour. The furnace is permitted to burn natural gas and No. 2 fuel oil as auxiliary fuels. Air Permit 211-0004-Z002 was issued on October 9, 1996, establishing PSD/BACT limits for filterable PM, SO₂, NO_x, VOC, CO, SAM, and opacity. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

The No. 1 Recovery Furnace is equipped with a dry ESP to control PM emissions from the flue gases. The particles are collected to be recycled in the salt tank mix tank and mixed with the black liquor feed. The recovery furnace is itself a control device for HVLC gases from the CWS.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Recovery Furnace is subject to:

- The applicable State Only requirements of ADEM Admin. Rule 335-3-5-.04 (4) for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for filterable PM, SO₂, NO_x, VOC, CO, SAM, and opacity.

The No. 1 Recovery Furnace has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 0.036 gr/DSCF at 8% O ₂ and/or ≤ 52.2 lbs/hr	PSD	211-0004-Z002	October 9, 1996
TRS	< 5 ppmv at 8% O ₂ as a 12-hr block average	SIP (State Only)	Rule 335-3-5-.04 (4)	N/A
SO ₂	≤ 144 ppmv at 8% O ₂ and/or ≤ 243 lbs/hr	PSD	211-0004-Z002	October 9, 1996
NO _x	≤ 112 ppmv at 8% O ₂ and/or ≤ 136 lbs/hr	PSD	211-0004-Z002	October 9, 1996
VOC	≤ 0.048 lbs/MMBtu and/or ≤ 37.2 lbs/hr	PSD	211-0004-Z002	October 9, 1996
CO	≤ 300 ppmv at 8% O ₂ and/or 222 lbs/hr	PSD	211-0004-Z002	October 9, 1996
SAM	≤ 12.2 lbs/hr	PSD	211-0004-Z002	October 9, 1996
Opacity	≤ 35% (6-min average)	PSD	211-0004-Z002	October 9, 1996
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
HAPs	Filterable PM as a surrogate for HAPS, ≤ 0.036 gr/DSCF at 8% O ₂	MACT	40 CFR 63 Subpart MM	N/A

The No. 1 Recovery Furnace has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.

- For PM and opacity periodic monitoring during periods when spent pulping liquor is being fed, 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. Corrective action can include completion of transient startup and shutdown conditions as expeditiously as possible. Records of all six-minute average opacities shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- For PM, SO₂, NO_x, VOC, CO, 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 the liquor firing rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- A COMS shall be installed, calibrated, operated, and maintained in accordance with provisions in 40 CFR 63.6(h), 63.8, and 63.864(d)(1) through (4). Excess emission reports shall be submitted quarterly. An excess emission report shall also be submitted semiannually in accordance 40 CFR 63 Subpart MM.
- A SO₂ emission test shall be performed and a report submitted at least once every five years.
- A NO_x emission test shall be performed and a report submitted at least once every five years.
- A CO emission test shall be performed and a report submitted at least once every five years.
- A VOC emission test shall be performed and a report submitted at least once every five years
- A SAM emission test shall be performed and a report submitted at least once every five years.
- In accordance with 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 Part 63 Subpart MM.
- In accordance with 40 CFR 63.863(c)(1), periodic PM performance tests shall be performed pursuant to 40 CFR 63.863(c)(1) 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) system. Records demonstrating compliance shall be maintained.
- A CEMS for the measurement of TRS and oxygen shall be installed, operated and maintained. Excess emission reports shall be submitted quarterly (State Only).

Changes During the Fourth Renewal

- On the Information Page, added opacity limit when spent pulping liquor is fired from Subpart MM. This limit was already present under Emission Standards.
- On the Information Page, corrected the TRS limit to "State Only".
- Under Compliance and Performance Test Methods and Procedures, removed references to "alternative test methods" and "other methods."

- Under Compliance and Performance Test Methods and Procedures, added Methods 17, 6C, 18, 13, 13A, and 16C as alternative test methods.
- Under Emission Monitoring, removed reference to initial testing from the proviso for PM testing pursuant to Subpart MM.
- Under Recordkeeping and Reporting Requirements, added requirements for reporting exceedances and corrective actions for opacity and the liquor firing rate.
- Created a State Only Enforceable Provisos section for TRS. As part of the low odor conversion project, TRS emissions were significantly reduced. TRS was not subject to PSD/BACT review since it did not exceed the significant emission rate threshold, nor was it subject to a synthetic minor limit to avoid PSD/BACT review. Therefore, the recovery furnace is only required to comply with the State Only requirements for TRS. Existing provisos for TRS were moved from Applicability, Emissions Standards, Compliance and Performance Test Methods and Procedures, Emission Monitoring, and Recordkeeping and Reporting Requirements to this new section. No new provisos were added.
- A number of citations were corrected to the appropriate regulation.

No. 1 Smelt Dissolving Tank

The No. 1 Smelt Dissolving Tank receives the smelt from the No. 1 Recovery Furnace. The smelt is dissolved in weak wash from the filtrate from the lime mud filters to create green liquor. The green liquor mixture is sent to the recausticizing area for further chemical recovery. The smelt tank was installed in 1966. It has an operating capacity of 125,000 pounds of BLS per hour. The smelt tank is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

The No. 1 Smelt Dissolving Tank is equipped with a wet scrubber to control PM and TRS emissions.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Smelt Dissolving Tank is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-4-.07 (2)(b) for PM.
- The applicable State Only requirements of ADEM Admin. Rule 335-3-5-.04 (7) for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.

