

RESPONSE TO COMMENTS

Delta Natural Kraft and Mid-America Packaging
P.O. Box 7857
Pine Bluff, AR 71612
Jefferson County
AFIN: 35-00017

On September 11, 2003, the draft permit for the above referenced facility was issued. During the comment period the facility submitted comments. The Department gives the following responses to these comments:

Comment 1: Specific Condition #10, 11, and 12

Specific Condition #12 requires that records be kept demonstrating compliance with the limits in Specific Condition #10 and #11, and that these records are to be included in the Semi-Annual Monitoring Report. Specific Condition #10 indicates that the source is permitted at maximum capacity, and that natural gas is the only fuel to be fired. Delta proposes that records documenting that natural gas is the only fuel fired are sufficient to ensure compliance with Specific Condition #10, because this source is permitted at maximum natural gas capacity. Consequently, natural gas usage amounts do not need to be recorded and subsequently included in the semi-annual reports. Delta requests that recordkeeping relating to natural gas firing be incorporated into Specific Condition #10 stating that the source is only capable of firing natural gas and these records will be kept onsite. It is requested that Specific Condition #12 only reference the required recordkeeping outlined in Specific Condition #11, and only those records would be required to be included in Semi-Annual Reporting.

Response 1: Specific Condition 10 has been changed to read as follows:

“10. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas shall be the only fuel used for the Pocket Ventilator System (exhausted through SN-15A-J). The maximum heat input of this system is 28.6 million Btu per hour and the system is only capable of firing natural gas. [The Pocket Ventilator System has been permitted at maximum capacity.] The permittee shall maintain records which demonstrate that natural gas is the only fuel fired at SN-15 A-J. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.”

Recordkeeping and reporting requirements pertaining to Specific Condition 10 have been removed from Specific Condition 12.

Comment 2: Specific Condition #23, 24, and 25, Page 59

Specific Condition #25 requires that records be kept demonstrating compliance with the limits in Specific Condition #23 and #24, and that these records are to be included in the Semi-Annual Monitoring Report. Specific Condition #23 indicates that the source is permitted to fire only black

liquor solids with natural gas to be used as secondary fuel. Delta proposes that records documenting that black liquor solids and natural gas are the only fuels fired are sufficient to ensure compliance with Specific Condition #23. Additionally, black liquor solids usage amounts are already required under Specific Condition #24 to be recorded and subsequently included in the semi-annual reports. Delta requests that recordkeeping relating to fuel firing be incorporated into Specific Condition #23 stating that the source is only capable of firing black liquor solids and natural gas and these records will be kept onsite. It is requested that Specific Condition #25 only reference the required recordkeeping outlined in Specific Condition #24, and only those records would be required to be included in Semi-Annual Reporting.

Response 2: Specific Condition 23 has been changed to read as follows:

“23. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, black liquor solids shall be the primary fuel for the recovery boiler. Natural gas may be used as a secondary fuel. The recovery boiler is only capable of firing black liquor solids and natural gas. The permittee shall maintain records which demonstrate that black liquor solids and natural gas are the only fuels fired at the recovery boiler. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.”

Recordkeeping and reporting requirements pertaining to Specific Condition 23 have been removed from Specific Condition 25.

Comment 3: Specific Condition #58, Page 75

Specific Condition #58 requires the AP Tech Venturi Scrubber to maintain a minimum liquid flow rate of 240 gallons per minute. During installation of the scrubber, it was discovered that if one of the pumps were to fail, the system could only achieve a maximum of 230 gallons per minute and more typically, can only maintain a flowrate of 200 gallons per minute and still meet the particulate opacity limits. This demonstrates that the initial 240 gpm limit is set too high to account for a pump failure. Delta requests that the minimum liquid flow rate be revised from 240 gpm to 200 gpm which allows Delta to maintain a flow rate high enough to meet the particulate limits and still cover a pump malfunction scenario.

Response 3: At this time, the request to reduce the minimum flowrate limit from 240 gpm to 200 gpm can not be granted and the permit language will remain as in the draft permit. The facility may modify the scrubber operating parameters in the upcoming modification application to comply with 40 CFR Part 63 Subpart MM.

Comment 4: Specific Condition #88, 89, and 90, Page 86

Specific Condition #90 requires that records be kept demonstrating compliance with the limits in Specific Condition #88 and #89, and that these records are to be included in the Semi-Annual Monitoring Report. Specific Condition #88 indicates that the source is permitted to fire only woodwaste and natural gas as fuel. Delta proposes that records documenting that woodwaste and natural gas are the only fuels fired are sufficient to ensure compliance with Specific Condition #88. Additionally, woodwaste usage amounts are already required under Specific Condition #89 to be recorded and subsequently included in the semi-annual reports. Delta requests that recordkeeping relating to fuel firing be incorporated into Specific Condition #88 stating that the source is only capable of firing woodwaste and natural gas and these records will be kept onsite. It is requested that Specific Condition #90 only reference the required recordkeeping outlined in Specific Condition #89, and only those records would be required to be included in Semi-Annual Reporting.

Response 4: Specific Condition 88 has been changed to read as follows:

“88. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas and woodwaste shall be the only fuels used in the Hog Fuel Boiler. The Hog Fuel Boiler is only capable of firing natural gas and woodwaste. The permittee shall maintain records which demonstrate that natural gas and woodwaste are the only fuels fired at the Hog Fuel boiler. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.”

Recordkeeping and reporting requirements pertaining to Specific Condition 88 have been removed from Specific Condition 90.

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 385-AOP-R4

Renewal #1

IS ISSUED TO:

Delta Natural Kraft and
Mid-America Packing, LLC
1701 Jefferson Parkway
Pine Bluff, AR 71612
Jefferson County
AFIN: 35-00017

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

and

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

SECTION I: FACILITY INFORMATION

PERMITTEE:	Delta Natural Kraft and Mid-America Packaging, LLC
AFIN:	35-00017
PERMIT NUMBER:	385-AOP-R4
FACILITY ADDRESS:	1701 Jefferson Parkway Pine Bluff, Arkansas 71612
COUNTY:	Jefferson
CONTACT PERSON:	Alban Bush
TELEPHONE NUMBER:	(870) 541-5046
REVIEWING ENGINEER:	Amanda Holloway
UTM North-South (X):	3792.0
UTM East-West (Y):	589.6

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Permit #: 385-AOP-R4
AFIN: 35-00017

SECTION II: INTRODUCTION

Summary of Permit Activity

Delta Natural Kraft (Delta) operates a kraft pulp and paper mill in Pine Bluff, Arkansas. Mid-America Packaging (Mid-America) manufactures multi-wall bags from the paper produced by Delta. Both facilities are permitted under this permit. This is the first renewal of Delta's Title V permit. With all Title V renewal applications, facilities are required to submit Compliance Assurance Monitoring (CAM) Plans for affected sources. Affected sources are those which have potential, pre-control emissions of more than 100 tons per year. Delta currently operates 4 affected sources (SN-01, SN-02, SN-04, and SN-05). The CAM plans submitted by Delta for the affected sources have been approved and included in the specific conditions of this permit renewal.

Combined with this renewal of the permit is a significant modification to replace an existing digester vessel (SN-17) with a new vessel, along with a minor modification (approved in July of 2003) to install a new Venturi Scrubber in series with the two scrubbers that are already in place to control emissions from SN-01 (Lime Kiln). The new scrubber will further reduce PM emissions in order that Delta will be able to comply with CAO LIS 03-029 and the current permitted PM emissions from SN-01. Neither modification will increase permitted emission rates; however, the replacement of the digester vessel is considered a PSD modification and the review of PSD standards are described in the following section.

With this renewal all emission limits have been revised to reflect updated emission factors and additional stack test data. Overall, the permitted annual criteria pollutant emission rates increased 17.2 tpy for PM₁₀, 12.9 for SO₂, 38.6 tpy NO_x, 97.9 tpy for TRS, and 0.013 tpy for Lead and permitted emission rates decreased 23.2 tpy for VOC and 421.2 tpy for CO.

Prevention of Significant Deterioration General Information

As part of this permit renewal and modification Delta proposed to replace an existing digester vessel, Digester No. 3 (SN-17), with a new vessel. Emission rates for all three digester vessels (SN-13 and SN-17) were re-evaluated in this renewal and modification and any changes in emission rates resulted from the updated emission factors used in re-calculating the emissions from these sources.

The replacement of the digester vessel does not trigger NSPS Subpart BB because the replacement only involves one of the digestion vessels and not associated digestion system

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components, the short- term emissions will not increase, and the cost on the component replacement will not exceed 50% of the cost of a new digester system. However, Delta controls gases from the digester vessels via incineration in the Lime Kiln at a temperature of at least 1200°F and a retention time of at least 0.5 second. This is consistent with the requirements of §19.804 of the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (SIP) and 40 CFR § 60.283(a)(1)(iii).

The new digester vessel is approximately 10% larger in volume than the vessel currently in use. Even though the replacement is larger, the new digester does not have the potential to emit pollutants at a rate greater than the current vessel because of a bottleneck in the papermaking process created by the washing stage. Hourly and annual emissions will not increase at the digester system as a result of the digester replacement due to the conveyance limitations and other production related restrictions. Actual to potential emissions from the digester vessel are less than the PSD threshold.

The purpose of replacing the digester vessel is not to increase productions or emission rates. However, sources affected by the digester include the recovery boiler, lime kiln, smelt dissolving tank, and other sources at the mill. Because these sources have not operated at permitted rates, the actual to potential emission rates from the facility exceed the PSD threshold for PM₁₀, SO₂, CO, and NO_x, a PSD application was submitted.

BACT Analysis

For a PSD permit, the applicant must perform a “top-down” BACT analysis for each new unit and for each affected emission unit that is undergoing a physical change or a change in the method of operation. The “top-down” PSD BACT analysis must satisfy two criteria under the Clean Air Act. First, the permit application must consider the most stringent technologies available. Second, if the applicant proposes less stringent controls, it must demonstrate, using objective data, that the most stringent controls are not achievable due to source specific energy, environmental, or economic impacts, and the permitting authority must exercise its informed judgment before accepting this determination. The PSD “top-down” BACT analysis consists of the following five steps:

1. Identify all control technologies.
2. Eliminate technically infeasible options.
3. Rank remaining control technologies by control effectiveness.
4. Evaluate most effective controls and document results.
5. Select BACT.

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A BACT analysis was conducted for the replacement of the digester vessel (SN-17). The BACT analysis must address each pollutant subject to PSD review emitted by the unit. For this permitting action, the BACT analysis was conducted for VOC and TRS pollutants.

In addition, the selected BACT must be at least as stringent as the NSPS for the source. In this case, the digester must meet the VOC and TRS limits included in NSPS Subpart BB.

BACT Analysis for VOC from Digester No. 3 (SN-17)

The RACT/BACT/LAER Clearinghouse was searched for historical and transient control technologies associated with digesters. One similar digester installation subject to PSD/BACT was found. The clearinghouse identified BACT as add-on and/or pollution prevention controls for the digester. The BACT found involved routing the emissions to the lime kiln for thermal oxidation. Delta currently collects emissions from the digester and routes the emissions to the Lime Kiln. This was done to demonstrate compliance with the NESHAP Subpart S for the Pulp and Paper industry. Based upon this analysis, incinerating the VOC emissions in the Lime Kiln is selected as BACT to control the emissions of VOC from the digester.

BACT Analysis for TRS from Digester No. 3 (SN-17)

The RACT/BACT/LAER Clearinghouse was searched for historical and transient control technologies associated with digesters. One similar digester installation subject to PSD/BACT was found. The clearinghouse identified BACT as add-on and/or pollution prevention controls for the digester. The BACT found involved routing the emissions to the lime kiln for thermal oxidation. Delta currently collects emissions from the digester and routes the emissions to the Lime Kiln. This was done to demonstrate compliance with the NESHAP Subpart S for the Pulp and Paper industry. Based upon this analysis, incinerating the TRS emissions in the Lime Kiln is selected as BACT to control the emissions of TRS from the digester.

Ambient Air Impact Analysis

An air dispersion modeling analysis is a required part of a PSD permit application. The air dispersion modeling analysis is used to demonstrate that the emissions resulting from a proposed modification will not cause or contribute to a violation of any applicable National Ambient Air Quality Standard (NAAQS) or surpass a PSD Increment.

