Statement of Basis
Resolute FP U.S., Inc.
309-0006

Resolute FP U.S. Inc. (Resolute or the Mill), Coosa Pines Mill has applied for a renewal of Major Source Operating Permit 309-0006. 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 originally began operations in 1949. The initial Title V MSOP was issued on August 1, 2003, and this is the fourth renewal. The current MSOP was issued on August 17, 2020, with an effective date of August 17, 2020, and expired on June 30, 2025. The current MSOP was administratively modified September 8, 2020. The fourth renewal application was received on December 24, 2024, administratively extending the current Title V Permit.

The facility is located in Talladega County, which is currently in compliance with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against the Resolute Mill 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 ALD004000790).

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

Background

Resolute is a pulp mill located in Coosa Pines, Talladega County, Alabama. The Mill produces roll pulp and baled pulp. The Mill previously produced paper in its two paper machines, but these machines have been removed. The Deink plant that processed wastepaper into deinked fiber has also been removed from the Mill. The facility is a major source with respect to Title V, prevention of significant deterioration (PSD), and the MACT / National Emission Standards for Hazardous Air Pollutants (NESHAP) standards. Resolute is a major source operating facility for the following

pollutants: particulate matter (PM), total PM less than 10 micrometers (PM_{10}), total PM less than 2.5 micrometers ($PM_{2.5}$), nitrogen oxides (NO_x), sulfur dioxide (SO_2), carbon monoxide (CO), volatile organic compounds (VOCs), carbon dioxide (CO_2), total hazardous air pollutants (HAPs), acetaldehyde, chlorine, hydrogen chloride (HCl), methanol, and phenol.

Wood Yard

All of the pulp produced at the Coosa Pines Mill comes from softwood timber. The facility purchases softwood chips which are received by truck. The chips are unloaded with an inclined truck dumper and are screened and transferred in covered conveyers to either the west line or east line batch digester system.

Control Equipment:
The woodyard has covers on the conveying system.

Emission Limits and Proposed Periodic Monitoring:
The woodyard is a non-regulated source of fugitive emissions; therefore, it is not subject to anything other than the general provisions of the Title V MSOP.

Pulp Mill

The Digesters, Brown Stock Washers, Bleach Plants, Chlorine Dioxide Generator, and the Ross Pulp Dryer make up Resolute's Pulp Mill. The Pulp Mill makes up the process of converting wood chips into pulp. The non-condensable gases (NCGs) are collected from the Pulp Mill and incinerated in the No. 3 Recovery Furnace or the No 3 Lime Kiln. Only softwood pulp is produced at this facility.

Digester Systems

Resolute uses the kraft process for the conversion of wood chips into pulp in both the West Line (Nos. 1-6, and 12) or East Line Digesters (Nos. 7-11). The process involves the use of sodium hydroxide and sodium sulfide mixture (referred to as white liquor) and pressure to "cook" the wood chips which dissolves the lignin in the wood. The digesters generate low volume high concentration gases (LVHCs) during this process.

Control Equipment:
The LVHCs are collected and routed through the concentrated non-condensable gas (CNCG) collection system, which is sent to the No. 3 Recovery Furnace or the No. 3 Lime Kiln for incineration as required by 40 CFR Part 63 Subpart S. The No. 3 Lime Kiln is the primary control device for LVHC/CNCG gases.

Emission Limits and Proposed Periodic Monitoring:
The West Line Digesters are subject to:

- The requirements of ADEM Admin. Code 335-3-5-.04 (5) for total reduced sulfur (Digesters 1-6).
- The applicable requirements of Federal New Source Performance Standards (NSPS) Subpart BB for total reduced sulfur (Digester 12).

- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.

The West Line Digesters' emission monitoring, recordkeeping, and reporting requirements are:

- For total reduced sulfur periodic monitoring at least once per day, mill personnel shall determine if the gases are being incinerated as required and if gases are not being incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file for five years.
- The digesters are subject to 40 CFR Part 63, Subpart S and the Mill must meet the requirements included in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.

Emission Limits and Proposed Periodic Monitoring:
The East Line Digesters are subject to:

- The requirements of ADEM Admin. Code 335-3-5-.04 (5) for total reduced sulfur (Digester 11).
- The applicable requirements of Federal New Source Performance Standards Subpart BB for total reduced sulfur (Digesters 7-10).
- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.

The East Line Digesters' emission monitoring, recordkeeping, and reporting requirements are:

- For total reduced sulfur periodic monitoring at least once per day, mill personnel shall determine if the gases are being incinerated as required and if gases are not being incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file for five years.
- The digesters are subject to 40 CFR Part 63, Subpart S and the Mill must meet the requirements included in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.

Changes During the Fourth Title V Renewal:

- Added citations to General Provisions Subpart A of 40 CFR Part 60 and Part 63 in the applicability sections.

Brown Stock Washer System
Following the digestion stage, pulp is sent to the blow tank and to the stock blending tank of the Combined Brown Stock Washer System to remove the spent cooking liquor (referred to as black liquor). The brown stock washer system produces high volume, low concentration (HVLCs) gases during operation.

Control Equipment:
The HVLCs are collected and routed to a dilute non-condensable gas (DNCG) collection system. The collected gases are sent to either the No. 3 Recovery Furnace or the No. 3 Lime Kiln for

incineration as required by 40 CFR Part 63 Subpart S. The No. 3 Recovery Furnace is the primary control device for HVLC/DNCG gases. For safety reasons, the DNCG and CNCG streams are kept separate and the DNCG line is maintained below the lower explosive limit (LEL) while the CNCG line is kept above the upper explosive limit (UEL).

Emission Limits and Proposed Periodic Monitoring:
The Brown Stock Washer System is subject to:

- The applicable requirements of Federal New Source Performance Standards Subpart BB for total reduced sulfur.
- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.