The No. 1 Smelt Dissolving Tank has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 0.5 lbs/ADTP	SIP	Rule 335-3-4-.07 (2)(b)	N/A
TRS	≤ 0.033 lb/ton of BLS	SIP (State Only)	Rule 335-3-5-.04 (7)	N/A
Opacity	≤ 20% with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	N/A
HAPs	Filterable PM as a surrogate for HAPs, ≤ 0.20 lbs/ton of BLS	MACT	40 CFR 63 Subpart MM	N/A

The No. 1 Smelt Dissolving Tank has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.
- For PM 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 the liquor firing rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- For PM periodic monitoring, if any three-hour block average total liquid flow to the scrubber is less than the operational parameter limits set by the required complying periodic test or a complying test approved by the Department or if fan amperage readings indicate the fan is not operating, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. Corrective action can include completion of transient startup and shutdown conditions as expediently as possible. Records of the total liquid flow and fan amperage shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- Pursuant to 40 CFR Part 63, Subpart MM, the facility shall monitor the scrubber total liquid supply flow rate (combined flow to the fan and lower zone spray nozzles) and the fan amperage. The parametric monitoring system shall meet the requirements listed in 40 CFR 63.8(c).

Monitoring of the flow rate and fan amperage 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 outside the range of values established in accordance with 40 CFR 63.864(j) and (k).

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

Records of the total liquid flow and fan amperage shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded. Excess emissions reports shall be submitted semiannually.

- Pursuant to 40 CFR 63.864(j)(4), when confirming or reestablishing operating limits during required periodic performance tests, operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.
- Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- 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 Part 63 Subpart MM.
- Pursuant to 40 CFR 63.865, periodic PM performance tests shall be performed every 5 years.

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

- A TRS emission test shall be performed and a report submitted at least once per every five years (State Only).
- For TRS 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 the liquor firing rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded (State Only).
- For TRS periodic monitoring, if any twelve-hour block average scrubber liquid makeup flow rate 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 the scrubber liquid makeup flow rates shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded (State Only).

Changes During the Fourth Renewal

- On the Information Page, clarified the TRS limit as being “State Only.”
- Under Federal and State Compliance and Performance Test Methods and Procedures, removed references to “alternative test methods.”
- Under State Compliance and Performance Test Methods and Procedures, added Method 16C as an alternative test method.
- Under Emission Monitoring, rewrote the Subpart MM periodic testing proviso to remove initial compliance since this date is passed.
- Under Recordkeeping and Reporting Requirements, added requirements for recording exceedances and corrective actions.
- A number of citations have been corrected to the appropriate regulation.

No. 2 Evaporator System

The No. 2 Evaporator System is a multiple effect evaporator that was installed in 1990. Weak black liquor from the washers is exposed to excess heat from the steam chest in order to boil off excess water. The concentrated heavy black liquor is sent to the No. 2 Recovery Furnace for combustion. It has an operating capacity of 187,500 pounds of BLS per hour. Air Permit 211-0004-X016 was issued on October 13, 1988. The evaporator system was subject to a PSD/BACT review for TRS that was satisfied through compliance with 40 CFR 60 Subpart BB. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

NCGs from the No. 2 Evaporator System are required to be treated under 40 CFR 60 Subpart BB and 40 CFR 63 Subpart S. LVHC gases from the evaporators are to be controlled by incineration in either the NCG Thermal Oxidization System or the No. 2 Lime Kiln. Foul condensates are sent to the steam stripper to remove the VOC and HAP content.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Evaporator System is subject to:

- The applicable requirements of 40 CFR 60 Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart S.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT limit for TRS.

The No. 2 Evaporator System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
TRS	Incineration	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X016	October 13, 1988
HAPs	Incineration	MACT	40 CFR 63 Subpart S	N/A

The No. 2 Evaporator System has the following monitoring, recordkeeping, and reporting requirements:

- See “Provisos for Pulping System Processes”, “Process Condensates”, and “Enclosures and Closed Vent Systems” for details.

Changes During the Fourth Renewal

- Under Emission Standard, removed State Only exemption for excess emissions during “startup, shutdowns, or unavoidable malfunctions” from the TRS standard proviso.
- A number of citations have been corrected to the appropriate regulations.

No. 2 Recovery Furnace

Heavy black liquor from the No. 2 Evaporator System is combusted in the No. 2 Recovery Furnace. The organic compounds are oxidized to create steam for power generation, and the inorganic compounds create a smelt that is sent to the No. 2 Smelt Dissolving Tank. The No. 2 Recovery Furnace was installed in 1990. It has an operating capacity of 187,500 lb of BLS per hour. The furnace is permitted to burn natural gas and No. 2 fuel oil as auxiliary fuels. Air Permit 211-0004-X011 was issued on October 13, 1988, establishing PSD/BACT limits for filterable PM, SO₂, NO_x, VOC, CO, and SAM. This permit was incorporated into the Title V permit issued on January 1, 2004. It was reissued on July 29, 2009, with a partially revised PSD/BACT limit for SO₂ that was incorporated into the Title V permit issued on October 6, 2010.

Control Devices

The No. 2 Recovery Furnace is equipped with a dry ESP to control PM emissions from the flue gases. The particles are collected to be recycled in the salt tank mix tank and mixed with the black liquor feed. The recovery furnace is itself a control device for HVLC gases from the BWS.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Recovery Furnace is subject to:

- The applicable requirements of 40 CFR 60 Subpart Db for SO₂ and NO_x.
- The applicable requirements of 40 CFR 60 Subpart BB for TRS, filterable PM, and opacity.

- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for filterable PM, TRS, SO₂, NO_x, VOC, CO, and SAM.