The US EPA requires that PSD modeling be performed in two stages: the significance analysis and the full impact analysis. The significance analysis considers the net emissions change associated with PSD affected emission units to determine if the increased emissions will have a significant impact on the surrounding area. If the results of the significance analysis are below the corresponding Modeling Significance Levels the full impact analysis is not required.

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The replacement of the digester vessel at Delta may result in a de-bottlenecking of actual emissions at other sources in the mill. These sources include the lime kiln, recovery boiler, lime slaker, smelt dissolving tank, lime storage, black liquor oxidizer, and the paper machines. This will result in emission rates for total reduced sulfur (TRS), particulate matter (PM₁₀, TSP), and carbon monoxide (CO) above the PSD significance levels. The maximum actual emission rate was derived by determining the maximum amount of pulp produced over a two year period for the last 10 years. The period from February 1993 through January 1995 was found to have the highest pulp production, and therefore, actual emissions were determined over that two year period for comparison to the permitted emissions. The pulp production during this time period (120,703 bone-dry tons of pulp, BDTP) was compared to the permitted pulp production rate (146,708 BDTP) to establish a percent difference (17.7%) between actual and potential emissions reflecting the maximum amount of system de-bottlenecking. In the cases where stack test data was utilized to establish the emission limits, the maximum stack test results were used as the actual emissions. The potential emissions were established by scaling up the actual emissions by 17.7% to reflect the de-bottlenecking of the system.

Pollutant	Actual Emission Increase (lb/hr)	Actual Emission Increase (tpy)	Significant Emission Limit (tpy)	Modeling Required (Y/N)
PM/PM ₁₀	6.73	29.46	15/25	Y
SO ₂	4.15	18.20	40	N
CO	308	1350	100	Y
NO _x	6.46	28.30	40	N
TRS	2.67	11.71	10	Y

As shown in the table above, PM₁₀, CO, and TRS actual emission increases exceed the significance modeling threshold. However, significance modeling was performed only for PM₁₀ and CO, because no federal standards exist for TRS emission limits. The modeling results were compared to the appropriate significance levels to determine if further modeling is required.

Significance Modeling Results

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PM₁₀ significance modeling results indicated that the maximum 24-hour average ground level PM₁₀ concentrations equal or exceed the modeling significance level for two of the five years. As a result, a full modeling analysis was required in order to determine whether or not there is a possible impact to the NAAQS or PSD Increment standards.

CO significance modeling indicated that the maximum 8-hour and 1-hour average ground level CO concentrations do not exceed the modeling significance levels for any of the five years. As a result, a full modeling analysis is not required for CO. A summary of the significance modeling results for both PM₁₀ and CO are displayed in the following table:

Pollutant	Avg. Period	Max. Concentration (µg/m ³)	Modeling Significance Level (µg/m ³)	Max. Area of Impact Radius (km)	Total Area to be Modeled (km)
PM ₁₀	Annual	0.63	1	---	---
	24-Hour	5.93	5	0.5	51
CO	8-Hour	117	500	---	---
	1-Hour	266	2,000	---	---

Ambient Air Monitoring Analysis

Ambient monitoring modeling was performed for PM₁₀ and CO. The modeling results were compared with the appropriate de minimis monitoring levels in order to determine whether ambient monitoring is required at the facility.

The net emissions increase for PM₁₀ was modeled for an averaging period of one year and 24-hours. The results indicated that the maximum 24-hour average ground level PM₁₀ concentrations do not exceed the de minimis monitoring levels for any of the five years. Therefore, pre-construction monitoring for PM₁₀ is not required.

The net emissions increase CO was modeled for both 8-hour and 1-hour averaging periods. The results indicated that the maximum 8-hour average ground level concentrations do not exceed the de minimis monitoring levels for any of the five years. Therefore, preconstruction monitoring is not required for CO. The following table summarizes the results of the ambient monitoring modeling analysis.

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Pollutant	Avg. Period	Max. Concentration ($\mu\text{g}/\text{m}^3$)	Ambient Monitoring De Minimis Level ($\mu\text{g}/\text{m}^3$)
PM ₁₀	24-Hour	5.93	5
CO	8-Hour	117	500

NAAQS Modeling Analysis

Modeling was performed for PM₁₀ on a 24-hour basis. All sources at located at the Delta mill along with other sources within the radius of impact plus 50 kilometers were modeled. The maximum reported background concentration of 21 $\mu\text{g}/\text{m}^3$ was added to the modeled results for comparison with the NAAQs. The model was run at 100% load with a discrete grid placed around Delta in order to provide concentrations along the property and extending out to the area of impact radius.

The air quality dispersion results for PM₁₀ for the 5-year High 6th High 24-hour averaging period is 121 $\mu\text{g}/\text{m}^3$ (142 $\mu\text{g}/\text{m}^3$ with added background concentration). The results from the discrete grid and area of impact grid show that NAAQs of PM₁₀ are not exceeded at Delta.

PSD Increment Modeling Analysis

PSD Increment Modeling was performed for PM₁₀ on a 24-hour basis. All sources at located at the Delta mill along with other sources within the radius of impact plus 50 kilometers were modeled. The model was run at 100% load with a discrete grid placed around Delta in order to provide concentrations along the property and extending out to the area of impact radius. In order to determine emission rates for increment modeling, the most recent actual emissions for all sources within the 50 kilometer radius around Delta were obtained for ADEQ. The minor source baseline date for PM₁₀ in Jefferson county in 1982. However, ADEQ does not have any emissions data for that time period. Therefore, the actual 1983 PM₁₀ emissions for sources within 50 kilometers of Delta were determined to be the baseline emission levels. If 1983 emission data was not available, no baseline emission level was used in the modeling analysis.

The air quality dispersion results for PM₁₀ for the high 24-hour averaging period are provided in the following table.

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Year	Avg. Period	UTM East (km)	UTM North (km)	Max Conc. ($\mu\text{g}/\text{m}^3$)	PSD Class II Limit ($\mu\text{g}/\text{m}^3$)	80% of Limit ($\mu\text{g}/\text{m}^3$)
1991	24-Hr.	589.330	3792.011	22.6	30	24
1992	24-Hr.	589.330	3792.011	15.0	30	24
1993	24-Hr.	589.635	3792.390	17.1	30	24
1994	24-Hr.	589.727	3792.357	19.9	30	24
1995	24-Hr.	589.746	3792.355	15.8	30	24

Arkansas Regulations (§19.904 (C) (4)) allow up to 80 % of any short term increment consumption. The modeling results show that the PSD Class II limit for PM_{10} is not exceeded along the property boundary or within a fine grid around Delta. This demonstrates that the boiler modification at Delta has not consumed PM_{10} increment and should thus be allowed to proceed.

Delta's proposed replacement of an existing digester vessel (SN-17) with a new vessel will result in an actual-to-potential air emission increase that exceeds significant modeling limits. As a result, NAAQS and PSD Increment analysis were performed in order to estimate off-site ground level concentrations of PM_{10} on a 24-hour basis. The modeled results indicate that within the area of impact radius of the Delta facility, there is no threat to the federal standards. The results show that none of the federal PSD limits or NAAQS are violated.

Process Description Pine Bluff Mill

At the Delta Natural Kraft Pine Bluff Mill (Delta), chips are brought in as raw material. Chips are unloaded and conveyed to the screening system, which separates acceptable from unacceptable material. Knots and rocks are separated from the chips with a fan and chips are collected with a cyclone. Unacceptable material is sent to the hogged fuel storage piles. Acceptable chips are stored in chip piles or in the chip silo.

Chips are conveyed from the chip silo to the digesters (SN-13 and SN-17). A mixture of white liquor and spent caustic from the white liquor measuring tank and black liquor from the washers is charged along with the chips. A batch is cooked by recirculating liquor through a steam supplied heat exchanger.

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During digester cooks, the capping valve at the top of the digester is closed. Gases generated during the cooking cycle are extracted from the digester and flow to the turpentine system where the gases are condensed. The resulting turpentine is stored until being loaded into railcars. Low Volume High Concentration (LVHC) gases generated are collected and combusted in the lime kiln. The capping valve is open between and during chip fills and any remaining gases are released to the atmosphere.

The contents of the digesters are blown to the blow tank upon completion of the cook. Gases from the blow tank are condensed in the primary and secondary condensers. Water and condensed gases fall into the accumulator while the remaining LVHC gases are collected and burned in the lime kiln (SN-01).

From the blow tank, the pulp is sent to the brown stock washers (SN-08A and SN-08B) to remove black liquor, which flows to the foam tank (SN-11). The black liquor is de-foamed before it is pumped to weak black liquor storage. High Volume Low Concentration (HVLC) gases from the brown stock washers (SN-08A and SN-08B), black liquor filter, rejects surge tank, hot stock surge tank, and foam tank are sent to the NCG HVLC condenser and then to the NCG HVLC heater to reduce the moisture content. The HVLC gases are then routed to the Lime Kiln (SN-01) for destruction.

Washed pulp is sent from the washers to the high-density tanks for storage. Recycled paper (secondary fiber) is used as supplemental feed stock. Secondary fiber is reduced to a pulp form in the pulper tub and sent to high-density storage.

Pulp from the high-density storage tanks (SN-36 and SN-37) is pumped to the decker where the consistency is adjusted to the desired level before being sent to the paper machine. To aid in drying the paper sheet, blowers (SN-16A thru SN-16C) and vacuum pumps (SN-18 and SN-19A thru SN-19D) pull a vacuum on the wet end of the paper machine. The paper sheet then passes to the dry end (SN-15A thru SN-15J) where it is further dried over steam heated dryer cans. Emissions from the dry end of the paper machine are captured by an exhaust hood and discharged to the atmosphere. The sheet is wound onto rolls in preparation for shipping as the sheet exits the dry ends.

Weak black liquor from the weak black liquor storage tanks (SN-33 and SN-34) is pumped to the black liquor evaporators where the solids content of the black liquor is increased due to evaporation of water. Pure steam is used as the heat source for the first evaporator while a mixture of steam and vapor is used as the heat source for subsequent evaporators. Vapor from the evaporators is collected and condensed, and the remaining non-condensable gases (NCGs)

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are combusted in the lime kiln. Black liquor is pumped from the evaporators to the soap collection system where the soap is skimmed and stored in preparation for railcar loading. From the final evaporator, strong black liquor is pumped to the strong black liquor storage.

Black liquor from the strong black liquor storage is pumped to the black liquor oxidation tank (SN-12) where air is blown into the oxidizer tank, contacting the black liquor and raising the solids content. The liquor is then pumped to the recovery boiler (SN-02) where it is burned, creating the heat necessary to produce steam for use throughout the mill. Natural gas is used for startup of the recovery boiler. Boiler flue gases are blown through the electrostatic precipitator and sent to the total reduced sulfur (TRS) scrubber where the gases are cleaned and discharged.

The recovery operations recover spent cooking chemicals for reuse in the digesters. Smelt resulting from the combustion process flows to the smelt dissolving tank (SN-04) where it is dissolved to form green liquor which is sent to the caustic area. Gases emitted during the dissolving process are cleaned in a scrubber and discharged.

Green liquor passes through a clarifier (SN-31 and SN-35) which removes dregs before it is sent to storage (SN-20 and SN-21). Clarified green liquor is then sent to the slaker (SN-03) where fresh lime and reburned lime are added to form sodium hydroxide and calcium carbonate. The dregs are washed with water and discarded to the sewer (SN-23 and SN-24).

This white liquor slurry then passes through the causticizers before entering a clarifier. Here lime mud is separated from the white liquor. The white liquor is sent to storage to be used in the pulping process. Dilute lime mud is then washed with water, the cake is collected in a filter (SN-14), and the cake is fed to the lime kiln (SN-01). The reburned lime is sent to storage. Delta purchases fresh lime to be used as make up for the reburned lime. The fresh lime is delivered and unloaded by a pneumatic truck. Air is blown into the storage compartment of the truck to force the lime from the storage compartment into the lime silo (SN-10).

Heat is provided to the lime kiln by burning natural gas along with non-condensable gas (NCG) collected from the mill. Flue gases from the lime kiln pass through three scrubbers in series to remove dust before being discharged to the atmosphere.

A hog fuel boiler (SN-05) and a power boiler (SN-06) are operated to meet the steam demands of the mill. Hog fuel (bark, fines, knots) is burned in the hog fuel boiler to generate steam for the mill. Flue gas from the boiler passes through a cyclone and a scrubber to remove particulate before being discharged to the atmosphere. Natural gas is used for startup of the boiler and as an

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auxiliary fuel. Natural gas is the only fuel used in the power boiler which converts water to steam for the mill.