The Brown Stock Washer System emission monitoring, recordkeeping, and reporting requirements are:

- The washer system is subject to 40 CFR Part 63, Subpart S and the Mill must meet the requirements included in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.
- For total reduced sulfur periodic monitoring at least once per day, mill personnel shall determine if the gases are being incinerated as required and if gases are not being incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file for five years.

Changes During the Fourth Title V Renewal:

- Added daily monitoring and recordkeeping proviso for TRS to be consistent with other permit sections. The Mill is still subject to 40 CFR Part 63 Subpart S monitoring for HAPs as specified in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.
- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.

Bleach Plants
Following the washer system, the pulp is bleached in the D and E Bleaching Systems. Pulp is bleached in five stages in the D bleachery and four in the E bleachery. Each stage consists of an up-flow bleach tower where chlorine dioxide (ClO_2) is injected, followed by a drum washer. Washing is performed to remove the remaining lignin and other contamination. The pulp from both D and E Bleaching Systems are sent to storage and used to furnish the Ross Dryer. The bleaching systems (Air Permit 309-0006-X037) at the Mill went through a number of modifications from 1989 – 2001, resulting in state enforceable air toxics limits for chlorine and chlorine dioxide. The original permit issuance with the corresponding limits is listed in the tables below. These limits were incorporated into the Title permit V during the initial issuance on August 1, 2003.

Control Equipment:
Air emissions from the ClO_2 stage towers, washers, and seal tanks are collected and treated in the unit's packed tower scrubber system.

Emission Limits and Proposed Periodic Monitoring:
The D Bleaching System is subject to:

- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.
- State only air toxics limits under Rule 335-3-16-.05.

The D Bleaching System has the following limits:

Pollutant	**Limit**	**Limit Type**	**Origin**	**Original Date**
ClO_2	$\leq$ 2.0 lb/hr	State Only	309-0006-X037	December 17, 2001
Total Chlorinated HAP or as Cl	$\leq$ 10.0 ppm total chlorinated HAP	MACT	40 CFR Part 63 Subpart S	N/A

The D Bleaching System's emission monitoring, recordkeeping, and reporting requirements are:

- The bleaching system is subject to 40 CFR Part 63 Subpart S, and the Mill must meet the requirements included in the and "Enclosures and Closed Vent Systems" section.
- A continuous monitoring system (CMS, as defined in 40 CFR 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.
- The CMS shall monitor the pH or the oxidation/reduction potential of the gas scrubber effluent, the gas scrubber influent flow rate, and the exhaust gas fan motor status.
- The bleaching system scrubber shall be operated in accordance with the parameter value ranges established in accordance with 40 CFR 63.453 (n).
- At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- A performance test for HAPs as total chlorinated HAPs or as chlorine shall be performed, and a test report shall be submitted to the Department every 60 months.
- A chlorine dioxide emission test shall be performed, and a test report shall be submitted to the Department at least once every sixty months.
- The owner or operator of this source shall comply with the recordkeeping and reporting requirements of 40 CFR 63, as shown in Table 1 of Subpart S.

Emission Limits and Proposed Periodic Monitoring:
The E Bleaching System is subject to:

- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.
- State only air toxics limits under Rule 335-3-16-.05.

The E Bleaching System has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
ClO_2	$\leq$ 0.1 lb/hr	State Only	309-0006-X037	April 16, 1993
Cl	$\leq$ 0.1 lb/hr	State Only	309-0006-X037	April 16, 1993
Total Chlorinated HAP or as Cl	$\leq$ 10.0 ppm total chlorinated HAP	MACT	40 CFR Part 63 Subpart S	N/A

The E Bleaching System's emission monitoring, recordkeeping, and reporting requirements are:

- The bleaching system is subject to 40 CFR Part 63 Subpart S, and the Mill must meet the requirements included in the and "Enclosures and Closed Vent Systems" section.
- A continuous monitoring system (CMS, as defined in 40 CFR 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.
- The CMS shall monitor the pH or the oxidation/reduction potential of the gas scrubber effluent, the gas scrubber influent flow rate, and the exhaust gas fan motor status.
- The bleaching system scrubber shall be operated in accordance with the parameter value ranges established in accordance with 40 CFR 63.453 (n).
- At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- A performance test for HAPs as total chlorinated HAPs or as chlorine shall be performed, and a test report shall be submitted to the Department every 60 months.
- A chlorine dioxide and chlorine emission test shall be performed, and a test report shall be submitted to the Department at least once every sixty months.
- The owner or operator of this source shall comply with the recordkeeping and reporting requirements of 40 CFR 63, as shown in Table 1 of Subpart S.

Changes During the Fourth Title V Renewal:

- All references of the Department granting alternative test methods have been removed from the permit.
- Added federally enforceable provisos for completing and reporting chlorinated HAP tests every 60 months as required by 40 CFR Part 63 Subpart S.
- Removed chlorine testing requirements from state only provisos for the D Bleaching System as there is no state limit for chlorine and chlorinated HAP testing is federally enforceable under 40 CFR Part 63 Subpart S.
- Changed the chlorine and chlorine dioxide testing and reporting period for the D and E Bleaching Systems from five years to sixty months.

Chlorine Dioxide Plant

Since ClO_2 is an extremely unstable compound at room temperature and pressure and cannot be easily stored, Resolute produces it on-site. ClO_2 is generated as a gas from the reaction of sodium chlorate with sulfuric acid with methanol as a catalyst. The gas is absorbed in chilled water and stored for use in the bleach plants. All methanol is received by truck and stored in a 15,000-gallon tank. The bleaching systems (Air Permit 309-0006-X037) at the Mill went through a number of modifications from 1989 – 2001, resulting in state enforceable air toxics limits for chlorine and chlorine dioxide. The original permit issuance with the corresponding limits is listed in the table below. These limits were incorporated into the Title V permit during the initial issuance on August 1, 2003.

Control Equipment:

Vented fumes from the unit are scrubbed and sent to either the D Bleaching Scrubber or directly to the atmosphere when the D Bleaching System is not operating.