The No. 2 Recovery Furnace has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 0.044 gr/DSCF at 8% O ₂	NSPS	40 CFR 60 Subpart BB	N/A
Filterable PM	≤ 106 lbs/hr	PSD	211-0004-X011	October 13, 1988
TRS	< 5 ppmv at 8% O ₂ as a 12-hr block average	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X011	October 13, 1988
SO ₂	≤ 140 ppmv at 8% O ₂	PSD	211-0004-X011	October 13, 1988
SO ₂	≤ 394.0 lbs/hr	PSD	211-0004-X011	July 29, 2009
SO ₂	When fuel oil is fired, SO ₂ emissions ≤ 0.3 lb/MMBtu (fuel oil heat input)	NSPS	40 CFR 60 Subpart Db	N/A
SO ₂	Fuel oil sulfur content ≤ 0.30%	NSPS	40 CFR 60 Subpart Db	N/A
NO _x	≤ 112 ppmv at 8% O ₂	PSD	211-0004-X011	October 13, 1988
NO _x	≤ 10% annual capacity factor	NSPS	40 CFR 60 Subpart Db	N/A
VOC	≤ 0.03 lbs/MMBtu	PSD	211-0004-X011	October 13, 1988
CO	≤ 879 ppmv at 8% O ₂	PSD	211-0004-X011	October 13, 1988
SAM	≤ 20 lbs/hr	PSD	211-0004-X011	October 13, 1988
Opacity	≤ 35% (6-min average)	NSPS	40 CFR 60 Subpart BB	N/A
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
HAPs	Filterable PM as a surrogate for HAPs, ≤ 0.028 gr/DSCF at 8% O ₂	MACT	40 CFR 63 Subpart MM	N/A

The No. 2 Recovery Furnace has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.

- For PM and opacity periodic monitoring during periods when spent pulping liquor is being fed, 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. Corrective action can include completion of transient startup and shutdown conditions as expeditiously as possible. Records of the six-minute average opacities shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded. An excess emission report pursuant to 40 CFR 63 Subpart MM must be submitted semiannually.
- For PM, SO₂, SAM, NO_x, VOC and CO 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 the liquor firing rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- The quantity and the heat input of fossil fuels shall be monitored when fired. Records of the quantities of fossil fuels fired shall be made and maintained on file available for inspection for at least five years.
- A continuous monitoring system to record the concentration of TRS on a dry gas basis and the percent oxygen by volume on a dry gas basis discharged from the recovery furnace shall be installed, calibrated, maintained, and operated. Excess emission reports shall be submitted quarterly.
- A COMS shall be installed, calibrated, operated, and maintained in accordance with provisions in 40 CFR 63.6(h), 63.8, and 63.864(d)(1) through (4). Excess opacity emission reports shall be submitted quarterly.
- A SO₂ emission test shall be performed and a report submitted at least once every five years.
- A SAM emission test shall be performed and a report submitted at least once every five years.
- A NO_x emission test shall be performed and a report submitted at least once every five years.
- A CO emission test shall be performed and a report submitted at least once every five years.
- A VOC emission test shall be performed and a report submitted at least once every five years.
- In accordance with 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 Part 63 Subpart MM.
- In accordance with 40 CFR 63.863(c)(1), periodic PM performance tests 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 system. Records demonstrating compliance must be maintained.
- For SO₂ periodic monitoring obtain receipts from the fuel oil supplier that certify sulfur content in fuel at least once a calendar year. Receipts shall be maintained on file available for inspection for at least five years.

Changes During the Fourth Renewal

- On the Information Page, added opacity limit when spent pulping liquor is fired from Subpart MM. This limit was already present under Emission Standards.
- Under Compliance and Performance Test Methods and Procedures, removed references to “alternative test methods” and “other methods.”
- Under Compliance and Performance Test Methods and Procedures, added Methods 17, 16C, 6C, 13, 13A, and 18 as alternative test methods.
- Under Compliance and Performance Test Methods and Procedures, replaced ASTM procedures from SO₂ compliance proviso with fuel oil vendor certification. Per an EPA letter dated September 2, 1988, the No. 2 Recovery Furnace was subject to Subpart Db and required to meet the standard under 40 CFR 60.42b(d). Air Permit 211-0004-X011 issued on October 13, 1988, specified that the ASTM method was for demonstrating compliance with this limit. The Mill may demonstrate compliance with this limit by obtaining and maintaining fuel oil receipts pursuant to 60.49b(r)(1) and burning only very low sulfur oil as defined in 60.41b. Monitoring and recordkeeping provisos have been added to require obtaining and maintaining fuel oil receipts. An emission standard proviso was added to limit the maximum fuel oil sulfur content to 0.30%.
- Under Emission Monitoring, removed reference to initial testing from the proviso for PM testing pursuant to Subpart MM.
- Under Recordkeeping and Reporting Requirements, added requirements for reporting exceedances and corrective actions.
- A number of citations were corrected to the appropriate regulation.

No. 2 Smelt Dissolving Tank

The No. 2 Smelt Dissolving Tank receives the smelt from the No. 2 Recovery Furnace. The smelt is dissolved in weak wash from the filtrate from the lime mud filters. This green liquor mixture is sent to the recausticizing area for further chemical recovery. The smelt tank was installed in 1990. It has an operating capacity of 187,500 pounds of BLS per hour. Air Permit 211-0004-X012 was issued on October 13, 1988, establishing PSD/BACT limits for filterable PM and SO₂. It was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

The No. 2 Smelt Dissolving Tank is equipped with a wet scrubber to control PM, TRS and SO₂ emissions.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Smelt Dissolving Tank is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of 40 CFR 60 Subpart BB for PM and TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for PM, TRS, and SO₂.