Effluent from the mill flows through a ditch to a clarifier where solids are allowed to settle. Clarified water flows to the aeration basin (SN-41) where aerators provide agitation and oxygen to the water. Condensate from the turpentine underflow tank and standpipe, evaporator hotwell, NCG HVLC condenser seal tank, and blow heat accumulator tank can be collected in the foul condensate tank before being pumped to the aeration basin where it enters through a submerged distribution header. Treated water is discharged to the Arkansas River. LVHC gases from the foul condensate tank are sent to the lime kiln for destruction.

Mid-America Packaging

Mid-America Packaging (MAP) is a manufacturer of multi-wall bags. Paper printed with graphics specified by the customer is used as the outer layer of the bags. The plates used in the printing process are made on-site at MAP. Several layers of paper are pasted together and the paper is folded and pasted into tubes. The tubes are bottomed to form the bags, and the bags are shipped to the customer.

MAP has four printing presses, No. 1 through No. 4, which are capable of printing different colors on a single roll of paper. Presses No. 3 and No. 4 also have the capability to apply a water-based lacquer coating to the paper. Various additives are mixed with the ink to maintain appropriate application conditions.

Press No. 3 is equipped with two drying chambers heated by natural gas. After ink has been applied to the paper, the sheet passes through the Tunnel Dryer (SN-102). Water-based lacquer is then applied to the paper sheet and the sheet passes through another heated chamber connected to the Lacquer Dryer (SN-103).

Press No. 4 is equipped with three natural gas heated drying chambers and one chamber consisting of a blower only (no combustion unit). Ink is dried as the paper sheet passes through chambers connected to the Between Decks Dryer (SN-104) and the Tunnel Dryer (SN-105). The paper then enters another chamber into which unheated air is blown by the Auxiliary Blower (SN-106). Water-based lacquer is then applied to the paper sheet and the sheet passes through another heated chamber connected to the Lacquer Dryer (SN-107). The printed paper sheet then enters the rewind unit where it is wound onto a reel.

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Bags are assembled using the printed paper rolls as the outer wall of the bags. Layers of paper are pasted together, the paper is folded and pasted into tubes, and the bottoms of the tubes are pasted or sewn shut. The bags are then prepared for shipping.

Bottom and seam paste are made on site at MAP. Starch and water are combined and cooked to make the paste. During the addition of the starch to the cooker, an exhaust hood fan (SN-101) pulls particulate matter from the work area and exhausts it to the atmosphere. After the batch is cooked, resin and other ingredients are added to the paste. A natural gas fired boiler (SN-100) produces the steam necessary to cook the paste.

Regulations

Delta and Mid-America are subject to regulation under the Regulation 18 - *Arkansas Air Pollution Control Code* (Air Code), Regulation 19 - *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (SIP) and Regulation 26 - *Regulations of the Arkansas Operating Air Permit Program* (Title V). Delta is also subject to regulation under 40 CFR 63 *National Emission Standard for Hazardous Air Pollutants* (NESHAP) Subpart S - *for the Pulp and Paper Industry*, NESHAP Subpart MM - *for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills* (compliance date March 13, 2004) and Mid-America is also subject to NESHAP Subpart KK - *for the Printing and Publishing Industry*. At the time of application for Title V renewal, this facility is also subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM).

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
Total Allowable Emissions (Pine Bluff Mill and MAP Combined)		PM	158.2	446.7	N/A
		PM ₁₀	158.2	446.7	
		SO ₂	32.8	123.3	
		VOC	593.1	2,193.3	
		CO	7,811.0	21,889.4	
		NO _x	77.8	334.4	
		Pb	0.01	0.05	
		TRS	41.2	471.6	
		Acetaldehyde	19.35	81.5	
		Acrolein	0.31	1.10	
		Acrylonitrile	0.02	0.07	
		Aniline	0.04	0.17	
		Benzene	0.21	0.89	
		Bromomethane	0.83	3.63	
		Carbon Disulfide	0.21	0.91	
		Chloromethane	69.07	302.50	
		Formaldehyde	2.61	10.41	
		Hydrochloric Acid	1.84	8.05	
		Iodomethane	0.82	3.56	
		Methanol	353.26	1500.92	
		2-Methylphenol	5.92	25.86	
		MEK	2.08	8.30	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Phenol	8.81	38.56	
		Styrene	0.70	2.83	
		Toluene	0.28	1.26	
		Phosphorus	0.08	0.29	
		Arsenic	0.01	0.01	
		Beryllium	0.03	0.10	
		Cadmium	0.01	0.01	
		Chromium +6	0.01	0.01	
		Manganese	0.14	0.58	
		Mercury	0.01	0.03	
		Selenium	0.01	0.01	
		Acetone	15.63	64.05	
		Ammonia	6.97	29.81	
		Sulfuric Acid	0.17	0.73	
		Barium	0.06	0.23	
		Copper	0.01	0.03	
		Silver	0.01	0.01	
		Thallium	0.01	0.01	
		Zinc	0.06	0.26	
		HAP (@SN102-108)	84.5	24.5	
Pine Bluff Mill					

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
01	Lime Kiln	PM	10.4	45.5	77
		PM ₁₀	10.4	45.5	
		SO ₂	6.3	9.2	
		VOC	3.5	12.7	
		CO	2.1	8.2	
		NO _x	12.5	48.8	
		Pb	0.003	0.011	
		TRS	3.4	14.6	
		Acetaldehyde	0.09	0.34	
		Acrolein	0.01	0.02	
		Benzene	0.01	0.03	
		Bromomethane	0.01	0.01	
		Carbon Disulfide	0.01	0.01	
		Chloromethane	0.01	0.04	
		Formaldehyde	0.07	0.27	
		Methanol	1.46	5.02	
		2-Methylphenol	0.01	0.03	
		MEK	0.02	0.05	
		Phenol	0.01	0.02	
		Styrene	0.01	0.02	
		Toluene	0.02	0.06	
		Phosphorus	0.05	0.17	
		Chromium +6	0.01	0.01	
		Barium	0.01	0.01	
		Copper	0.01	0.01	
		Silver	0.01	0.01	
		Thallium	0.01	0.01	
		Zinc	0.01	0.02	
		Acetone	0.14	0.52	
02	Recovery Boiler	PM	27.9	121.9	59

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		PM ₁₀	27.9	121.9	
		SO ₂	21.2	92.7	
		VOC	374.2	1638.9	
		CO	7703.6	21,420.0	
		NO _x	18.2	79.4	
		TRS	35.0	152.9	
		Acetaldehyde	14.89	65.3	
		Acrolein	0.03	0.12	
		Acrylonitrile	0.02	0.06	
		Aniline	0.04	0.17	
		Benzene	0.17	0.72	
		Bromomethane	0.83	3.62	
		Carbon Disulfide	0.15	0.66	
		Chloromethane	69.04	302.37	
		Formaldehyde	1.30	5.70	
		Hydrochloric Acid	1.79	7.81	
		Iodomethane	0.82	3.56	
		Methanol	270.73	1,185.78	
		MEK	0.88	3.86	
		2-Methylphenol	5.82	25.49	
		Phenol	8.80	38.54	
		Styrene	0.41	1.78	
		Toluene	0.22	0.95	
		Phosphorus	0.01	0.01	
		Acetone	9.16	40.11	
		Sulfuric Acid	0.17	0.73	
		Arsenic	0.01	0.01	
		Beryllium	0.01	0.01	
		Cadmium	0.01	0.01	
		Chromium +6	0.01	0.01	
		Lead	0.001	0.001	
02	Recovery Boiler	Manganese	0.02	0.05	59

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
	(cont'd)	Mercury	0.001	0.001	
		Selenium	0.01	0.01	
		Zinc	0.01	0.02	
03	Lime Slaker	PM	3.0	13.1	68
		PM ₁₀	3.0	13.1	
		VOC	0.7	2.7	
		TRS	0.1	0.1	
		Acetaldehyde	0.31	1.19	
		Benzene	0.01	0.01	
		Methanol	0.31	1.19	
		MEK	0.01	0.03	
		Styrene	0.01	0.03	
		Toluene	0.01	0.01	
		Acetone	0.11	0.43	
		Ammonia	1.60	6.26	
04	Smelt Dissolving Tank	PM	4.2	16.3	65
		PM ₁₀	4.2	16.3	
		SO ₂	0.4	1.4	
		VOC	3.8	16.3	
		NO _x	0.7	2.9	
		TRS	0.7	3.0	
		Benzene	0.01	0.04	
		Bromomethane	0.01	0.01	
		Carbon Disulfide	0.01	0.01	
		Chloromethane	0.01	0.01	
		Methanol	3.22	14.10	
		MEK	0.05	0.20	
		Styrene	0.01	0.02	
		Toluene	0.01	0.02	
04	Smelt Dissolving Tank	Phosphorus	0.01	0.02	65
		Chromium +6	0.01	0.01	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
	(cont'd)	Acetone	0.11	0.46	
		Ammonia	0.97	4.25	
		Barium	0.01	0.01	
		Copper	0.01	0.01	
		Silver	0.01	0.01	
		Thallium	0.01	0.01	
		Zinc	0.01	0.01	
05	Hog Fuel Boiler	PM	53.6	234.7	89
		PM ₁₀	53.6	234.7	
		SO ₂	4.0	17.6	
		VOC	7.1	31.1	
		CO	197.6	865.2	
		NO _x	35.2	154.2	
		Pb	0.008	0.034	
		Acetone	0.01	0.03	
		Acetaldehyde	0.02	0.08	
		Acrolein	0.01	0.01	
		Benzene	0.01	0.05	
		Carbon Disulfide	0.03	0.10	
		Chloromethane	0.01	0.04	
		Formaldehyde	0.06	0.24	
		Hydrochloric Acid	0.06	0.24	
		Methanol	0.23	0.99	
		MEK	0.01	0.01	
		Phenol	0.01	0.01	
		Styrene	0.01	0.02	
		Toluene	0.01	0.01	
		Phosphorus	0.03	0.12	
		Beryllium	0.03	0.10	
05	Hog Fuel Boiler	Cadmium	0.01	0.01	89
	(cont'd)	Chromium +6	0.01	0.01	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Manganese	0.12	0.53	
		Mercury	0.006	0.024	
		Selenium	0.01	0.02	
		Arsenic	0.01	0.01	
		Barium	0.06	0.23	
		Copper	0.01	0.03	
		Silver	0.01	0.02	
		Zinc	0.05	0.22	
06	Power Boiler	PM	0.6	2.6	93
		PM ₁₀	0.6	2.6	
		SO ₂	0.1	0.2	
		VOC	0.5	1.9	
		CO	6.4	28.1	
		NO _x	7.7	33.4	
08A	Washer Hood Exhaust Fan A	These sources are routed to the Lime Kiln (SN-01) as required by NESHAP Subpart S			45
08B	Washer Hood Exhaust Fan B				
11	Foam Tank Stack				
10	Fresh Lime Storage	PM	55.0	5.0	68
		PM ₁₀	55.0	5.0	
12	Black Liquor Oxidation Tank Stack	SO ₂	0.5	1.7	54
		VOC	8.1	35.5	
		TRS	0.9	3.6	
		Acetaldehyde	0.44	1.91	
		Methanol	6.54	28.62	
		Benzene	0.01	0.04	
		Bromomethane	0.01	0.01	
		Carbon Disulfide	0.04	0.16	