Emission Limits and Proposed Periodic Monitoring:

The Chlorine Dioxide Generator is Subject to:

- State only air toxics limits under Rule 335-3-16-.05.

The Chlorine Dioxide Generator has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
ClO_2	$\leq$ 0.1 lb/hr	State Only	309-0006-X037	July 27, 1994
Cl	$\leq$ 0.1 lb/hr	State Only	309-0006-X037	July 27, 1994

The Chlorine Dioxide Generator's emission monitoring, recordkeeping, and reporting requirements are:

- A chlorine and chlorine dioxide emission test shall be performed, and a test report shall be submitted to the Department at least once every five years.
- At least once daily monitor whether the generator scrubber emissions are vented to the "D" Bleachery Scrubber or to atmosphere.
- If the process is vented directly to the atmosphere, the facility must record the scrubber chilled water flow and temperature once per day. Records shall be made and maintained on file for five years.

Changes During the Fourth Title V Renewal:

- All references of the Department granting alternative test methods have been removed from the permit.

Ross Pulp Dryer

The Ross Pulp Dryer is designed to produce fully bleached kraft fluff pulp, which is shipped in rolls from the Coosa Pines Mill. Bleached pulp is mixed with available Ross broke then detrashed, cleaned and/or screened before the head box distributes the pulp slurry on the forming wire of the pulp dryer. The dried sheet of pulp is wound on rolls, cut, and shipped offsite.

Control Equipment:
There are no controls installed on the pulp dryer.

Emission Limits and Proposed Periodic Monitoring:
This unit is not subject to anything other than the general provisions of the Title V.

Chemical Recovery Area

The Chemical Recovery Area is made up of the Liquor Recovery, Tall Oil Plant, and Calcining and Recausticizing areas.

Liquor Recovery

The Liquor Recovery System concentrates and burns spent pulping liquors, recovering the pulping chemicals for re-use and generating steam for other mill processes. This system is made up of the No. 3 Multiple Effect Evaporator System, the Foul Condensate Stripper System, the No. 3 Recovery Furnace, and the No. 3 Smelt Dissolving Tank. Each of these systems is discussed below.

No. 3 Multiple Effect Evaporator

Weak black liquor from the West Line and East Line Batch Digester Systems is pumped to the 14% Black Liquor storage tanks. Black liquor contains residual pulping chemicals and dissolved organic substances from the wood chips. Salt cake by-product produced from the chlorine dioxide generation and dirty condensates from the evaporator are added to the weak black liquor prior to the multiple effect evaporator system. To raise the solids content the liquor is routed through the steam heated evaporator system. After leaving the evaporator system, the 50% solids black liquor is fed through a flash tank and on to intermediate storage tanks. From the intermediate storage tanks, the liquor is fed to finishers to bring the solids content to 63-65% before being stored then fired in the recovery furnace. The foul condensates produced from the evaporator system and NCG removal system are collected in the Condensate Hotwell and sent to the Condensate Stripper for treatment. The LVHC gases are collected from the evaporator system and routed to the CNCG system.

Control Equipment:
The multiple effect evaporator gases are routed to the CNCG system and sent to the No. 3 Recovery Furnace or the No. 3 Lime Kiln for control.

Emission Limits and Proposed Periodic Monitoring:
The No. 3 Multiple Effect Evaporator is subject to:

- The requirements of ADEM Admin. Code 335-3-5-.04 (5) for total reduced sulfur.
- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.

The No. 3 Multiple Effect Evaporator's emission monitoring, recordkeeping, and reporting requirements are:

- For total reduced sulfur periodic monitoring at least once per day mill personnel shall determine if the gases are being incinerated as required and if gases are not being

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

- The evaporator system is subject to 40 CFR Part 63, Subpart S and the Mill must meet the requirements included in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.

Changes During the Fourth Title V Renewal:

- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.

Foul Condensate Stripper System

Foul condensates from the blow heat systems, turpentine system, evaporator system, and NCG system, are collected for stripping in the foul condensate stripper system. Steam is used in the condensate stripper to vaporize methanol and other volatile hazardous air pollutants. The clean condensates are removed from the stripper in liquid form and re-used in the pulping process. The stripper off gas is passed through a reflux condenser before reintroduction into the stripper column. The stripper off gas is then fed through a methanol condenser which condenses the gas into a liquid that is 40-55% methanol. The gases from the methanol condenser are handled with the other CNCG streams while the liquid is added to the heavy black liquor prior to incineration in the recovery furnace. There is no back-up incineration source for the foul methanol condensate. The facility uses a condensate storage tank to provide continued operation of the stripper during any brief periods (<24 hours) of interruption of the incineration source.

Control Equipment:

The Foul Condensate Stripper is routed to the CNCG system and sent to the No. 3 Recovery Furnace or the No. 3 Lime Kiln for control.

Emission Limits and Proposed Periodic Monitoring:

The Foul Condensate Stripper System is subject to:

- The applicable requirements of Federal New Source Performance Standards Subpart BB.
- The applicable requirements of Federal National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart S and Subpart S.

The Foul Condensate Stripper System's emission monitoring, recordkeeping, and reporting requirements are:

- The stripper system is subject to 40 CFR Part 63, Subpart S and the Mill must meet the requirements included in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.
- For total reduced sulfur periodic monitoring at least once per day mill personnel shall determine if the gases are being incinerated as required and if gases are not being incinerated, investigate and take corrective action within twenty-four hours. Records shall be made and maintained on file for five years.

Changes During the Fourth Title V Renewal:

- Added daily monitoring and recordkeeping proviso for TRS to be consistent with other permit sections. The Mill is still subject to 40 CFR Part 63 Subpart S monitoring for HAPs as specified in the "Pulping System Processes", "Process Condensates", and "Enclosures and Closed Vent Systems" sections.
- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.