The No. 2 Smelt Dissolving Tank has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 18.8 lbs/hr	PSD	211-0004-X012	October 13, 1988
Filterable PM	≤ 0.2 lbs/ton of BLS (dry weight)	NSPS	40 CFR 60 Subpart BB	N/A
TRS	≤ 0.033 lb/ton of BLS	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X012	October 13, 1988
SO ₂	≤ 12 ppmv and/or ≤ 6.3 lbs/hr	PSD	211-0004-X012	October 13, 1988
Opacity	$\leq 20\%$ with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	N/A
HAPs	Filterable PM as a surrogate for HAPs, ≤ 0.20 lbs/ton of BLS	MACT	40 CFR 63 Subpart MM	N/A

The No. 2 Smelt Dissolving Tank has the following monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.
- A TRS emission test shall be performed and a report submitted at least once every five years.
- 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 a 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 the liquor firing rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- For PM periodic monitoring, if any three-hour block average total liquid flow to the scrubber is less than the operational parameter limits set by the required complying periodic test or a complying test approved by the Department or if fan amperage readings indicate the fan is not operating, the cause is to be investigated and appropriate corrective action is to be taken within twenty-four hours. Corrective action can include completion of transient startup and shutdown conditions as expediently as possible. Records of the liquid flow rate and fan amperage shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- For TRS periodic monitoring, if any twelve-hour block average scrubber liquid makeup flow rate 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 the liquid makeup flow rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- Pursuant to 40 CFR Part 63, Subpart MM, the facility shall monitor the scrubber total liquid supply flow rate (combined flow to the fan and lower zone spray nozzles) and the fan amperage. The parametric monitoring system shall meet the requirements listed in 40 CFR 63.8(c).

Monitoring of the flow rate and fan amperage 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 outside the range of values established in accordance with 40 CFR 63.864 (j) and (k).

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

Records of the liquid flow rate and fan amperage shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded. Excess emission reports shall be submitted semiannually.

- Pursuant to 40 CFR 63.864(j)(4), when confirming or reestablishing operating limits during required periodic performance tests, operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.
- A SO₂ emission test shall be performed and a report submitted at least once every five years.
- 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 Part 63 Subpart MM.
- Pursuant to 40 CFR 63.865, periodic PM performance tests shall be performed every 5 years.

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

Changes During the Fourth Renewal

- Under Applicability, clarified the applicability of Subpart BB and PSD/BACT limits for PM and TRS.
- Under Compliance and Performance Test Methods and Procedures, removed references to “alternative methods” and “other methods”.
- Under Compliance and Performance Test Methods and Procedures, added Methods 16C and 6C as alternative test methods.
- Under Emission Monitoring, rewrote Subpart MM periodic testing proviso to remove references to passed dates.
- Under Recordkeeping and Reporting Requirements, added requirements for recording exceedances and corrective actions.
- A number of citations were corrected to the appropriate regulations.

RECAUSTICIZING SYSTEMS

The recausticizing systems include the No. 1 and No. 2 Lime Kilns and the No. 1 and No. 2 Lime Slakers. Reburned lime is produced from lime mud in the lime kilns. The reburned lime is mixed with green liquor from the smelt tanks in the lime slakers to create a slurry. This is fed through causticizers that turn the green liquor into white liquor that is filtered out and stored for use in the pulp mill. Lime mud caught by the filter is sent to lime mud storage tanks to be refired in the lime kilns.

No. 1 Lime Kiln

The No. 1 Lime Kiln was installed in 1966. It has an operating capacity of 20,833 pounds of quick lime (CaO) per hour. The lime kiln is permitted to burn natural gas, crude tall oil and its derivatives, and No. 2 – 6 fuel oils. The No. 1 Lime Kiln is not subject to any PSD synthetic minor or PSD/BACT limits.

Control Devices

The No. 1 Lime Kiln is equipped with a venturi scrubber system to control PM and TRS emissions. The lime kiln itself is a control device for LVHC gases from the digesters, evaporators, and condensate stripper.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Lime Kiln is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-4-.07 (2)(c) for PM.
- The applicable State Only requirements of ADEM Admin. Rule 335-3-5-.04 (6) for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.

The No. 1 Lime Kiln has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 1.0 lb/ADTP	SIP	Rule 335-3-4-.07 (2)(c)	N/A
TRS	≤ 20 ppm _{dv} at 10% O ₂ (as a 12-hour block average)	SIP (State Only)	Rule 335-3-5-.04 (6)	N/A
Opacity	≤ 20% with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	N/A
HAPs	Filterable PM as a surrogate, ≤ 0.192 gr/dscf at 10% O ₂	MACT	40 CFR 63 Subpart MM	N/A

The No. 1 Lime Kiln has the following emission monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.
- For PM periodic monitoring, if any three-hour block average lime mud flow rate is greater than 110 percent of its average value recorded at the time of a required periodic test that showed compliance or a test approved by the Department that showed compliance, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of the lime mud flow rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- Pursuant to 40 CFR Part 63, Subpart MM, for PM periodic monitoring during periods when lime mud is fed to the kiln, if any rolling three-hour block averages for liquid flow to the scrubber or differential pressure across the scrubber are less than the operational parameter limits set by the required complying periodic test or any complying test approved by the Department, the cause is to be investigated and appropriate corrective action is to be taken within twenty four hours. Corrective action can include completion of transient startup and shutdown conditions as expediently as possible. The facility is excluded from the

requirement to implement corrective action during periods of startup and shutdown when the 3-hour average scrubber pressure drop value is below the minimum established operating limit. Records of the liquid flow rate and differential pressure shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded. Excess emission reports shall be submitted semiannually.