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			lb/hr	ton/yr	
		Chloromethane	0.01	0.05	
		MEK	0.15	0.63	
		Phenol	0.01	0.01	
		Styrene	0.01	0.05	
		Toluene	0.01	0.04	
		Acetone	0.85	3.73	
14	Lime Mud Filter Vacuum Pump	VOC	0.3	1.0	68
		TRS	0.1	0.1	
		Acetone	0.02	0.05	
		Acetaldehyde	0.01	0.01	
		Methanol	0.20	0.79	
		MEK	0.01	0.03	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
13	Digester Building Vent (No. 1 and No. 2)	VOC	5.5		42
		TRS	0.2		
		Acetaldehyde	0.03		
		Methanol	0.16		
		MEK	0.01	15.2 ³	
		Toluene	0.01	0.4	
		Acetone	0.05	0.08	
17	Digester Building Vent No. 3	VOC	2.8	0.43	42
		TRS	0.1	0.02	
		Acetaldehyde	0.02	0.01	
		Methanol	0.08	0.12	
		MEK	0.01		
		Toluene	0.01		
		Acetone	0.03		
15 (A thru J)	Paper Machine Dry End Fans (1, 1A, 1B, 2, 2A,	PM	0.3	1.0	46
		PM ₁₀	0.3	1.0	
		SO ₂	0.1	0.1	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
	3, 3A, 4, 5 and 6)	VOC CO NO _x TRS Acetaldehyde Acetone Acrolein Formaldehyde Methanol MEK Styrene	9.5 2.3 2.8 0.3 0.57 0.69 0.13 0.48 5.15 0.10 0.02	33.5 10.1 12.0 0.8 2.02 2.45 0.44 1.71 18.25 0.33 0.07	
16A	Fourdrinier Blower A	VOC Acetone Methanol Acetaldehyde MEK Toluene	6.9 ⁵ 0.10 5.15 ⁵ 0.03 0.03 0.01	24.4 ⁵ 0.36 18.25 ⁵ 0.09 0.08 0.01	46
16B	Fourdrinier Blower B	VOC Acetone Methanol Acetaldehyde	5.8 ⁵ 0.06 5.15 ⁵ 0.04	20.6 ⁴ 0.20 18.25 ⁵ 0.12	46
16C	Fourdrinier Blower C	VOC Acetone Methanol Acetaldehyde MEK Toluene	6.9 ⁵ 0.10 5.15 ⁵ 0.03 0.03 0.01	24.4 ⁵ 0.36 18.25 ⁵ 0.09 0.08 0.01	46
18	Paper Machine Vacuum Pumps (1 thru 3)	VOC Acetone Acetaldehyde	11.7 ⁵ 1.26 0.90	41.3 ⁵ 4.38 3.33	46

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Styrene Acrolein Formaldehyde Methanol	0.09 0.04 0.24 5.15 ⁵	0.33 0.12 0.87 18.25 ⁵	
19A	Paper Machine Vacuum Pump 4	VOC Acetone Acetaldehyde Acrolein Formaldehyde Styrene Methanol MEK Toluene	7.4 ⁵ 0.42 0.30 0.02 0.09 0.03 5.15 ⁵ 0.09 0.01	26.0 ⁵ 1.49 1.07 0.04 0.29 0.11 18.25 ⁵ 0.30 0.01	46
19B	Paper Machine Vacuum Pump 5	VOC Acetone Acetaldehyde Acrolein Formaldehyde Styrene Methanol MEK Toluene	7.4 ⁵ 0.42 0.30 0.02 0.09 0.03 5.15 ⁵ 0.09 0.01	26.0 ⁵ 1.49 1.07 0.04 0.29 0.11 18.25 ⁵ 0.30 0.01	46
19C	Paper Machine Vacuum Pump 6	VOC Acetone Acetaldehyde Acrolein Formaldehyde Styrene Methanol MEK Toluene	7.4 ⁵ 0.42 0.30 0.02 0.09 0.03 5.15 ⁵ 0.09 0.01	26.0 ² 1.49 1.07 0.04 0.29 0.11 18.25 ⁵ 0.30 0.01	46

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
19D	Paper Machine Vacuum Pump 7	VOC	9.5 ⁵	33.6 ⁵	46
		Acetone	0.84	2.98	
		Acetaldehyde	0.60	2.13	
		Acrolein	0.03	0.08	
		Formaldehyde	0.17	0.58	
		Styrene	0.06	0.20	
		Methanol	5.15 ⁵	18.25 ⁵	
		MEK	0.17	0.60	
		Toluene	0.01	0.01	
20	Green Liquor Storage Tank North	VOC	0.8	3.1	73
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
21	Green Liquor Storage Tank South	VOC	0.8	3.1	73
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
22	Multi Purpose Tank	VOC	0.8	3.1	73
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
23	Dregs Mixer	VOC	0.8	3.1	68
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
24	Dregs Washer	VOC	0.8	3.1	68
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
27	White Liquor Clarifier No. 2	VOC	0.2	0.5	68
		Acetone	0.01	0.02	
		Benzene	0.01	0.01	
		Formaldehyde	0.02	0.05	
		Methanol	0.09	0.34	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
28	East White Liquor Storage Tank	VOC	0.2	0.5	73
		Acetone	0.01	0.02	
		Benzene	0.01	0.01	
		Formaldehyde	0.02	0.05	
		Methanol	0.09	0.34	
		MEK	0.01	0.01	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Styrene	0.01	0.01	
29	West White Liquor Storage Tank	VOC	0.2	0.5	73
		Acetone	0.01	0.02	
		Benzene	0.01	0.01	
		Formaldehyde	0.02	0.05	
		Methanol	0.09	0.34	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
30	White Liquor Measuring Tank	VOC	0.2	0.5	73
		Acetone	0.01	0.02	
		Benzene	0.01	0.01	
		Formaldehyde	0.02	0.05	
		Methanol	0.09	0.34	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
31	Green Liquor Clarifier No.2	VOC	0.8	3.1	68
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
32	Weak Wash Storage Tank	VOC	0.8	3.1	73
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
33	North Weak Black	VOC	0.9	3.8	54

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
	Liquor Tank	TRS	0.1	0.3	
		Acetone	0.02	0.08	
		Acetaldehyde	0.01	0.02	
		Acrolein	0.01	0.01	
		Benzene	0.01	0.01	
		Methanol	0.71	3.11	
		MEK	0.01	0.02	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
34	South Weak Black Liquor Tank	VOC	0.9	3.8	54
		TRS	0.1	0.3	
		Acetone	0.02	0.08	
		Acetaldehyde	0.01	0.02	
		Acrolein	0.01	0.01	
		Benzene	0.01	0.01	
		Methanol	0.71	3.11	
		MEK	0.01	0.02	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
35	Green Liquor Clarifier No.1	VOC	0.8	3.1	68
		TRS	0.1	0.1	
		Acetone	0.01	0.04	
		Methanol	0.75	2.91	
		Acetaldehyde	0.01	0.01	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
36	High Density Storage Tank No.2	VOC	0.1	0.4	52
		TRS	0.1	0.3	
		Acetone	0.01	0.01	
		Acetaldehyde	0.01	0.01	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Benzene	0.01	0.01	
		Methanol	0.05	0.22	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
37	High Density Storage Tank No.3	VOC	0.1	0.4	52
		TRS	0.1	0.3	
		Acetone	0.01	0.01	
		Acetaldehyde	0.01	0.01	
		Benzene	0.01	0.01	
		Methanol	0.05	0.22	
		MEK	0.01	0.01	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
38	Strong Black Liquor Storage Tank No.2	VOC	0.2	0.8	54
		TRS	0.3	1.1	
		Acetone	0.03	0.12	
		Acetaldehyde	0.02	0.06	
		Acrolein	0.01	0.01	
		Benzene	0.01	0.01	
		Formaldehyde	0.01	0.01	
		Methanol	0.13	0.57	
		MEK	0.02	0.07	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
39	Black Liquor Spill Tank	VOC	0.2	0.8	54
		TRS	0.3	1.1	
		Acetone	0.03	0.13	
		Acetaldehyde	0.02	0.06	
		Acrolein	0.01	0.01	
		Benzene	0.01	0.01	
		Formaldehyde	0.01	0.01	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Methanol	0.13	0.57	
		MEK	0.02	0.07	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
40	Paper Machine General Building Ventilation	VOC	--	36.0 ⁴	46
		TRS	--	1.3	
		Acetone	--	1.24	
		Methanol	--	18.25 ⁵	
		2-Methylphenol	--	0.34	
		Acetaldehyde	--	0.09	
		Benzene	--	0.01	
		MEK	--	0.11	
		Styrene	--	0.04	
		Toluene	--	0.03	
41	Aeration Basin	VOC	--	13.6	83
		TRS	--	292.1	
		Methanol	--	13.5	
		Formaldehyde	--	0.01	
50	Chip and Hogged Fuel Storage Piles	PM	--	0.1	95
		PM ₁₀	--	0.1	
		VOC	--	4.8	
51	Saveall Tank	VOC	5.5 ²	19.6 ²	95
		TRS	0.1	0.1	
		Acetone	0.13	0.44	
		Acrolein	0.02	0.07	
		Methanol	5.15 ⁴	18.25 ⁴	
		Acetaldehyde	0.15	0.53	
		Benzene	0.01	0.01	
		MEK	0.03	0.09	
		Styrene	0.01	0.01	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
52	Outside White Water Chest	VOC	5.5 ²	19.6 ²	95
		TRS	0.1	0.1	
		Acetone	0.13	0.44	
		Acrolein	0.02	0.07	
		Methanol	5.15 ⁴	18.25 ⁴	
		Acetaldehyde	0.15	0.53	
		Benzene	0.01	0.01	
		MEK	0.03	0.09	
		Styrene	0.01	0.01	
53	Landfill	CO	--	0.1	95
		VOC	--	8.6	
		TRS	--	0.1	
		Acetone	--	0.02	
		Acrylonitrile	--	0.01	
		Benzene	--	0.01	
		Carbon Disulfide	--	0.01	
		Chloromethane	--	0.01	
		MEK	--	0.02	
		Toluene	--	0.09	
54	DAF Unit	VOC	5.5 ²	19.6 ²	95
		TRS	0.1	0.1	
		Acetone	0.13	0.44	
		Acrolein	0.02	0.07	
		Acetaldehyde	0.15	0.53	
		Benzene	0.01	0.01	
		MEK	0.03	0.09	
		Styrene	0.01	0.01	
		Methanol	5.15 ⁴	18.25 ⁴	
55	No. 3 Strong Black Liquor Storage Tank	VOC	0.2	0.8	54
		TRS	0.3	1.1	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
		Acetone	0.03	0.13	
		Acetaldehyde	0.02	0.06	
		Acrolein	0.01	0.01	
		Benzene	0.01	0.01	
		Formaldehyde	0.01	0.01	
		Methanol	0.13	0.57	
		MEK	0.02	0.07	
		Styrene	0.01	0.01	
		Toluene	0.01	0.01	
-	LVHC/HVLC System	-	-	-	105
-	Condensate Collection System	-	-	-	110
MAP					
100					Natural Gas Fired Boiler
101	Mixer Hood Exhaust	PM	2.8	6.3	98
		PM ₁₀	2.8	6.3	
102 thru 108	No. 3 Press (Tunnel and Lacquer Dryer Vents)	PM	0.5	0.5	98
		PM ₁₀	0.5	0.5	
	No. 4 Press (Between Decks Dryer, Tunnel Blower, Auxiliary Blower, and	SO ₂	0.5	0.5	
		VOC	84.5	60.0	
		CO	0.5	2.2	
		NO _x	0.9	3.8	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	ton/yr	
	Lacquer Dryer Vents) General Building Ventilation	HAP Ammonia	84.5 ¹³ 4.4	24.5 ¹⁴ 19.3	

¹ Methanol contribution (34.37 tons/yr) is a total for SN-08A and SN-08B.

² Yearly TRS emissions (34.3 tons/yr) are a total for SN-08A and SN-08B.

³ Total for SN-13 and SN-17.

⁴ Total for entire dry end of the paper machine (SN-15A-J).

⁵ Methanol contribution (5.15 lb/hr, 18.25 tons/yr) is total methanol for all paper machine sources (SN-15, 16, 18, 19, 40).

⁶ Total from Press No. 3.

⁷ Includes total VOC from lacquer usage (12 tons/yr) at Presses No. 3 and No. 4 and total VOC (29.5 tons/yr) at all four presses.

⁸ Total from Press No. 4.

⁹ Emission factors to spectate HAP emissions were either not available or did not match well.

¹⁰ Total from Presses No. 3 and No. 4.

¹¹ Total from all four Presses.

¹² Includes total VOC from ink usage at all four presses.

¹³ Because the raw materials used at SN-102 through SN-108 contain only organic HAPs, the hourly HAP emission rate be set to the hourly VOC emission rate.

¹⁴ The limit for any combination of HAPs applied on the flexographic printing presses is 5.29 ton/yr (40 CFR Part 63 Subpart KK). The annual limit for any single HAP is 9.5 ton/yr and for any combination of HAPs is 24.5 ton/yr, which includes the 5.29 ton/yr total HAPs applied to product on the flexographic presses.