No. 3 Recovery Furnace

The No. 3 Recovery Furnace burns the organic compounds in black liquor to generate steam and recovers the sodium and sulfur compounds used in the kraft cooking process. The No. 3 Recovery Furnace is rated at 378 MMBtu/hr while firing fossil fuels and has a capacity of 158,333 pounds of black liquor solids (BLS) per hour. The unit is capable of burning natural gas, black liquor, methanol, and NCGs. The Mill went through a project to increase the capacity of the recovery furnace and shutdown a number of existing units in 2005. The project was significant for sulfur dioxide and resulted in Best Available Control Technology (BACT) limits for SO_2. The project also resulted in synthetic minor limits for particulate matter, total reduced sulfur, nitrogen oxides, carbon monoxide, volatile organic compounds, and sulfuric acid mist. This modification did not meet the definition of a modification under New Source Performance Standards due to actual emissions not increasing from the modification. Additionally, the proposed limits were equivalent to emission limits under 40 CFR Part 60 Subpart BB. Air Permit 309-0006-Z003 was issued on September 20, 2005, for ths modification. The Air Permit and associated limits were incorporated into the Title V during the first renewal on June 18, 2009.

Control Equipment:

The No. 3 Recovery Furnace has an ESP for the control of particulate emissions. The recovery furnace itself is considered a control device and is used to control the LVHC and HVLC gases at the Mill.

Emission Limits and Proposed Periodic Monitoring:

The No. 3 Recovery Furnace is subject to:

- The requirements of ADEM Admin. Code 335-3-4-.07 for particulate matter.
- The requirements of ADEM Admin. Code 335-3-5-.04 (4) for total reduced sulfur.
- The applicable requirements of Rule 335-3-10-.02 (28) such that the opacity limit is the same as the New Source Performance Standards subpart BB for kraft recovery furnaces.
- The requirements of ADEM Admin. Code 335-3-14-.04 prevention of significant deterioration synthetic minor limits for particulate matter, total reduced sulfur, nitrogen oxides, carbon monoxide, volatile organic compounds, and sulfuric acid mist.
- The requirements of ADEM Admin. Code 335-3-14-.04 (9) Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) limits for sulfur dioxide.
- The requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM.

The No. 3 Recovery Furnace has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
HAPs (Particulate as a surrogate)	≤ 0.044 gr/sdcf at 8%	MACT	40 CFR Part 63 Subpart MM	-
PM	≤ 4.0 lb/ADTP	SIP	Rule 335-3-4-.07 (2)(a)	-
PM	≤ 0.044 gr/sdcf at 8% & 85.6 lbs/hr	Anti-PSD	Permit	September 20, 2005
TRS	≤ 5 ppm at 8% O_2 & 6.0 lb/hr	SIP	Rule 335-3-5-.04 (4)	-
		Anti-PSD	Permit	September 20, 2005
Opacity	≤ 35 percent	SIP (State Only)	Rule 335-3-10-.01 (2) and 10-.02 (28)	-
		MACT	40 CFR Part 63 Subpart MM	-
SO_2	≤ 75 ppm at 8% O_2 & 169.6 lb/hr	PSD BACT	Permit	September 20, 2005
NO_x	≤ 125 ppm at 8 % O_2 & 203.2 lb/hr	Anti-PSD	Permit	September 20, 2005
CO	≤ 285 ppm at 8% O_2 & 281.9 lb/hr	Anti-PSD	Permit	September 20, 2005
VOC	≤ 70 ppm at 8% O_2 & 29.7 lb/hr	Anti-PSD	Permit	September 20, 2005
H_2SO_4 Mist	≤ 0.06 lb/ton of BLS & 4.8 lb/hr	Anti-PSD	Permit	September 20, 2005

The No. 3 Recovery Furnace's emission monitoring, recordkeeping, and reporting requirements are:

- A particulate matter emission test shall be performed, and a test report shall be submitted to the Department at least once per year.
- A continuous opacity monitor shall be installed, calibrated, operated, and maintained. Pursuant to 40 CFR Part 63, Subpart MM, the COMs shall meet the provisions of §63.6 (h), §63.8, and §63.864 (d)(1) through (d)(4). All six-minute average opacities shall be recorded and kept on file for five years.
- A sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, and sulfuric acid mist stack test shall be performed, and a test report shall be submitted to the Department at least once per five year cycle.
- For particulate matter and opacity periodic monitoring when the COMs is available, 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. Records shall be made and kept on file for five years.
- For particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, and sulfuric acid mists periodic monitoring, if any three-hour block average

liquor firing rate is greater than 110 percent of its average value set by the required complying periodic test or a complying test approved by the Department, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. Records of all three-hour block average black liquor firing rates shall be made and kept on file for five years.

- As specified in §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 Part 63, Subpart MM the facility must maintain records of the black liquor firing rates in terms of tons/day or Mg/day.
- For compliance with 40 CFR Part 63, Subpart MM, the facility must conduct a particulate matter performance test, pursuant to §63.865, every five years.
- The facility must maintain proper operation of the ESP's automatic voltage control (AVC).
- Excess emissions and Summary Reports for 40 CFR Part 63 Subpart MM are to be submitted semiannually.
- The facility shall record and maintain records of the amounts of natural gas combusted during each day and calculate a 12-month rolling average based on the total amount combusted at the end of each calendar month. These records shall be made available and maintained on file available for review for at least five years.
- A TRS continuous emission monitor shall be installed, calibrated, maintained and operated in accordance with 40 CFR §60.284, except that monitoring spans may be approved by the Director.
- A TRS continuous emission monitoring system which meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 5 shall be installed, operated, calibrated, and maintained.
- The facility must submit TRS and opacity excess emissions reports quarterly.