- HAP metals reported as PM are in violation of the standard, if six or more three-hour average parameter values within any 6-month reporting period are outside the range of values established during performance tests. For the purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.
- Pursuant to 40 CFR 63.864(j)(4), when confirming or reestablishing operating limits during required periodic performance tests, operating outside a previously established parameter limit during a performance test to expand the operating limit range does not constitute a monitoring exceedance.
- In accordance with 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 63.865, periodic PM performance tests shall be performed every 5 years.
Performance test data must be submitted through CEDRI within 60 days after the date of completing each performance test.

Changes During the Fourth Renewal

- Under Federal and State Compliance and Performance Test Methods and Procedures, removed references to “alternative methods” and “other methods”.
- Under State Compliance and Performance Test Methods and Procedures, added Method 16C as an alternative test method.
- Under Emission Monitoring, rewrote Subpart MM PM testing proviso to remove reference to initial testing as this date is passed.
- Under Recordkeeping and Reporting Requirements, added requirements for recording exceedances and corrective actions.
- A number of citations were corrected to the appropriate regulation.

No. 2 Lime Kiln

The No. 2 Lime Kiln was installed in 1990. It has an operating capacity of 25,000 pounds of CaO per hour. The lime kiln is permitted to burn natural gas, crude tall oil and its derivatives, and No. 2 – 6 fuel oils. Air Permit 211-0004-X013 was issued on October 13, 1988, establishing PSD/BACT limits for filterable PM, TRS, SO₂, NO_x, CO, VOC, and SAM. This permit was incorporated into the Title V permit issued on January 1, 2004. It was reissued on July 29, 2009, with revised limits for SAM and incorporated into the Title V permit issued on October 6, 2010.

Control Devices

The No. 2 Lime Kiln is equipped with an ESP to control filterable PM emissions. The lime kiln itself is a control device for LVHC gases from the digesters and evaporators.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Lime Kiln is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of 40 CFR 60 Subpart BB for TRS.
- The applicable requirements of 40 CFR 63 Subpart MM.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for PSD/BACT limits for filterable PM, TRS, SO₂, NO_x, CO, VOC, and SAM.

The No. 2 Lime Kiln has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Filterable PM	≤ 0.035 gr/dscf at 10% O ₂ and/or ≤ 7.9 lbs/hr (when firing natural gas)	PSD	211-0004-X013	October 13, 1988
Filterable PM	≤ 0.064 gr/dscf at 10% O ₂ (when firing fuel oil)	MACT	40 CFR 63 Subpart MM	N/A
TRS	≤ 8 ppmv at 10% O ₂ . (as 12-hr block avg.)	NSPS	40 CFR 60 Subpart BB	N/A
		PSD	211-0004-X013	October 13, 1988
SO ₂	≤ 44 ppmv at 10% O ₂ . Fuel oil sulfur content shall not exceed 3%	PSD	211-0004-X013	October 13, 1988
Opacity	≤ 20% with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	N/A
NO _x	≤ 336 ppmv at 10% O ₂	PSD	211-0004-X013	October 13, 1988
CO	≤ 52 ppmv at 10% O ₂	PSD	211-0004-X013	October 13, 1988
VOC	≤ 78 ppmv at 10% O ₂	PSD	211-0004-X013	October 13, 1988
SAM	≤ 12.9 ppmv at 10% O ₂ and/or ≤ 4.3 lbs/hr	PSD	211-0004-X013	July 29, 2009
HAPs	Filterable PM as a surrogate, ≤ 0.035 gr/dscf at 10% O ₂	MACT	40 CFR 63 Subpart MM	N/A

The No. 2 Lime Kiln has the following emission monitoring, recordkeeping, and reporting requirements:

- A PM emission test shall be performed and a report submitted at least once per year.
- For PM and opacity periodic monitoring during periods when lime mud is fed, if the average of any ten consecutive six-minute opacity average exceeds 20 percent, the cause is to be investigated and appropriate corrective action is to be taken. Corrective action can

include completion of transient startup and shutdown conditions as expediently as possible. Records of the six-minute average opacity shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded. Excess emissions reports pursuant to 40 CFR 63 Subpart MM shall be submitted semiannually.

- For PM, SO₂, NO_x, CO, SAM, and VOC periodic monitoring if any three-hour block average lime mud flow 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 flow rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of the lime mud flow rate shall be made and maintained on file available for inspection for at least five years. Exceedances and corrective actions shall also be recorded.
- For SO₂ periodic monitoring obtain receipts from the fuel oil supplier that certify sulfur content in fuel at least once a calendar year. Receipts shall be maintained on file available for inspection for at least five years.
- A TRS CEMS shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60.284. Excess emissions reports shall be submitted quarterly.
- A COMS shall be installed, calibrated, operated, and maintained in accordance with provisions in 40 CFR 63.6(h), 63.8, and 63.864(d)(1) through (4). Excess opacity emission reports shall be submitted quarterly. Excess emissions reports pursuant to 40 CFR 63 Subpart MM shall be submitted semiannually.
- A SO₂ emission test shall be performed and a report submitted at least once every five years.
- A NO_x emission test shall be performed and a report submitted at least once every five years.
- A CO emission test shall be performed and a report submitted at least once every five years.
- A VOC emission test shall be performed and a report submitted at least once every five years.
- A SAM emission test shall be performed and a report submitted at least once every five years.
- In accordance with 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 63.865, periodic PM performance tests shall be 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 system. Records demonstrating compliance shall be maintained.

Changes During the Fourth Renewal

- Under Applicability, added PM as a pollutant subject to a PSD/BACT limit.
- Under Compliance and Performance Test Methods and Procedures, removed references to "alternative methods" and "other methods".
- Under Compliance and Performance Test Methods and Procedures, added Methods 17, 16C, 6C, 13, and 13A as alternative test methods.

- Under Emission Monitoring, removed reference to initial testing for Subpart MM PM testing as this date is passed.
- Under Recordkeeping and Reporting Requirements, added requirements for recording exceedances and corrective actions.
- A number of citations were corrected to the appropriate regulation.