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SECTION III: PERMIT HISTORY

The mill first began operating in 1957 and was owned by Dierks Paper Company. In 1970 Weyerhaeuser Company (Weyerhaeuser) purchased the mill.

Weyerhaeuser was issued its first permit, **#385-A**, for the pulp and paper mill in Pine Bluff, Arkansas, on January 28, 1977. This permit allowed Weyerhaeuser to make several changes at the facility to reduce its dependence upon natural gas and fossil fuels and to provide improved emission controls. Weyerhaeuser installed a woodwaste fired boiler. The lime kiln, which was previously fired only with natural gas, was converted to have the capability of firing fuel oil. A wet scrubber was placed in series with an existing electrostatic precipitator (ESP) to control emissions from the recovery boiler. A black liquor oxidation system was installed to reduce total reduced sulfur (TRS) emissions. Two cyclones were installed to reduce particulate matter emissions from the facility's bark and wood chip facilities.

On July 22, 1983, Weyerhaeuser was issued its modified permit **#385-AR-1**. This permit deleted the requirement for the TRS characterization program. The condition was no longer necessary because the program had been completed. In addition, this permit deleted the requirement that Weyerhaeuser operate a black liquor oxidation system.

Pursuant to a Consent Administrative Order, Weyerhaeuser proposed to install a scrubber on their woodwaste fired boiler. This scrubber along with the existing multi-clones would enable the boiler to comply with its allowable emission rates. Permit **#385-AR-2** was issued on March 13, 1985 to allow the installation of this scrubber.

On September 11, 1987, permit **#857-A**, was issued to signify the fact that Mid-America Packaging (MAP) had purchased the Weyerhaeuser pulp and paper mill in Pine Bluff, Arkansas. This permit also allowed MAP to replace the existing scrubber and ESP on the recovery boiler with an ESP alone.

Permit **#385-AR-3** was issued on August 25, 1988. This permit indicated that Gaylord, formerly known as MAP, now operated the pulp and paper mill formerly owned by Weyerhaeuser in Pine Bluff, Arkansas. This permit allowed Gaylord to install a scrubber to control TRS emissions from the smelt dissolving tank. Gaylord was also permitted to install a system to collect non-condensable gases (NCGs) from the digesters and evaporator and incinerate them in the lime kiln as required by the 111d plan.

On June 1, 1992, Gaylord was issued permit **#385-AR-4** to allow the installation of a scrubber on the recovery boiler to control TRS.

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Gaylord was issued a consolidated permit, **#385-AR-5**, on March 3, 1997. This permit included both the Gaylord pulp and paper mill in Pine Bluff, Arkansas, and the MAP bag making operations. Permit modifications included the addition of previously unpermitted sources and the addition of three new sources, specifically one fourdrinier blower and two paper machine vacuum pumps.

Permit **#385-AOP-R0**, issued on July 13, 1998, was the first Title V operating permit issued to the Gaylord Pine Bluff Mill and MAP facility under Regulation #26. Some of the emission limits in this permit differ from those found in the last permit. The following are the changes and clarifications proposed by Gaylord to be included in this permit:

- C In some cases, emission factors were used to calculate the emission rates instead of stack test data to facilitate compliance through record keeping.
- C Different or additional emission factors were used to calculate some emissions of VOCs and TRS.
- C Non-VOC hydrocarbons were removed from the VOC totals quantified in the last permit which resulted in an apparent decrease in some VOC emission rates.
- C Gaylord requested an increase in the annual black liquor solids firing rate from 159,688 tons of black liquor solids per year to 173,448 tons of black liquor solids per year. This increased number is based on the hourly rate previously calculated in the last permit and in this permit application. The proposed black liquor solids firing rate increase does not affect recovery boiler emissions because the recovery boiler emissions were based on stack testing data. The rate increase will result in slightly higher annual emissions at other sources at the mill where emission factors are used to calculate emissions. The requested change is not a result of any changes or modifications at the facility. It is merely an alternate way of calculating the yearly firing rate.
- C Permit **#385-AR-5** allowed Gaylord to install two paper machine vacuum pumps. Instead of installing two vacuum pumps, Gaylord installed one vacuum pump which is twice the size of the two that were proposed.
- C Gaylord proposes to install two new bag machine lines at MAP to enable the facility to begin producing a different type and size of bag. The two new bag lines will require an increase in the usage of adhesives, ink and ink additives, and lacquer. The increase in emissions is

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calculated to be 25.2 tons per year of VOCs which is less than the PSD level of significance of 40 tons per year.

The following sources have been permanently removed from service.

Location	Description
Pine Bluff Mill	Old Turpentine Separators
Pine Bluff Mill	Old Turpentine Tank
Pine Bluff Mill	Old Lime Slaker
Pine Bluff Mill	Fuel Oil Storage Tank No. 1
Pine Bluff Mill	Fuel Oil Storage Tank No. 2
Pine Bluff Mill	Mini Mercher
Pine Bluff Mill	Barking Drum
Pine Bluff Mill	Aeration Pond Diesel Tank
MAP	Rolowash Tank

First, this permit was modified to include 40 CFR Part 63 Subpart KK – National Emissions Standards for the Printing and Publishing Industry as an applicable requirement. MAP is considered a major source for hazardous air pollutants only in conjunction with the adjacent Pulp and Paper Mill. For this reason, MAP is subject to regulation under NESHAP Subpart KK. If a facility can meet the Incidental Printing Exemption [40 CFR §63.821(b)], they are subject only to the recordkeeping and reporting requirements of the standard. MAP will comply with the Incidental Printing Exemption.

Second, this permit was modified to revise the permitted HAPs for MAP. One of MAP's ink suppliers recently changed its reporting procedures related to the percentage of HAPs in its ink/ink additives, lacquers, and adhesives. In the past the vendor reported any HAP less than 0.10% as 0.00%; the vendor now reports HAP content as low as 0.001%. Because of this change in reporting methodology, it is necessary to modify the permit to include all the HAPs listed by the vendor.

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Third, this permit was modified to incorporate the results of the year long (i.e., July 1997 thru July 1998) Recovery Boiler Carbon Monoxide Emissions Study. This study was conducted in accordance with Specific Conditions #35 thru #39 contained in Permit #385-AOP-R0. These conditions required the installation and operation of a Continuous Emissions Monitoring System for the purpose of conducting a study to determine baseline carbon monoxide emissions from the Recovery Boiler (SN-02). The ultimate goal of the Study was to establish an accurate and reasonable carbon monoxide permit limit which would allow Gaylord to continue operations while maintaining compliance with federal and state air regulations. The three objectives of the Study were as follows:

- (1) determine baseline clean boiler carbon monoxide emission levels;
- (2) develop proposed carbon monoxide emission limits; and
- (3) develop future operational procedures to ensure permit compliance.

Fourth, this permit was modified to update the control equipment operating parameters for two sources at the Pine Bluff Mill.

Fifth, this permit was modified to revise the permitting scheme of the MAP sources. In order to simplify recordkeeping and achieve the maximum operating flexibility, the emissions from SN-102 through SN-108 have been "bubbled."

Sixth, this permit was modified to include the No. 3 Strong Black Liquor Storage Tank (SN-55). This storage tank had been taken out of service. It was previously used to store used fuel oil.

Seventh, this permit was modified to revise the requirement for a backup incineration device.

The final modification includes requirements outlined in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Pulp and Paper Industry, 40 CFR Part 63, Subpart S (Cluster Rule). Changes to the permit include the collection and incineration of HVLC gases and the LVHC gases from the Foul Condensate Tank in the Lime Kiln as described in the Cluster Rule. This modification qualifies as a Pollution Control Project and therefore emission increases did not trigger PSD review requirements.

Permit **#385-AOP-R2**, issued on November 8, 2001, was a modification to the Title V operating permit issued to the Gaylord Pine Bluff Mill and MAP facility under Regulation #26. This modification clarified the wording of three specific conditions (SC #28, # 44, #60) that required monitoring of specified parameters associated with scrubber pressure. There were no emission limit increases associated with this modification.

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Permit #**385-AOP-R3** was issued on May 19, 2003. Delta Natural Kraft (Delta) acquired ownership of Temple Inland Incorporated - Pine Bluff Mill on January 10, 2003. Temple purchased the Mill from Gaylord Container Corporation - Pine Bluff Mill in April 2002. This modification to the permit removed specific emission limits on hazardous air pollutants (HAPs) at the Mid-America facility and replaced former limits with a Threshold Limit Value (TLV) Table based on the TLVs and weight percentages of any HAP which may be used at this facility. In addition, the emission limits were revised to reflect the most recent volatile organic compound (VOC) and HAP contents of the adhesives, lacquers and inks used by Mid-America. Overall, the permitted annual emission rate for Ammonia increased 10.89 ton/yr, while the total permitted combined HAP emissions remained 24.5 tons/yr and the annual emission limits for the criteria pollutant emissions did not change.

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SECTION IV: EMISSION UNIT INFORMATION

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SN-13 and SN-17
Digester Building

Source Description

Digester No. 1 and Digester No. 2 are vented to the atmosphere through a common vent stack (SN-13) while Digester No. 3 is vented through a separate vent stack (SN-17). It is possible that both Digester No. 1 and Digester No. 2 could be filled during the same one hour period. Digester No. 1 and Digester No. 2 were installed in 2000 while the current Digester No. 3 was installed before 1976. The digesters are not subject to NSPS Subpart BB.

During digester cooks, the capping valve at the top of the digester is closed. Gases generated during the cooking cycle are extracted from the digester and flow to the turpentine system where the gases are condensed. The resulting turpentine is stored until being loaded into railcars. Low Volume High Concentration (LVHC) gases generated are collected and combusted in the lime kiln (SN-01).

After the completion of the cooking cycle, the cooked pulp is blown to the blow tank and the digesters are uncapped and filled again with chips and liquor for the next cook. During the filling of the digesters, the air displaced from the digesters is vented to the atmosphere. This gas stream is the source of the digester's emissions.

This permit modification will allow the facility to replace Digester No. 3 with a new vessel which will not increase permitted emission rates.

Specific Conditions

1. Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation #19) and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #3.

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Source No.	Description	Pollutant	lb/hr	ton/yr*
13	Digester Building Vent No. 1 and No. 2	VOC	5.5	15.2 0.4
		TRS	0.2	
17	Digester Building Vent No. 3	VOC	2.8	
		TRS	0.1	

* Total for SN-13 and SN-17. Emissions occur during the filling of the digester; emissions that result while the digester is capped are routed to SN-01.

2. Pursuant to §18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation #18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #3.

Source No.	Description	Pollutant	lb/hr	ton/yr*
13	Digester Building Vent No. 1 and No. 2	Acetaldehyde	0.03	0.08 0.43 0.02 0.01 0.12
		Methanol	0.16	
		Methyl Ethyl Ketone	0.01	
		Toluene	0.01	
		Acetone	0.05	
17	Digester Building Vent No. 3	Acetaldehyde	0.02	
		Methanol	0.08	
		Methyl Ethyl Ketone	0.01	
		Toluene	0.01	
		Acetone	0.03	

* Total for SN-13 and SN-17. Emissions occur during the filling of the digester; emissions that result while the digester is capped are routed to SN-01.

3. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not produce in excess of 15,066 air-dried tons of pulp (ADTP) per month or 162,608 ADTP per twelve consecutive months (equivalent to 13,593 bone-dry tons of pulp (BDTP) per month or 146,708 BDTP per twelve consecutive months).

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4. Pursuant to §19.801 and §19.901 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR Part 63, § 63.446(b), gases from the digesters (generated during the cooking cycle) must be routed to the Lime Kiln for control.
5. Pursuant to §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, §18.1004 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #3. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

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SN-08A, 08B and 11
Brownstock Washers System

Source Description

Delta's brownstock washing system consists of one pressure drum washer (totally enclosed) followed by three vacuum drum washers in series. Delta's three brownstock washers are enclosed by a common hood and the emissions from the washers are collected into the High Volume Low Concentration (HVLC) closed collection system. The Lime Kiln serves as the HVLC incineration device. The Brownstock Washers System was installed prior to 1976; therefore, it is not subject to NSPS Subpart BB.

The brownstock washers remove black liquor from the pulp. The black liquor is then sent to the Foam Tank (SN-11). The emissions generated from the Foam Tank are also collected into the High Volume Low Concentration (HVLC) closed collection system. The Foam Tank was installed in 1994.