Changes During the Fourth Title V Renewal:

- Removed fuel oil as a permitted fuel as it is no longer fired in the recovery furnace.
- Removed SO_2 provisos associated with fuel oil as this fuel is no longer a permitted fuel.
- Clarified the particulate matter SIP limit as 4.0 lb/ADTP instead of 4 lb/ADTP to match the regulation.
- Corrected the reference to 40 CFR Part 60 Subpart BB as Rule 335-3-10-.02 (28) in Applicability Proviso 3 instead of Rule 335-3-10-.01.
- Removed the reference to the anti-PSD PM limit of 85.6 lb/hr in Emission Standards Proviso 1 and created a separate proviso for this limit.
- Removed the last proviso in Emission Standards as it was a duplicate reference to Proviso 1 and the limit under 40 CFR Part 63 Subpart MM.
- Added a reference to Rule 335-3-11-.06 (38) on Emission Monitoring Proviso 4.

- In Emission Monitoring Proviso 7, removed initial testing dates for 40 CFR Part 63 Subpart MM as these dates have passed and testing was completed. Ongoing testing is still required every 5 years.
- Clarified the regulation citations to be more precise in the state only provisos.

No. 3 Smelt Dissolving Tank

The smelt tank is located directly below the smelt spouts on the recovery furnace. Weak wash from the causticizing area is added to the smelt to dissolve the chemicals thereby transforming it into green liquor. The green liquor is then pumped to the green liquor clarifier.

Control Equipment:

The vent stack in the dissolving tank is fitted with a scrubber system including an exhaust fan. The dissolving tank gases are routed to the scrubber where weak wash is used to absorb the gases and control the entrained particulate matter. The scrubbed gases exit the top of the scrubber through a vent and the weak wash is recirculated. A portion of the weak wash is continually replaced to maintain the absorbing efficiency.

Emission Limits and Proposed Periodic Monitoring:

The No. 3 Smelt Dissolving Tank is subject to:

- The requirements of ADEM Admin. Code 335-3-4-.01 (1) for opacity.
- The requirements of ADEM Admin. Code 335-3-4-.07 (2)(b) for particulate matter.
- The requirements of ADEM Admin. Code 335-3-5-.04 (7) for total reduced sulfur.
- The requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM.

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

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 0.5 lb/ADTP	SIP	Rule 335-3-4-.07 (2)(b)	-
PM	≤ 0.2 lb/ton of black liquor solids	MACT	40 CFR Part 63 Subpart MM	-
TRS	≤ 0.033 lb/ton of black liquor solids	SIP	Rule 335-3-5-.04 (7)	-
Opacity	≤ 20 percent with one six-minute period up to 40 percent in any one-hour period	SIP	Rule 335-3-4-.01 (1)	-

The No. 3 Smelt Dissolving Tank's emission monitoring, recordkeeping, and reporting requirements are:

- A particulate matter emission test shall be performed, and a test report shall be submitted to the Department at least once per year.
- A continuous parameter monitoring system (CPMS) shall be properly installed, calibrated, maintained, and operated in such a way as to determine and record the scrubbing liquid flow rate and scrubber fan amperage at least once every 15-minute periods using

procedures in §63.8 (c). All three-hour block averages are required to be made and maintained on file for five years.

- For particulate matter periodic monitoring, if any three-hour block average liquor firing rate is greater than 110 percent of its value set by 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. All three-hour block averages are required to be made and maintained on file for five years.
- Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- The facility must maintain records of any occurrence when corrective action is required (when a three-hour average flow rate or fan amperage is below the minimum operating limit established according to §63.864 (j) during times when spent pulping liquor is fed), and when a violation is noted (when six or more three-hour average flow rate or fan amperage values within any 6-month reporting period are below the minimum operating limit established according to §63.864(j) during times when spent pulping liquor is fed). For purposes of determining the number of nonopacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period.
- As specified in §63.8 (g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.
- For compliance with 40 CFR Part 63, Subpart MM, the facility must conduct a particulate matter performance test, pursuant to 63.865, every five years.
- Excess emissions and Summary Reports for 40 CFR Part 63 Subpart MM are to be submitted semiannually.
- A total reduced sulfur emission test shall be performed, and a test report shall be submitted to the Department at least once every five years.
- For total reduced sulfur periodic monitoring, if the three-hour block average wet scrubber weak wash flow rate is less than 90 percent of its average value set by a required periodic test that showed compliance or a test approved by the Department that showed compliance, the cause is to be investigated and appropriate corrective action is to be taken within 24 hours. All three-hour block averages are required to be made and maintained on file for five years.

Changes During the Fourth Title V Renewal:

- Clarified the regulation citations to be more precise.
- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.
- Created an additional proviso for the SIP PM limit to separate it from the 40 CFR Part 63 Subpart MM limit.
- Under Compliance and Performance Test Methods and Procedures, removed all references to the Department granting alternative test methods.
- In Emission Monitoring Proviso 6, removed initial testing dates for 40 CFR Part 63 Subpart MM as these dates have passed and testing was completed. Ongoing testing is still required every 5 years.

- Changed the TRS testing requirement proviso to require an emission test at least once every five years instead of within 90 days of permit issuance or re-issuance to match the reporting proviso.

Tall Oil Plant

The Tall Oil Plant is designed to process black liquor soap into crude tall oil. Black liquor soap is separated from the liquor during the evaporation process and soap is fed to the tall oil reactor while black liquor is returned to the recovery process. The soap is mixed with sulfuric acid and steam, and the resulting reaction produces crude tall oil, which is then decanted. The wet tall oil is sent to a storage tank and then further separated to remove the remaining brine from the tall oil. The dry tall oil is sent to a dry DTO tank for storage and shipping.

Control Equipment:

NCGs from the de-liquoring tank, Soap Storage Tank, Tall Oil Reactor, and the Tall Oil Decanters are collected and treated in a dedicated scrubber, which is primarily for odor control.

Emission Limits and Proposed Periodic Monitoring:

This unit is subject to only the general provisions of the Title V.