No. 1 Lime Slaker

The No. 1 Lime Slaker was installed in 1966 and replaced with a new unit in 1998. The lime slaker is used to mix quicklime with green liquor to create white liquor. The lime slaker has an operating capacity of 25,700 pounds of CaO per hour. Air Permit 211-0004-X026 was issued on November 16, 1998, for the new No. 1 Lime Slaker. The application dated August 19, 1998, indicated the replacement of the No. 1 Lime Slaker would not result in an emissions increase subject to PSD/BACT review, nor was a PSD synthetic minor limit required to remain below the significant emissions threshold. On October 2, 1998, the Mill voluntarily proposed to apply the same limit for PM as the No. 2 Lime Slaker, which is much more stringent than the required process-based limit of Rule 335-3-4-.04. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

The No. 1 Lime Slaker is equipped with a wet scrubber to control PM emissions.

Emission Limits and Proposed Periodic Monitoring

The No. 1 Lime Slaker is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-16-.05 for PM.

The No. 1 Lime Slaker has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 1.0 lb/hr	Title V	211-0004-X026	November 16, 1998
Opacity	≤ 20% with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	N/A

The No. 1 Lime Slaker has no additional monitoring, recordkeeping, or reporting requirements other than those listed in the general provisos.

Changes During the Fourth Renewal

- Under Applicability, removed reference to PSD/BACT limit for PM.
- Rewrote provisos that stated “None required” under Emission Monitoring and Recordkeeping and Reporting Requirements to match the wording of other units.
- A number of citations were corrected to the appropriate regulation.

No. 2 Lime Slaker

The No. 2 Lime Slaker was installed in 1990. The lime slaker is used to mix quicklime with green liquor to create white liquor. The lime slaker has an operating capacity of 25,000 pounds of CaO per hour. Air Permit 211-0004-X018 was issued on October 13, 1988, establishing a PSD/BACT limit for PM. This permit was incorporated into the Title V permit issued on January 1, 2004.

Control Devices

The No. 2 Lime Slaker is equipped with a venturi wet scrubber to control PM emissions.

Emission Limits and Proposed Periodic Monitoring

The No. 2 Lime Slaker is subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of ADEM Admin. Rule 335-3-14-.04 (9) for a PSD/BACT limit for PM.

The No. 2 Lime Slaker has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 1.0 lb/hr	PSD/BACT	211-0004-X018	October 13, 1988
Opacity	≤ 20% with one six-minute period up to 40% in any one hour period	SIP	Rule 335-3-4-.01 (1)	N/A

The No. 2 Lime Slaker has no additional monitoring, recordkeeping, or reporting requirements other than those listed in the general provisos.

Changes During the Fourth Renewal

- Rewrote provisos that stated “None required” under Emission Monitoring and Recordkeeping and Reporting Requirements to match the wording of other units.
- A number of citations were corrected to the appropriate regulation.

MACT I SOURCES

Pulping System Processes

Control Devices

LVHC gases from the digesters, evaporators, turpentine recovery, and condensate stripper systems are collected and incinerated in the NCG Thermal Oxidizer. As an alternative, LVHC gases can be incinerated in the lime kilns, and HVLC gases from the washing and screening systems are collected and incinerated in the No. 3 Wood Residue Boiler or the recovery furnaces. The gases must be conveyed in a closed system that meets the requirements of 40 CFR 63.450.

Changes During the Fourth Renewal

- Updated “Proviso 1(b)-(d)” to “Proviso 1(a)-(c)” to correspond to a change in the associated “Enclosures and Closed-Vent Systems” provisos.
- Under Recordkeeping and Reporting Requirements, removed “no later than April 17, 2006” as this date is passed.

- A number of citations were corrected to the appropriate regulation.

Process Condensates

Control Devices

Process condensates from the digesters, turpentine recovery system, and evaporator systems are collected in a closed-collection system that meets the requirements of 40 CFR 63.446 and treated by steam-based stripping in the condensate stripper. The gases 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 7.2 pounds of HAPs per oven dried ton of pulp (ODTP) and treat at least 6.6 pounds of HAPs per ODTP.

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

- For the pulping process condensates from the equipment systems of this section per the requirements of 40 CFR 63.446, the permittee shall meet the requirements of 40 CFR 63.453.
- 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 following parameters for each steam stripper used to comply with the treatment requirements in 40 CFR 63.446(e) (3), (4), or (5).
 - a. The process wastewater feed rate;
 - b. The steam feed rate.
 - c. The steam-to-feed ratio will be monitored as the CMS parameter for the process condensate treatment system. (See EPA Region IV letter granting approval of alternative monitoring.)
- A CMS shall be operated to measure the process wastewater flow rate for the condensate that is recycled to an equipment system specified in 40 CFR 63.443(a).
- To establish or reestablish, the value for each operating parameter required to be monitored by this section, each owner or operator shall use the following procedures:
 - a. During the initial performance test required in 40 CFR Part 63.457(a) or any subsequent performance test, continuously record the operating parameter;
 - b. Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;
 - c. The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with this section; and
 - d. Provide for the Administrator's approval the rational for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.

- The permittee shall meet the Recordkeeping and Reporting Requirements section of the “Enclosures and Closed-Vent Systems” provisos.

Changes During the Fourth Renewal

- A number of citations were corrected to the appropriate regulation.

Enclosures and Closed-Vent Systems

The Enclosures and Closed-Vent Systems serve to enclose and transport gases from the pulping systems 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 are subject to:

- The General Provisions as provided for in Table 1 of 40 CFR 63 Subpart S.