The High Volume Low Concentration (HVLC) gases are collected from the Brownstock washers (SN-08), Foam Tank (SN-11), Black Liquor Filter, Rejects Surge Tank, and Hot Stock Surge Tank. These gases are sent to the Lime Kiln (SN-01) in order to comply with 40 CFR Part 63, Subpart S.

Specific Conditions

6. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63.443(c)(4), the non-condensable gases from the Brownstock Washers and the Foam Tank are to be enclosed and vented into a closed-vent system and routed to the Lime Kiln (SN-01) thus eliminating emissions from SN-11, SN-08A, and SN-08B. The washers shall not be vented into the atmosphere.

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SN-15A thru 15J, 16A thru 16C, 18, 19A thru 19D and 40
Papermaking Operations

Source Description

The paper machine consists of a wet end (fourdrinier) and a dry end (steam heated dryer cans). Paper machine vacuum pumps pull a vacuum on the wet end of the paper machine.

The wet end of the paper machine at Delta is equipped with three fourdrinier blowers (SN-16A thru SN-16C) and seven vacuum machine pumps (SN-18 and SN-19A thru D).

Ten exhaust fans are associated with the dry end of the paper machine (SN-15A thru SN-15J). The emissions associated with the dry end exhaust fans have been bubbled together.

Fugitive emissions from the wet end of the paper machine, including fugitives from the pulp decker, fourdrinier, press section, and associated process vessels, may exit the building through general building ventilation. SN-40 accounts for these emissions.

Specific Conditions

7. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #10 and #11.

Source No.	Description	Pollutant	lb/hr	ton/yr
15 (A thru J)	Paper Machine Dry End Fans (1, 1A, 1B, 2, 2A, 3, 3A, 4, 5 and 6)	PM ₁₀	0.3	1.0
		SO ₂	0.1	0.1
		VOC	9.5 ⁴	33.5 ⁴
		CO	2.3	10.1
		NO _x	2.8	12.0
		TRS	0.3	0.8
16A	Fourdrinier Blower A	VOC	6.9 ⁴	24.4 ⁴

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Source No.	Description	Pollutant	lb/hr	ton/yr
16B	Fourdrinier Blower B	VOC	5.8 ⁴	20.6 ⁴
16C	Fourdrinier Blower C	VOC	6.9 ⁴	24.4 ⁴
18	Paper Machine Vacuum Pumps (1 thru 3)	VOC	11.7 ⁴	41.3 ⁴
19A	Paper Machine Vacuum Pump 4	VOC	7.4 ⁴	26.0 ⁴
19B	Paper Machine Vacuum Pump 5	VOC	7.4 ⁴	26.0 ⁴
19C	Paper Machine Vacuum Pump 6	VOC	7.4 ⁴	26.0 ⁴
19D	Paper Machine Vacuum Pump 7	VOC	9.5 ⁴	33.6 ⁴
40	Paper Machine General Building Ventilation	VOC	--	36.0 ⁴
		TRS	--	1.3

⁴ Includes total methanol (5.2 lb/hr and 18.3 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

8. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the Paper Machine Dry End Fans (SN-15A thru SN-15J) gases which exhibit an opacity greater than 5%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #10.
9. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #10 and #11.

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Source No.	Description	Pollutant	lb/hr	ton/yr
15 (A thru J)	Paper Machine Dry End Fans (1, 1A, 1B, 2, 2A, 3, 3A, 4, 5 and 6)	PM	0.3	1.0
		Acetaldehyde	0.57	2.02
		Acetone	0.69	2.45
		Acrolein	0.13	0.44
		Formaldehyde	0.48	1.71
		Methanol	5.15 ⁴	18.25 ⁴
		MEK	.10	0.33
		Styrene	0.02	0.07
16A	Fourdrinier Blower A	Acetone	0.10	0.36
		Methanol	5.15 ⁴	18.25 ⁴
		Acetaldehyde	0.03	0.09
		MEK	0.03	0.08
		Toluene	0.01	0.01
16B	Fourdrinier Blower B	Acetone	0.06	0.20
		Methanol	5.15 ⁴	18.25 ⁴
		Acetaldehyde	0.04	0.12
16C	Fourdrinier Blower C	Acetone	0.10	0.36
		Methanol	5.15 ⁴	18.25 ⁴
		Acetaldehyde	0.03	0.09
		MEK	0.03	0.08
		Toluene	0.01	0.01
18	Paper Machine Vacuum Pumps (1 thru 3)	Acetone	1.26	4.38
		Acetaldehyde	0.90	3.33
		Styrene	0.09	0.33
		Acrolein	0.04	0.12
		Formaldehyde	0.24	0.87
		Methanol	5.15 ⁴	18.25 ⁴
19A	Paper Machine Vacuum Pump 4	Acetone	0.42	1.49
		Acetaldehyde	0.30	1.07
		Acrolein	0.02	0.04

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Source No.	Description	Pollutant	lb/hr	ton/yr
		Formaldehyde	0.09	0.29
		Styrene	0.03	0.11
		Methanol	5.15 ⁴	18.25 ⁴
		MEK	0.09	0.30
		Toluene	0.01	0.01
19B	Paper Machine Vacuum Pump 5	Acetone	0.42	1.49
		Acetaldehyde	0.30	1.07
		Acrolein	0.02	0.04
		Formaldehyde	0.09	0.29
		Styrene	0.03	0.11
		Methanol	5.15 ⁴	18.25 ⁴
		MEK	0.09	0.30
		Toluene	0.01	0.01
19C	Paper Machine Vacuum Pump 6	Acetone	0.42	1.49
		Acetaldehyde	0.30	1.07
		Acrolein	0.02	0.04
		Formaldehyde	0.09	0.29
		Styrene	0.03	0.11
		Methanol	5.15 ⁴	18.25 ⁴
		MEK	0.09	0.30
		Toluene	0.01	0.01
19D	Paper Machine Vacuum Pump 7	Acetone	0.84	2.98
		Acetaldehyde	0.60	2.13
		Acrolein	0.03	0.08
		Formaldehyde	0.17	0.58
		Styrene	0.06	0.21
		Methanol	5.15 ⁴	18.25 ⁴
		MEK	0.17	0.60
		Toluene	0.01	0.01
40	Paper Machine General	Acetone	--	1.24

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Source No.	Description	Pollutant	lb/hr	ton/yr
	Building Ventilation	Methanol	--	18.25 ⁴
		2-Methylphenol	--	0.34
		Acetaldehyde	--	0.09
		Benzene	--	0.01
		MEK	--	0.11
		Styrene	--	0.04
		Toluene	--	0.03

⁴ Includes total methanol (5.2 lb/hr and 18.3 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

10. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas shall be the only fuel used for the Pocket Ventilator System (exhausted through SN-15A-J). The maximum heat input of this system is 28.6 million Btu per hour and the system is only capable of firing natural gas. [The Pocket Ventilator System has been permitted at maximum capacity.] The permittee shall maintain records which demonstrate that natural gas is the only fuel fired at SN-15 A-J. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.
11. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not produce in excess of 20,708 scale weight tons of paper per month or 208,050 scale weight tons of paper per twelve consecutive months.
12. Pursuant to §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, §18.1004 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #11. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

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SN-36 and SN-37
Associated Paper Machine Storage Tanks

Source Description

The following sources were all installed prior to 1976. The specifications of the Associated Paper Machine Storage Tanks are listed in the following table.

Source No.	Description	Size (gallons)
36	High Density Storage Tank No. 2	359,000
37	High Density Storage Tank No. 3	359,000

Specific Conditions

13. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #3.

Source No.	Description	Pollutant	lb/hr	ton/yr
36	High Density Storage Tank No. 2	VOC	0.1	0.4
		TRS	0.1	0.3
37	High Density Storage Tank No. 3	VOC	0.1	0.4
		TRS	0.1	0.3

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14. Pursuant to §18.801 of Regulation #18, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #3.

Source No.	Description	Pollutant	lb/hr	ton/yr
36	High Density Storage Tank No. 2	Acetone	0.01	0.01
		Acetaldehyde	0.01	0.01
		Benzene	0.01	0.01
		Methanol	0.05	0.22
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01
37	High Density Storage Tank No. 3	Acetone	0.01	0.01
		Acetaldehyde	0.01	0.01
		Benzene	0.01	0.01
		Methanol	0.05	0.22
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01

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SN-12, 33, 34, 38, 39, and 55
Black Liquor Tanks

Source Description

The following sources, with the exception of the No. 3 Strong Black Liquor Storage Tank, were installed prior to 1976. An existing fuel oil tank was taken out of service and converted to the No. 3 Strong Black Liquor Storage Tank (SN-55) in 2000. The specifications of the Black Liquor Tanks are listed in the following table.

Source No.	Description	Size (gallons)
33	North Weak Black Liquor Tank	125,000
34	South Weak Black Liquor Tank	125,000
38	No. 2 Strong Black Liquor Storage Tank	352,000
39	Black Liquor Spill Tank	16,000
55	No. 3 Strong Black Liquor Storage Tank	568,000

Specific Conditions

15. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3 and #24.

Source No.	Description	Pollutant	lb/hr	ton/yr
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Source No.	Description	Pollutant	lb/hr	ton/yr
12	Black Liquor Oxidation Tank Stack	SO ₂	0.5	1.7
		VOC	8.1	35.5
		TRS	0.9	3.6
33	North Weak Black Liquor Tank	VOC	0.9	3.8
		TRS	0.1	0.3
34	South Weak Black Liquor Tank	VOC	0.9	3.8
		TRS	0.1	0.3
38	No. 2 Strong Black Liquor Storage Tank	VOC	0.2	0.8
		TRS	0.3	1.1
39	Black Liquor Spill Tank	VOC	0.2	0.8
		TRS	0.3	1.1
55	No. 3 Strong Black Liquor Storage Tank	VOC	0.2	0.8
		TRS	0.3	1.1

16. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3 and #24.

Source No.	Description	Pollutant	lb/hr	ton/yr
12	Black Liquor Oxidation Tank Stack	Acetaldehyde	0.44	1.91
		Methanol	6.54	28.62
		Benzene	0.01	0.04
		Bromomethane	0.01	0.01
		Chloromethane	0.01	0.05
		MEK	0.15	0.63
		Phenol	0.01	0.01

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Source No.	Description	Pollutant	lb/hr	ton/yr
		Styrene	0.01	0.05
		Toluene	0.01	0.04
		Acetone	0.85	3.73
		Carbon Disulfide	0.04	0.16
33	North Weak Black Liquor Tank	Acetone	0.02	0.08
		Acetaldehyde	0.01	0.02
		Acrolein	0.01	0.01
		Benzene	0.01	0.01
		Methanol	0.71	3.11
		MEK	0.01	0.02
		Styrene	0.01	0.01
		Toluene	0.01	0.01
34	South Weak Black Liquor Tank	Acetone	0.02	0.08
		Acetaldehyde	0.01	0.02
		Acrolein	0.01	0.01
		Benzene	0.01	0.01
		Methanol	0.71	3.11
		MEK	0.01	0.02
		Styrene	0.01	0.01
		Toluene	0.01	0.01
38	No. 2 Strong Black Liquor Storage Tank	Acetone	0.03	0.13
		Acetaldehyde	0.02	0.06
		Acrolein	0.01	0.01
		Benzene	0.01	0.01
		Formaldehyde	0.01	0.01
		Methanol	0.13	0.57
		MEK	0.02	0.07
		Styrene	0.01	0.01
		Toluene	0.01	0.01
39	Black Liquor Spill Tank	Acetone	0.03	0.13
		Acetaldehyde	0.02	0.06

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Source No.	Description	Pollutant	lb/hr	ton/yr
		Acrolein	0.01	0.01
		Benzene	0.01	0.01
		Formaldehyde	0.01	0.01
		Methanol	0.13	0.57
		MEK	0.02	0.07
		Styrene	0.01	0.01
		Toluene	0.01	0.01
55	No. 3 Strong Black Liquor Storage Tank	Acetone	0.03	0.13
		Acetaldehyde	0.02	0.06
		Acrolein	0.01	0.01
		Benzene	0.01	0.01
		Formaldehyde	0.01	0.01
		Methanol	0.13	0.57
		MEK	0.02	0.07
		Styrene	0.01	0.01
		Toluene	0.01	0.01

17. Pursuant to §19.801 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR Part 63, § 63.466(b), gases from the evaporators must be routed to the Lime Kiln (SN-01) at all times.
18. The No. 3 Strong Black Liquor Storage Tank (SN-55) is subject to and shall comply with 40 CFR Part 60 Subpart A – General Provisions and 40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. (A copy of Subpart Kb is provided in Appendix E.) The capacity of the tank is approximately 568,000 gallons. Only black liquor, which has a vapor pressure of <1 kPa (<0.145 psi), will be stored in the tank. Delta is required to keep tank dimension and capacity records for the life of the tank.