Calcining and Recausticizing

Recausticizing is the conversion of sodium carbonate in green liquor to sodium hydroxide in white liquor by a reaction with lime. Green liquor is produced from the hydration of smelt, which is the viscous residue from firing black liquor. Resolute may also receive green liquor in exchange for excess black liquor that is shipped out. The green liquor is pumped into a gravity clarifier, and the clarified liquor is transferred to an agitated tank known as a slaker. The insoluble solids (dregs) that are removed in the clarifier are washed and filtered. The filtrate is returned to the clarifier, and the washed dregs are sent to the onsite landfill. In the slaker, the clarified green liquor is combined with reburned or fresh lime to initiate the slaking and causticizing reactions. From the slaker, the mixture flows to the causticizer which converts the sodium carbonate to sodium hydroxide and calcium oxide (lime) to calcium carbonate (lime mud). The slurry is transferred from the causticizer to a clarifier to settle out the lime mud, and the white liquor is pumped to a white liquor storage tank for use in the digesters.

No. 3 Lime Kiln

The clarified lime mud slurry is pumped from the white liquor clarifier to the Mud Washer, which yields weak wash used for dissolving smelt in the smelt tank and scrubbers on the smelt tank and bleach plants. The washed lime mud is then sent to the Pre-Coat Filter for further washing and dewatering. Following the Pre-Coat Filter, the high solids lime mud is then fed to a rotary kiln where it is dried and burned to drive off CO_2 and recover the lime to be re-used in the recausticizing process. The lime kiln is currently permitted to fire natural gas.

Control Equipment:

The lime kiln is equipped with a ventrui scrubber to control particulate emissions. The lime kiln itself is considered a control device and is used to control the LVHC and HVLC gases at the mill.

Emission Limits and Proposed Periodic Monitoring:
The No. 3 Lime Kiln is subject to:

- The requirements of ADEM Admin. Code 335-3-4-.01 (1) for opacity.
- The requirements of ADEM Admin. Code 335-3-4-.07 (2)(c) for particulate matter.
- The requirements of ADEM Admin. Code 335-3-5-.04 (6) for total reduced sulfur.
- The requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in Table 1 of Subpart MM and 40 CFR Part 63 Subpart MM.

The No. 3 Lime Kiln has the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	≤ 1.0 lb/ADTP	SIP	Rule 335-3-4-.07 (2)(c)	-
TRS	≤ 20 ppm at 10 % O_2	SIP	Rule 335-3-5-.04 (6)	-
Opacity	≤ 20 % with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	-
HAPs (Particulate as a surrogate)	≤ 0.064 gr/dscf at 10% O_2	MACT	40 CFR Part 63 Subpart MM	-

The No. 3 Lime Kiln's emission monitoring, recordkeeping, and reporting requirements are:

- A particulate matter emission test shall be performed, and a test report shall be submitted to the Department at least once per year.
- For particulate matter periodic monitoring, if any three-hour average wet scrubber pressure drop or liquid flow rate, when lime mud is fed, is less than the average value recorded at the time of the most recent required periodic test that showed compliance or a test approved by the Department that showed compliance, with the exception of pressure drop during periods of startup and shutdown, the cause is to be investigated and appropriate corrective action is to be initiated. All three-hour block averages are required to be made and maintained on file for five years.
- For particulate matter 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 lime mud flow rate is to be lowered until compliance is successfully demonstrated at the higher rate. All three-hour block averages are required to be made and maintained on file for five years.
- Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring.
- As specified in §63.8 (g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments shall not be included in any data average computed under 40 CFR 63, Subpart MM.

- For compliance with 40 CFR Part 63, Subpart MM, the facility must conduct a particulate matter performance test, pursuant to 63.865, every five years.
- Records of CaO production rates in units of ton per day shall be made and maintained on file available for inspection for at least five years.
- Excess emissions and Summary Reports for 40 CFR Part 63 Subpart MM are to be submitted semiannually.
- A total reduced sulfur (TRS) continuous emission monitoring system which meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 5 shall be installed, operated, calibrated, and maintained.
- A total reduced sulfur (TRS) continuous emission monitor shall be installed, calibrated, maintained and operated in accordance with 40 CFR §60.284, except that monitoring spans may be approved by the Director.
- The facility must submit TRS excess emissions reports quarterly.

Changes During the Fourth Title V Renewal:

- Removed fuel oil as a permitted fuel as it is no longer fired in the lime kiln.
- Clarified the regulation citations to be more precise.
- Removed references to 40 CFR Part 63 Subpart S as the Lime Kiln itself is not subject to Subpart S but is used as a control device pursuant to the subpart. The requirements of Subpart S are specified in other sections of the Title V (i.e. Pulping System Processes).
- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.
- Under Compliance and Performance Test Methods and Procedures, removed all references to the Department granting alternative test methods.
- In Emission Monitoring Proviso 6, removed initial testing dates for 40 CFR Part 63 Subpart MM as these dates have passed and testing was completed. Ongoing testing is still required every 5 years.

Utilities

Resolute's utility area consists of the No. 1 and No. 2 Package Boilers. The utilities provide support services, steam, and power for the facility. The previously permitted Nos. 1-4 AOW Power Boilers were permanently retired following the startup of the package boilers.

No. 1 and No. 2 Package Boilers

The two package boilers are identical, and each have a heat input capacity of 210 MMBtu/hr. The boilers are limited to firing natural gas only. Each boiler is designed to produce 150,000 lb/hr of 550 psig steam.

Control Equipment:
There are no add-on control devices on these boilers.

Emission Limits and Proposed Periodic Monitoring:
The No. 1 and 2 Package Boilers are subject to:

- The requirements of ADEM Admin. Code 335-3-4-.01 (1) for opacity.
- The requirements of ADEM Admin. Code 335-3-4-.03 (1) for particulate matter.
- The requirements of ADEM Admin. Code 335-3-5-.01 (1)(b) for sulfur dioxide.
- The requirements of ADEM Admin. Code 335-3-10-.02 (2)(b) and New Source Performance Standards 40 CFR 60 Subpart Db for nitrogen dioxide.
- The requirements of 40 CFR Part 63, Subpart DDDDD – Emission Standards for Hazardous Air Pollutants for Major Sources: Commercial, Industrial, and Institutional Boilers and Process Heaters as a Gas 1 Boiler with a continuous oxygen trim system that maintains an optimum air to fuel ratio.