The Enclosure and Closed-Vent Systems have the monitoring, recordkeeping, and reporting requirements

- Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified in Proviso 1(a) - (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 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 elapsed time between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects.
 - 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 Proviso 1(a) - (f) 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 this part, 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 this part.
 - 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 this part.
 - 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 this part 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 including a drawing or schematic of the components of applicable affected equipment.

Changes During the Fourth Renewal

- A number of citations were corrected to the appropriate regulation.

RICE UNITS

WRM operates ten stationary Reciprocating Internal Combustion Engine (RICE) units that provide emergency and non-emergency power. Six of the units are spark ignition engines, four of which are gasoline driven and two of which are propane driven. Four of the units are compression ignition engines driven by diesel fuel. These units are identified and described by the following:

- RICE-01 – No. 1 Lime Kiln Auxiliary Drive Replacement Engine; 2019; 79.7 hp
- RICE-02 – No. 2 Lime Kiln Auxiliary Drive Replacement Engine; 2019; 79.7 hp
- RICE-03 – Lime Mud Tank Agitator Replacement Engine; 2019; 79.7 hp
- RICE-04 – Main Office Replacement Engine; 2020; 43.5 hp
- RICE-05 – Radio Tower Generator; 1989; 40 hp
- RICE-06 – Fire Pump at Mill Supply; 1994; 300 hp
- RICE-07 – Starter for Gas Turbine; 1998; 450 hp
- RICE-08 – Onan Generator below TG-2; 1988; 355 hp

- RICE-09 – Onan Generator for Gas Turbine; 1997; 170 hp
- RICE-10 – Spare Recaust Drive Engine; 2019; 79.7 hp

Emission Limits and Proposed Periodic Monitoring

All RICE units are subject to:

- The applicable requirements of ADEM Admin. Rule 335-3-4-.01 (1) for opacity.
- The applicable requirements of 40 CFR 63 Subpart ZZZZ.

Units RICE-01, RICE-02, RICE-03, RICE-04, and RICE-10 are subject to:

- The applicable requirements of 40 CFR 63 Subpart JJJJ to meet the requirements of Subpart ZZZZ.

The RICE units have the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
Opacity	Shall not exceed 20% based on 6-minute average, except one 6-minute period in every 60-minute period it shall not exceed 40%	SIP	Rule 335-3-4-.01 (1)	N/A
HC + NO _x , and CO (RICE-01, RICE-02, RICE-03, RICE-10)	HC + NO _x : 2.7 g/kW-hr CO: 4.4 g/kW-hr	NSPS	40 CFR 60 Subpart JJJJ	N/A
HC + NO _x , and CO (RICE-04)	HC + NO _x : 13.4 g/kW-hr CO: 519 g/kW-hr	NSPS	40 CFR 60 Subpart JJJJ	N/A
HAPs (RICE-05)	a. Change oil and filter every 500 hours of operation or within one year and 30 days of the previous change, whichever comes first.; b. Inspect spark plugs every 1,000 hours of operation or within one year and 30 days of the previous change, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or within one year and 30 days of the previous change, whichever comes first, and replace as necessary.	MACT	40 CFR 63 Subpart ZZZZ	N/A

Pollutant	Limit	Limit Type	Origin	Original Date
HAPs (RICE-06 – RICE-09)	<p>a. Change oil and filter every 500 hours of operation or within one year and 30 days of the previous change, whichever comes first;</p> <p>b. Inspect air cleaner every 1,000 hours of operation or within one year and 30 days of the previous change, whichever comes first;</p> <p>c. Inspect all hoses and belts every 500 hours of operation or within one year and 30 days of the previous change, whichever comes first, and replace as necessary.</p>	MACT	40 CFR 63 Subpart ZZZZ	N/A

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

- In accordance with 40 CFR 63.6625(f), a non-resettable hour meter must be installed on units RICE-05 – RICE-09 prior to startup of the engine.
- The facility must install a non-resettable hour meter on Unit RICE-04, pursuant to 40 CFR 60.4237(c), and monitor the spark ignition units according to the requirements of 40 CFR 60.4243(d).
- In accordance with 40 CFR 60.4234, owners/operators must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine.
- In accordance with 40 CFR 60.4243(a), the facility shall comply with the emission standards of Subpart JJJJ by purchasing an engine that is certified by the manufacturer to meet the requirements of 40 CFR 60.4233.
- Units RICE-01, RICE-02, RICE-03, and RICE-10 are permitted to burn gasoline only.
- Unit RICE-04 is permitted to burn only propane or natural gas.
- 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 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 5 years from the date of generation of each record.

- The facility shall maintain and show records of manufacturer’s certification for Units RICE-01, RICE-02, RICE-03, RICE-04 and RICE-10 in accordance with 40 CFR 60.4231(b) and (c).
- For Units RICE-01, RICE-02, RICE-03, RICE-04, and RICE-10, the facility shall keep records in accordance with 40 CFR 60.4245(a)(1)-(3), specifically;
 - a. All notifications submitted to comply with this subpart and all documentation supporting any notification;
 - b. All maintenance conducted on the engine;
 - c. Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required by 40 CFR 90 and 1048, as applicable.