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SN-02
Recovery Boiler

Source Description

Weak black liquor from the weak black liquor storage tanks is pumped to the black liquor evaporators where the solids content of the black liquor is increased due to evaporation of liquor. Pure steam is used as the heat source for the first evaporator while a mixture of steam and vapor is used as the heat source for subsequent evaporators. Vapor from the evaporators is collected and condensed, and the remaining non-condensable gases (NCGs) are burned in the lime kiln. Black liquor is pumped from the evaporators to the soap collection system where the soap is skimmed and stored in preparation for railcar loading. Strong black liquor from the final evaporator is pumped to strong black liquor storage.

Black liquor from strong black liquor storage is pumped to the black liquor oxidation tank where air is blown into the tank, contacting the black liquor and raising the solids content. The liquor is then pumped to the recovery boiler where it is burned, creating the heat necessary to produce steam for use throughout the mill. Smelt resulting from the combustion process falls to the bottom of the boiler and flows to the smelt dissolving tank where it is dissolved to form green liquor which is sent to the caustic area.

Natural gas is used as a secondary fuel.

The Recovery Boiler at Delta is a 100 million Btu per hour boiler. The boiler is equipped with a scrubber and an electrostatic precipitator. The Recovery Boiler is equipped with a direct contact cascade evaporator. The Recovery Boiler was installed prior to 1976 and therefore is not subject to NSPS Subpart BB.

This permit was modified to incorporate the results of the year long (i.e., July 1997 thru July 1998) Recovery Boiler Carbon Monoxide Emissions Study. This study was conducted in accordance with Specific Conditions #35 thru #39 contained in Permit #385-AOP-R0. These conditions required the installation and operation of a Continuous Emissions Monitoring System for the purpose of conducting a study to determine baseline carbon monoxide emissions from the Recovery Boiler (SN-02). The ultimate goal of the Study was to establish an accurate and reasonable carbon monoxide permit limit which would allow Delta to continue operations while maintaining compliance with federal and state air regulations. Considering operational information obtained during the course of the study, the decision was made to pursue the development of CO limits using a statistically based approach.

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Specific Conditions

19. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table (except CO) are limited by Specific Conditions #23, #24, and #26. Compliance with the CO emission limits are demonstrated by compliance with Specific Condition #34.

Pollutant	lb/hr	ton/yr
PM ₁₀	27.9	121.9
SO ₂	21.2	92.7
VOC	374.2	1,638.9
CO	7,703.6	21,420.0
NO _x	18.2	79.4

20. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Data from the CEMS (required by Specific Condition #29) will be used to demonstrate compliance with the TRS concentration limit (ppm) listed below. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #23, #24, and #26.

Pollutant	lb/hr	ton/yr
TRS	35.0	152.9
	100 ppm Measured as H ₂ S on a dry basis and on a 12 hour average, corrected to 8% volume oxygen.	

21. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Recovery Boiler gases, which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with

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EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #26.

22. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #23, #24, and #26.

Pollutant	lb/hr	ton/yr
PM	27.9	121.9
Acetaldehyde	14.89	65.22
Acetone	9.16	40.11
Acrolein	0.03	0.12
Acrylonitrile	0.02	0.06
Aniline	0.04	0.17
Arsenic	0.01	0.01
Beryllium	0.01	0.01
Benzene	0.17	0.72
Bromomethane	0.83	3.62
Cadmium	0.01	0.01
Carbon Disulfide	0.15	0.66
Chloromethane	69.04	302.37
Chromium +6	0.01	0.01
Formaldehyde	1.30	5.70
Hydrochloric Acid	1.79	7.81
Iodomethane	0.82	3.56
Lead	0.001	0.001

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Pollutant	lb/hr	ton/yr
Manganese	0.02	0.05
Mercury	0.001	0.001
Methanol	270.73	1185.78
MEK	0.88	3.86
2-Methylphenol	5.82	25.49
Phenol	8.80	38.54
Phosphorus	0.01	0.01
Selenium	0.01	0.01
Styrene	0.41	1.78
Sulfuric Acid	0.17	0.73
Toluene	0.22	0.95
Zinc	0.01	0.02

23. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, black liquor solids shall be the primary fuel for the recovery boiler. Natural gas may be used as a secondary fuel. The recovery boiler is only capable of firing black liquor solids and natural gas. The permittee shall maintain records which demonstrate that black liquor solids and natural gas are the only fuels fired at the recovery boiler. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.
24. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not fire in excess of 14,731 tons of black liquor solids per month or 173,448 tons of black liquor solids per twelve consecutive months to the Recovery Boiler.
25. Pursuant to §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, §18.1004 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in

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Specific Condition #24. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7.

26. Pursuant to §19.303 of Regulation #19, 40 CFR Part 64, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor the scrubber liquor flow rate to the TRS scrubber. The flow rate shall be maintained between 1,500 and 5,000 gpm.
 - A. When the Recovery Boiler is operating the scrubber liquid flow rate will be monitored hourly and recorded a minimum of 19 hours in a 24-hour period (approximately 80%).
 - B. If one data point recorded in a 24-hour period is outside the permitted range of 1,500 - 5,000 gpm for the liquid flow rate, all data recorded for that 24-hour period will be averaged. The average liquid flow rate for a 24-hour period will be maintained within the permitted range.
 - C. Any 24-hour period that has less than 19 hours of recorded data or has an average liquid flow rate outside the permitted range will be considered a permit violation and shall be reported as one deviation in the Annual Compliance Certification Report.
27. Pursuant to §19.303 of Regulation #19, 40 CFR Part 64, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor the voltage across the exit field in the ESP. The hourly average TR primary voltage shall be maintained above 200 vac. If two fields in the ESP are not operating, Delta will cease firing black liquor solids at the recovery boiler after 15 minutes of ESP failure. Natural gas will be used as the fuel until at least three fields are working properly at the ESP.
28. Pursuant to §19.705 of Regulation #19, 40 CFR Part 64, and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Condition #26. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.
29. Pursuant to §19.801 et seq of Regulation #19, 40 CFR Part 64, and 40 CFR Part 52 Subpart E, the permittee shall continue to operate and maintain CEMs which record the TRS concentration of gases leaving the Recovery Boiler. The TRS monitors shall be operated in accordance with the requirements of 40 CFR 60.284 (date of installation not

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withstanding) and the Department Continuous Emission Monitoring Systems Conditions (See Appendix A).

30. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Recovery Boiler for PM/PM₁₀ during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5. Testing shall be used to demonstrate compliance with permitted emission rates.
31. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Recovery Boiler for SO₂ during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 6C. Testing shall be used to demonstrate compliance with permitted emission rates.
32. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Recovery Boiler for VOC during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 25A. Testing shall be used to demonstrate compliance with permitted emission rates.
33. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Recovery Boiler for NO_x during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E. Testing shall be used to demonstrate compliance with permitted emission rates.

Carbon Monoxide Specific Conditions

34. Pursuant to §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall continue to operate a Continuous Emissions Monitor (CEM) for carbon monoxide on the Recovery Boiler. The CEM shall be operated in accordance with the Department Continuous Emission Monitoring Systems Conditions except where a specific requirement is given by this permit. A copy of the Department Continuous Emission Monitoring Systems Conditions is provided in Appendix A. A 24-hour averaging period will be used.
35. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, operational and maintenance procedures will be conducted as necessary to maintain CO emissions below permitted levels.

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36. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the Specific Condition #35.

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SN-04
Smelt Dissolving Tank

Source Description

The recovery operations recover spent cooking chemicals for reuse in the digesters. Smelt resulting from the combustion process flows to the smelt dissolving tank (SN-04) where it is dissolved to form green liquor which is sent to the caustic area. Gases emitted during the dissolving process are cleaned in a scrubber and discharged.

The Smelt Dissolving Tank was installed prior to 1976 and therefore is not subject to NSPS Subpart BB. The Smelt Dissolving Tank is equipped with a scrubber which was installed in 1988.

Specific Conditions

37. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3 and #24.

Pollutant	lb/hr	ton/yr
PM ₁₀	4.2	16.3
SO ₂	0.4	1.4
VOC	3.8	6.3
NO _x	0.7	2.9

38. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3, #24, and #41.

Pollutant	lb/hr	ton/yr
TRS	0.7	3.0
	0.0168 g/kg measured as grams of H ₂ S per kilogram of black liquor solids on a 12 hour average	

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39. Pursuant to §19.503 of Regulation #18 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Smelt Dissolving Tank gases which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #42.
40. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3 and #24.

Pollutant	lb/hr	ton/yr
PM	4.2	16.3
Benzene	0.01	0.04
Bromomethane	0.01	0.01
Carbon Disulfide	0.01	0.01
Chloromethane	0.01	0.01
MEK	0.05	0.20
Styrene	0.01	0.02
Toluene	0.01	0.02
Acetone	0.11	0.46
Ammonia	0.97	4.25
Barium	0.01	0.01
Chromium +6	0.01	0.01
Copper	0.01	0.01
Methanol	3.22	14.10
Phosphorus	0.01	0.02
Silver	0.01	0.01
Thallium	0.01	0.01
Zinc	0.01	0.01

41. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall continue to conduct annual compliance testing of TRS emissions from the Smelt Dissolving Tank. Testing shall be conducted in accordance with Plantwide

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Condition #3 and EPA Reference Method 16. Data reduction shall be performed as set forth in 40 CFR 60.8.

42. Pursuant to §19.303 of Regulation #19, 40 CFR Part 64, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor the scrubber media pressure into the scrubber. The scrubber media pressure shall be maintained between 28 and 40 psi.
 - A. When the Smelt Dissolving Tank is operating the scrubber media pressure into the scrubber will be monitored hourly and recorded a minimum of 19 hours in a 24-hour period (approximately 80%).
 - B. If one data point recorded in a 24-hour period is outside the permitted range of 28 - 40 psi for the scrubber media pressure, all data recorded for that 24-hour period will be averaged. The average liquid flow rate for a 24-hour period will be maintained within the permitted range.
 - C. Any 24-hour period that has less than 19 hours of recorded data or has an average liquid flow rate outside the permitted range will be considered a permit violation and shall be reported as one deviation in the Annual Compliance Certification Report.
43. Pursuant to §19.705 of Regulation #19, 40 CFR Part 64, and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Condition #42. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.

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SN-03, 10, 14, 23, 24, 27, 31 and 35
Caustic Area

Source Description

Green liquor passes through a clarifier (SN-31 and SN-35) which removes dregs before it is sent to storage (SN-20 and SN-21). Clarified green liquor is then sent to the slaker (SN-03) where fresh lime and reburned lime are added to form sodium hydroxide and calcium carbonate. The dregs are washed with water and discarded to the sewer (SN-23 and SN-24).

This white liquor slurry then passes through the causticizers before entering a clarifier. Here lime mud is separated from the white liquor. The white liquor is sent to storage to be used in the pulping process. Diluted lime mud is then washed with water, the cake is collected in a filter (SN-14), and the cake is fed to the lime kiln (SN-01). The reburned lime is sent to storage. Delta purchases fresh lime to be used as make up for the reburned lime. The fresh lime is delivered and unloaded by a pneumatic truck. Air is blown into the storage compartment of the truck to force the lime from the storage compartment into the lime silo (SN-10).

Specific Conditions

44. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #55.

Source No.	Description	Pollutant	lb/hr	ton/yr
03	Lime Slaker	PM ₁₀	3.0	13.1
		VOC	0.7	2.7
		TRS	0.1	0.1
10	Fresh Lime Storage Bin	PM ₁₀	55.0	5.0

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Source No.	Description	Pollutant	lb/hr	ton/yr
14	Lime Mud Filter Vacuum Pump	VOC	0.3	1.0
		TRS	0.1	0.1
23	Dregs Mixer	VOC	0.8	3.1
		TRS	0.1	0.1
24	Dregs Washer	VOC	0.8	3.1
		TRS	0.1	0.1
27	White Liquor Clarifier No. 2	VOC	0.2	0.5
31	Green Liquor Clarifier No. 2	VOC	0.8	3.1
		TRS	0.1	0.1
35	Green Liquor Clarifier No. 1	VOC	0.8	3.1
		TRS	0.1	0.1

45. Pursuant to §19.503 of Regulation #18 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Slaker (SN-03) gases which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #46.
46. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, daily observations of the opacity from the Slaker shall be conducted by personnel familiar with the permittee's visible emissions. The permittee shall accept such observations for demonstration of compliance. The permittee shall maintain personnel trained, but not necessarily certified, in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Department personnel upon request.