The No. 1 and 2 Package Boilers have the following limits:

Pollutant	Limit	Limit Type	Origin	Original Date
PM	$\leq$ 0.131 lb/MMBtu	SIP	Rule 335-3-4-.03 (1)	-
NOx	$\leq$ 0.20 lb/MMbtu	NSPS	Rule 335-3-10-.02 (2)(b)	-
Opacity	$\leq$ 20 % with one six-minute period up to 40% in any one-hour period	SIP	Rule 335-3-4-.01 (1)	-
SO_2	$\leq$ 4.0 lb/MMBtu	SIP	Rule 335-3-5-.01 (1)(b)	-

The No. 1 and 2 Package Boiler's emission monitoring, recordkeeping, and reporting requirements are:

- A continuous emission monitoring system to record the nitrogen dioxide emission rates in pounds per million Btu heat input shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60, Subpart Db, §60.48b (e). The continuous emission monitoring systems shall be subject to the quality control and quality assurance requirements of 40 CFR Chapter 1 Part 60 Appendix F.
- The NOx CEMS shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- This source shall meet the energy assessment and tune-up requirements found in Table 3 of 40 CFR Part 63, Subpart DDDDD as referenced in 40 CFR 63.7540 (a).
- The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only natural gas shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that gaseous fuel meets the definition of natural gas as defined in §60.41b for a period of 2 years following the date of such record.
- As required under §60.49b (h) of NSPS, Subpart Db, this facility shall submit quarterly excess emission reports for NOx.
- This source shall submit a five-year compliance report documenting the required tune-ups, as specified in 40 CFR 63.7550 (c)(1). The report must be postmarked or submitted no later than January 31.

Changes During the Fourth Title V Renewal:

- Clarified the regulation citations to be more precise.
- Added a citation to General Provisions Subpart A of 40 CFR Part 60 in the applicability section.
- Under Compliance and Performance Test Methods and Procedures, removed all references to the Department granting alternative test methods.

Pulping System Processes

LVHC gases from digesters, evaporators, turpentine recovery, and condensate stripper system, must be collected and incinerated in either the No. 3 Recovery Furnace or No. 3 Lime Kiln. HVLC gases from the combined brown stock washer line must be collected and incinerated in either the No. 3 Recovery Furnace or No. 3 Lime Kiln. The gases must be conveyed in a system that meets the requirements of §63.450 and meet the requirements included in the "Enclosures and Closed-Vent Systems" section.

Changes During the Fourth Title V Renewal:

- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.
- Specified the equipment required to be controlled as part of Pulping System Processes as stated in 40 CFR Part 63 Subpart S.

Process Condensates

Process condensates from the digesters, turpentine recovery system, evaporators, LVHC collection system, and HVLC collection system that in total contain a HAP mass of 11.1 pounds per ton of ODP, shall be collected and treated to remove 10.2 pounds or more of total HAP per ton of ODP at the outlet of the control device. The Mill has chosen to use a steam stripper system for treatment of process condensates as described above.

The Process Condensate System's emission monitoring, recordkeeping, and reporting requirements are:

- The condensates must be conveyed in a system that meets the requirements of §63.446 and §63.450.
- 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 process wastewater feed rate, steam feed rate, and process wastewater feed temperature for each steam stripper used to comply with the treatment requirements in §63.446 (e)(3), (4), or (5).
- Each owner or operator using a control device, technique or an alternative parameter shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.
- To establish or reestablish, the value for each operating parameter required to be monitored by this section, each owner or operator shall use the procedures specified in Emission Monitoring Proviso 5 and §63.453 (n).

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

Changes During the Fourth Title V Renewal:

- Specified the equipment required to be controlled as part of Process Condensates as stated in 40 CFR Part 63 Subpart S.
- Added a citation to General Provisions Subpart A of 40 CFR Part 63 in the applicability section.

Enclosures and Closed-Vent Systems

The Enclosures and Closed-Vent Systems serve to enclose and transport LVHC and HVLC gases, process condensates, and bleach plant exhausts to their corresponding control devices. The systems are subject to the requirements found in §63.450.

The Enclosures and Closed-Vent Systems' emission monitoring, recordkeeping, and reporting requirements are:

- 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) through (1)(f) of this section.
    - For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR §63.450 (b) shall be performed at least once per calendar month to ensure the opening is maintained in the closed position and sealed.
    - Each closed-vent system required by 40 CFR §63.450 (a) shall be visually inspected at least once per calendar month with at least 15 days between inspections and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects. Inspection requirements are subject to the waiver for inaccessible monitoring points, issued by the EPA Region IV on January 15, 2002.
    - 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).
    - Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in §63.457 (e).
    - The valve or closure mechanism specified in 40 CFR §63.450 (d)(2) shall be inspected at least once per calendar month with at least 15 days 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.
    - If an inspection required by provisos (1)(a) through (1)(e) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by 40 CFR §63.450, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.

i. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.

ii. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

- Each pulping process condensate closed collection system used to comply with 40 CFR §63.446 (d) shall comply with the requirements specified in provisos 2(a) through 2(c) of this section.
    - Each pulping process condensate closed collection system shall be visually inspected at least once per calendar month with at least 15 days between inspections and shall comply with the inspection and monitoring requirements specified in §63.964 of subpart RR of this part, except:
        i. Owners or operators shall comply with the recordkeeping requirements of §63.454 instead of the requirements specified in 40 CFR §63.964 (a)(1)(vi) and (b)(3) of subpart RR of Part 63.
        ii. Owners or operators shall comply with the inspection and monitoring requirements for closed-vent systems and control devices specified in bullets (a) and (k) of 40 CFR §63.453 instead of the requirements specified in 40 CFR §63.964 (a)(2) of subpart RR of part 63.
    - 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).
    - 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 part 63 shall be taken.
- For each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and maintain a site-specific inspection plan.
- The owner or operator shall record the CMS parameters specified in 40 CFR §63.453 and meet the requirements specified in proviso 1 of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.
- The owner or operator of each affected source subject to the requirements of Subpart S shall comply with the reporting requirements of 40 CFR Part 63 Subpart A, as shown in Table 1 of Subpart S and the requirements of §63.455. This includes a semiannual report for excess emissions and CMS performance and summary for Subpart S.