Changes During the Fourth Renewal

- On the Information Page, moved the dates under Reconstruction/Modification Date to Installation Date for applicable units. These units were replacements, per the original permit application from 2019, which means they would not be considered modifications or reconstructions pursuant to 40 CFR 60.14 or 60.15 respectively.
- On the Information Page, added model year.
- On the Information Page, clarified which RICE units were subject to Subpart JJJJ and Subpart ZZZZ.
- On the Information Page, added the applicable limits. These limits were already present under Emissions Standards.
- Under Applicability, clarified the opacity standard proviso to include the appropriate State Code.
- Under Emission Standards, removed the operation and maintenance proviso. This was a duplicate with an existing proviso under Compliance and Performance Test Methods and Procedures
- Under Emission Standards, updated the Subpart ZZZZ standards to “within one year and 30 days of the previous change” effective August 30, 2024.
- Under Emission Standards, corrected the Subpart JJJJ limit for RICE-01 – RICE-03 and RICE-10 to “sum of hydrocarbons (HC) and nitrogen oxides (NO_x)” as appears in Table 1 of 40 CFR 1048.
- Under Compliance and Performance Test Methods and Procedures and Emission Monitoring, added separate emergency use and non-resettable hour meter provisos for RICE-04 since it must meet the standards of Subpart 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 JJJJ with Applicability Provisos 3.
- A number of citations have been removed due to irrelevance, corrected, or added to clarify the source of specific provisos.

SOURCES SUBJECT ONLY TO THE GENERAL PROVISOS

Description	Regulation
No. 1 Lime Storage System	General Provisos
No. 2 Lime Storage System	General Provisos

Common Paper Production Equipment	General Provisos
No. 1 Recycling System	General Provisos
No. 2 Recycling System	General Provisos
Cooling Towers	General Provisos
VOL Storage tanks less than 10,567 gallons	General Provisos
VOL Storage tanks 10,567 to 19,890 gallons	General Provisos
VOL Storage tanks greater than 19,890 gallons	General Provisos
Woodyard Material Handling Operations	General Provisos
Tall Oil System	General Provisos
Wastewater Treatment	General Provisos
No. 1 Salt Cake Mix Tank	General Provisos
No. 2 Salt Cake Mix Tank	General Provisos
No. 1 Mud Filter	General Provisos
No. 1 Mud Filter Vacuum Pump	General Provisos
No. 2 Mud Filter	General Provisos
No. 2 Mud Filter Vacuum Pump	General Provisos
Lime Mud Pressure Filter	General Provisos
High Density Storage Tanks	General Provisos
Turpentine Tanks	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:

- Continuous Washing and Screening System (HAPs) – subject to 40 CFR 63 Subpart S
- Continuous Digester System (HAPs) – subject to 40 CFR 63 Subpart S
- Batch Digester System (HAPs) – subject to 40 CFR 63 Subpart S
- Batch Washing and Screening System (HAPs) – subject to 40 CFR 63 Subpart S
- No. 1 Recovery Furnace (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- No. 1 Smelt Tank (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- No. 1 Evaporator System (HAPs) – subject to 40 CFR 63 Subpart S
- No. 2 Recovery Furnace (PM, HAPs) – subject to 40 CFR 63 Subpart MM

- No. 2 Smelt Tank (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- No. 2 Evaporator System (HAPs) – subject to 40 CFR 63 Subpart S
- Condensate Stripper System (HAPs) – subject to 40 CFR 63 Subpart S
- No. 1 Lime Kiln (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- No. 2 Lime Kiln (PM, HAPs) – subject to 40 CFR 63 Subpart MM
- NCG Oxidation System (HAPs) – subject to 40 CFR 63 Subpart S
- No. 1 Wood Residue Boiler (PM) – subject to 40 CFR 63 Subpart DDDDD
- No. 2 Wood Residue Boiler (PM) – subject to 40 CFR 63 Subpart DDDDD
- No. 3 Wood Residue Boiler (PM) – subject to 40 CFR 63 Subpart DDDDD
- RICE Units (NO_x, CO, VOC) – subject to 40 CFR 60 Subpart JJJJ
- RICE Units (HAPs) – subject to 40 CFR 63 Subpart ZZZZ
- Pulping System Processes (HAPs) – subject to 40 CFR 63 Subpart S
- Process Condensates (HAPs) - subject to 40 CFR 63 Subpart S
- Enclosures and Closed-Vent Systems (HAPs) – subject to 40 CFR 63 Subpart S

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:

- Continuous Digester System (TRS) – state only requirements; may also be satisfied by monitoring pursuant to 40 CFR 63 Subpart S
- No. 1 Smelt Tank (TRS) – state only requirements; monitoring of three-hour block average liquor firing rate and twelve-hour block average scrubber liquid makeup flow rate
- No. 1 Evaporator System (TRS) – state only requirements; may also be satisfied by monitoring pursuant to 40 CFR 63 Subpart S
- No. 2 Smelt Tank (TRS) – monitoring of three-hour block average liquor firing rate and twelve-hour block average scrubber liquid makeup flow rate
- NCG Oxidation System (PM, SAM, SO₂) – monitoring of three-hour block average wet scrubber liquid recirculation flow rate and pH

Several units are subject to an NSPS or NESHAP rule promulgated prior to November 15, 1990, and are therefore subject to CAM. However, the Mill is satisfying CAM by following the monitoring requirements of 40 CFR 63 Subpart S. Therefore, no additional CAM plan is required.

- Continuous Washing and Screening System (TRS, VOC) – monitoring pursuant to 40 CFR 63 Subpart S
- Batch Digester System (TRS) – monitoring pursuant to 40 CFR 63 Subpart S
- Batch Washing and Screening System (TRS) – monitoring pursuant to 40 CFR 63 Subpart S
- No. 2 Evaporator System (TRS) – monitoring pursuant to 40 CFR 63 Subpart S
- Condensate Stripper System (TRS) – monitoring pursuant to 40 CFR 63 Subpart S

FUGITIVE DUST PLAN

A fugitive dust plan was submitted with the application on June 23, 2025, and will be incorporated into the Title V MSOP during the fourth renewal as Appendix A.

RECOMMENDATIONS

The renewal Major Source Operating Permit 211-0004 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.



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MAB/mab

February 26, 2026
Date

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