Changes During the Fourth Title V Renewal:

- Added Recordkeeping and Reporting proviso to follow the reporting requirements of 40 CFR Part 63 Subpart A as shown in Table 1 of Subpart S.

RICE Units

The Mill operates four stationary Reciprocating Internal Combustion Engine (RICE) units that provide power to different areas of the Mill. These units are identified and described by the following:

1. X040 - Emergency Fire Pump Generator; 2001; 749 hp;
2. X041 - IT Server Emergency Generator; 2001; 134 hp; compression ignition; diesel
3. X042 - Security Building Emergency Generator; 2005; 30 hp; spark ignition; propane
4. X043 - Lime Kiln Auxiliary Drive Engine; 2018; 49 hp; spark ignition; natural gas

Due to the age, size, and purpose of the Emergency Fire Pump Generator (X040), there are no applicable requirements under the RICE MACT per 40 CFR 63.6590 (b)(3). Based on year, size, and purpose, the remaining units are subject to the following regulations:

- The requirements of ADEM Admin. Code 335-3-4-.01 (1) for opacity.
- The Lime Kiln Auxiliary Drive Engine is subject to the applicable requirements of ADEM Admin. Code R. 335-3-10-.02 (88), "Standards of Performance for Stationary Spark Ignition Internal Combustion Engines" (40 CFR Part 60, Subpart JJJJ).
- The requirements of National Emission Standards for Hazardous Pollutants General Provisions as provided for in 40 CFR Part 63 Subpart ZZZZ as referenced in ADEM Admin. Code 335-3-11-.06 (103).

NSPS IIII and NESHAP ZZZZ require these units to adhere to the following standards:

Emission Point #	Point Description	Pollutant	Emission Limit	Standard
X041, X042, X043	All Units	Opacity	≤ 20% as determined by six-minute average, with one six-minute period up to 40% in any one hour period.	Rule 335-3-4-.01 (1)
X041	IT Server Emergency Generator	HAPs	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Rule 335-3-11-.06 (103)
X042	Security Building Emergency Generator	HAPs	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Rule 335-3-11-.06 (103)

X043	Lime Kiln Auxiliary Drive Engine	HAPs	NOx: 3.8 g/kW-hr CO: 6.5 g/kW-hr	Rule 335-3-10-.02 (88)
X043	Lime Kiln Auxiliary Drive Engine	HAPs	a. Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions; b. Adjust engine settings according to and consistent with the manufacturer's instructions; c. Keep records of conducted maintenance to demonstrate compliance.	Rule 335-3-10-.02 (88)

Changes During the Fourth Title V Renewal:

- Clarified the SIP opacity regulation citations to be more precise.
- Added a citation to General Provisions Subpart A of 40 CFR Part 60 and Part 63 in the applicability section.
- Removed "No. 3" references on the Lime Kiln Auxiliary Drive Engine to be consistent throughout the permit.

Sources Subject to General Provisos

These are sources that are subject only to the General Provisos, but do not qualify for the Trivial and Insignificant list. No specific limitations or monitoring apply.

Emission Point #	Point Description
131	Softwood Chip Unloading and Storage
238	West Batch Digester System Pad Liquor Tank
329	East Batch Digester System Pad Liquor Tank
601	D Bleach E-1 Stage Washer
611	D Bleach E-1 Stage Tower
613	D Bleach E-2 Stage Tower
619	D Bleach Brownstock Blend Chest
624	D Bleach E-1 Stage Filtrate Tank
626	D Bleach E-2 Stage Filtrate Tank
628	D Bleach E-2 Stage Washer
701	E Bleach Brownstock Feed Tank
702	E Bleach EO Stage Tower
703	E Bleach EO Stage Filtrate Tank
800	Ross Pulp Dryer
1130	62% Black Liquor Storage Tank No. 1
1131	62% Black Liquor Storage Tank No. 2
1132	52% Black Liquor Storage Tank No. 1
1133	52% Black Liquor Storage Tank No. 2
1134	Soap Skimmer Tank
1135	14% Black Liquor Storage Tank No. 1

1136	14% Black Liquor Storage Tank No. 2
1302	Tall Oil Reactor
1601	No. 3 Lime Kiln Mud Pre-coat Filter
1602	No. 3 Lime Kiln Mud Pre-coat Filter Vacuum Pump
1609	Lime Slaker with Causticizers
1626	Clarified Green Liquor Storage Tank
1627	Green Liquor Clarifier
1632	Lime Mud Washer
1642	Dregs Precoat Filter
2600	Wastewater Lagoons (fugitives)
X040	Emergency Fire Pump Generator

CAM

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 potentially 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 or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions within a source or between sources.
- The requirements of Part 64 shall not apply to emission limitations or standards for backup utility power units that: are owned by a municipality, are exempt from all monitoring requirements in Part 75, are operated solely for providing electricity during peak periods or emergency situations, and for which average actual emission for the previous 3 years are less than 50 percent of the major source cutoff and are expected to remain so.
- 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)).

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

Fugitive Dust Plan

A fugitive dust plan was submitted with the application and will be incorporated into the MSOP as Appendix A during the fourth renewal. The permittee shall maintain a record of all inspections, to include visible observations performed to satisfy the requirements of Proviso 1 of Emission Monitoring section. This shall include problems observed and corrective actions taken. The

records shall be retained for at least five years from the date of generation and shall be available upon request.

Recommendation

The renewal Major Source Operating Permit (309-0006) 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.

Steven Bissey
Industrial Chemicals Section
Chemical Branch
Air Division

January 5, 2026
Date