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- A. The date and time of the observation.
- B. If visible emissions which appeared to be above the permitted limit were detected.
- C. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedence of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
- D. The name of the person conducting the opacity observations.
47. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #55.

Source No.	Description	Pollutant	lb/hr	ton/yr
03	Lime Slaker	PM	3.0	13.1
		Acetaldehyde	0.31	1.19
		Acetone	0.11	0.43
		Ammonia	1.60	6.26
		Benzene	0.01	0.01
		MEK	0.01	0.03
		Styrene	0.01	0.03
		Toluene	0.01	0.01
		Methanol	0.31	1.19
10	Fresh Lime Storage Bin	PM	55.0	5.0
14	Lime Mud Filter Vacuum Pump	Acetone	0.02	0.05
		Acetaldehyde	0.01	0.01
		Methanol	0.20	0.79
		MEK	0.01	0.03
		Styrene	0.01	0.01
		Toluene	0.01	0.01
23	Dregs Mixer	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01

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Source No.	Description	Pollutant	lb/hr	ton/yr
24	Dregs Washer	Styrene	0.01	0.01
		Toluene	0.01	0.01
		Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01
27	White Liquor Clarifier No. 2	Acetone	0.01	0.02
		Benzene	0.01	0.01
		Formaldehyde	0.02	0.05
		Methanol	0.09	0.34
		MEK	0.01	0.01
		Styrene	0.01	0.01
31	Green Liquor Clarifier No. 2	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	.01
35	Green Liquor Clarifier No. 1	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01

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SN-20, 21, 22, 28, 29, 30 and 32

Caustic Area Tanks

Source Description

All of the following Caustic Area Tanks were installed prior to 1976. The Weak Wash Storage Tank (SN-32) stores weak wash which is diluted green liquor. The Multi Purpose Tank (SN-22) stores weak wash, white liquor or green liquor. The specifications of the Caustic Area Tanks are listed in the following table.

Source No.	Description	Size (gallons)
20	Green Liquor Storage Tank North	70,000
21	Green Liquor Storage Tank South	70,000
22	Multi-Purpose Tank	70,000
28	East White Liquor Storage Tank	70,000
29	West White Liquor Storage Tank	70,000
30	White Liquor Measuring Tank	9,490
32	Weak Wash Storage Tank	70,000

Specific Conditions

48. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #55.

Source No.	Description	Pollutant	lb/hr	ton/yr
20	Green Liquor Storage Tank North	VOC	0.8	3.1
		TRS	0.1	0.1
21	Green Liquor Storage Tank South	VOC	0.8	3.1
		TRS	0.1	0.1
22	Multi Purpose Tank	VOC	0.8	3.1
		TRS	0.1	0.1
28	East White Liquor	VOC	0.2	0.5

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Source No.	Description	Pollutant	lb/hr	ton/yr
	Storage Tank			
29	West White Liquor Storage Tank	VOC	0.2	0.5
30	White Liquor Measuring Tank	VOC	0.2	0.5
32	Weak Wash Storage Tank	VOC	0.8	3.1
		TRS	0.1	0.1

49. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #55.

Source No.	Description	Pollutant	lb/hr	ton/yr
20	Green Liquor Storage Tank North	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01
21	Green Liquor Storage Tank South	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01
22	Multi Purpose Tank	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01

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Source No.	Description	Pollutant	lb/hr	ton/yr
		Styrene	0.01	0.01
		Toluene	0.01	0.01
28	East White Liquor Storage Tank and Temporary Railcars	Acetone	0.01	0.02
		Benzene	0.01	0.01
		Formaldehyde	0.02	0.05
		Methanol	0.09	0.34
		MEK	0.01	0.01
		Styrene	0.01	.01
29	West White Liquor Storage Tank	Acetone	0.01	0.02
		Benzene	0.01	0.01
		Formaldehyde	0.02	0.05
		Methanol	0.09	0.34
		MEK	0.01	0.01
		Styrene	0.01	0.01
30	White Liquor Measuring Tank	Acetone	0.01	0.02
		Benzene	0.01	0.01
		Formaldehyde	0.02	0.05
		Methanol	0.09	0.34
		MEK	0.01	0.01
		Styrene	0.01	0.01
32	Weak Wash Storage Tank	Acetone	0.01	0.04
		Methanol	0.75	2.91
		Acetaldehyde	0.01	0.01
		MEK	0.01	0.01
		Styrene	0.01	0.01
		Toluene	0.01	0.01

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**SN-01
Lime Kiln**

Source Description

The Lime Kiln at Delta has a heat input capacity of 65 million Btu per hour. The Lime Kiln was installed prior to 1976; therefore, it is not subject to NSPS Subpart BB. The Lime Kiln is equipped with three scrubbers and is natural gas fired. The Lime Kiln is currently the only incineration device for non-condensable gases (NCGs) at Delta. NESHAP Subpart S requires that all Low Volume High Concentration (LVHC) and High Volume Low Concentration (HVLC) gases be controlled within a closed-vent system and incinerated. These gases are sent to the Lime Kiln. Applicable conditions for the HVLC/LVHC system are listed as a separate source group and begin on page #105 and the source group for the Condensate Collection System begins on page #110.

Green liquor passes through a clarifier, which removes dregs before it is sent to storage. Clarified green liquor is then sent to the slaker where fresh lime and reburned lime are added to form sodium hydroxide and calcium carbonate. The dregs are washed with water and discarded to the sewer.

The white liquor slurry then passes through the causticizers before entering a clarifier. Here lime mud is separated from the white liquor. The white liquor is sent to storage to be used in the pulping process. Dilute lime mud is then washed with water, the cake is collected in a filter, and the cake is fed to the lime kiln. The reburned lime is sent to storage.

Heat is provided to the lime kiln by burning natural gas along with non-condensable gas (NCG) collected from the mill. Flue gases from the lime kiln pass through three scrubbers in series to remove dust before being discharged to the atmosphere.

Effective March 13, 2004, the Lime Kiln (SN-01) must comply with applicable provisions of NESHAP Subpart MM - *for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills* (Appendix G). Compliance with Subpart MM will take the place of the CAM plan for SN-01 upon the compliance date.

Specific Conditions

50. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions

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#3, #54 and #55.

Pollutant	lb/hr	ton/yr
PM ₁₀	10.4	45.5
SO ₂	6.3	9.2
VOC	3.4	12.7
CO	2.1	8.2
NO _x	12.5	48.8
Pb	0.003	0.011

51. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Data from the CEMS (required by Specific Condition #63) will be used to demonstrate compliance with the TRS concentration limit (ppm) listed below. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3, #54 and #55.

Pollutant	lb/hr	ton/yr
TRS	3.4	14.6
	40 ppm measured as H ₂ S on a dry basis and on a twelve hour average, corrected to 10% volume oxygen	

52. Pursuant to §19.503 of Regulation #18 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Lime Kiln gases which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #57.
53. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded.

Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #3, #54 and #55.

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Pollutant	lb/hr	ton/yr
PM	10.4	45.5
Acetaldehyde	0.09	0.34
Acetone	0.14	0.52
Acrolein	0.01	0.02
Barium	0.01	0.01
Benzene	0.01	0.03
Bromomethane	0.01	0.01
Carbon Disulfide	0.01	0.01
Chloromethane	0.01	0.04
Formaldehyde	0.07	0.27
Chromium +6	0.01	0.01
Copper	0.01	0.01
Methanol	1.46	5.02
MEK	0.02	0.05
2-Methylphenol	0.01	0.03
Phenol	0.01	0.02
Phosphorus	0.05	0.17
Silver	0.01	0.01
Styrene	0.01	0.02
Thallium	0.01	0.01
Toluene	0.02	0.06
Zinc	0.01	0.02

54. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas shall be the only fuel used in the Lime Kiln.
55. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not use in excess of 4,143 tons of lime (reburned lime + fresh lime) per month or 44,717 tons of

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lime (reburned lime + fresh lime) per twelve consecutive months.

56. Pursuant to §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, §18.1004 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #55. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7.
57. Pursuant to §19.303 of Regulation #19, 40 CFR Part 64, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor the pressure drop across the AP Tech (Venturi) scrubber. The pressure drop shall be maintained at a minimum of 8 inches of water.
 1. When the Lime Kiln is operating the pressure drop across the scrubber will be monitored once per 8-hour shift and recorded a minimum of 2 shifts in a 24-hour period (approximately 80%).
 2. If one data point recorded in a 24-hour period is below the permitted minimum of 8 inches of water for the pressure drop across the scrubber, all data recorded for that 24-hour period will be averaged. The average pressure drop across the scrubber will be maintained within the permitted minimum.
 3. Any 24-hour period that has less than two data recordings or has an average pressure drop below the permitted minimum will be considered a permit violation and shall be reported as one deviation in the Annual Compliance Certification Report.
58. Pursuant to §19.303 of Regulation #19, 40 CFR Part 64, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor the liquid flow rate across the AP Tech (Venturi) scrubber. The liquid flow rate shall be maintained at a minimum of 240 gpm.
 1. When the Lime Kiln is operating, the liquid flow rate across the scrubber will be monitored once per 8-hour shift and recorded a minimum of 2 shifts in a 24-hour period (approximately 80%).
 2. If one data point recorded in a 24-hour period is below the permitted minimum liquid flow rate of 240 gpm across the scrubber, all data recorded for that 24-hour period will be averaged. The average pressure drop across the scrubber will be maintained within the permitted minimum.
 3. Any 24-hour period that has less than two data recordings or has an

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average pressure drop below the permitted minimum will be considered a permit violation and shall be reported as one deviation in the Annual Compliance Certification Report.

59. Pursuant to §19.705 of Regulation #19, 40 CFR Part 64, and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Conditions 57 and 58. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.
60. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain at least 1200°F for at least 0.5 seconds at all times for gases in the Lime Kiln. The NCG burner at the Lime Kiln is the primary incineration device for non-condensable gases (NCGs).
61. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the Lime Kiln is to be operated at all times. If, for any reason, the Lime Kiln is shut down, the date, time, duration of shutdown, and the reason for shutdown will be recorded. Records shall be kept on site and shall be provided to Department personnel upon request. If the shutdown is not categorized as a startup, shutdown, or malfunction, it will contribute to the four percent limit outlined in Specific Condition #62.
62. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, periods of excess emissions at the closed-vent system shall not be a violation provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed four percent. Delta will not be required to install a backup incinerator as part of the 111d plan as long as Delta complies with the MACT standards set forth in 40 CFR Part 63 Subpart S. In the event that the four percent downtime requirement is exceeded, Delta will be required to install a backup incineration device within 6 months.
63. Pursuant to §19.801 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall continue to operate and maintain CEMs which record the TRS concentration of gases leaving the Lime Kiln. The TRS monitors shall be operated in accordance with the requirements of 40 CFR 60.284 (date of installation not withstanding) and the Department Continuous Emission Monitoring Systems Conditions (Appendix A).
64. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.443(d)(4), the permittee shall introduce the LVHC and HVLC HAP emission streams from the closed-vent system into the flame zone of the Lime Kiln or with the primary fuel.

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65. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.443(e)(3), periods of excess emissions shall not be a violation provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed four percent.

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SN-41
Wastewater Treatment Aeration Basin

Source Description

Effluent from the mill flows through a ditch to a clarifier where solids are allowed to settle. Clarified water flows to the aeration pond where aerators provide agitation and oxygen to the water. Treated water is discharged to the Arkansas River.

The pulping condensate streams from some, but not necessarily all, of the following equipment will be collected in a hard piping system and routed to the Aeration Basin (SN-41) for biological treatment: Multiple Effect Evaporator Hotwell, Turpentine Underflow Standpipe, Blow Heat Accumulator Overflow, and NCG HVLC Condenser Seal Tank.

Emissions are not based on production, throughput, or usage rates. The NCASI Organic Compound Elimination Pathway Model was used to estimate emissions from Delta's wastewater treatment aeration basin.

Specific Conditions

66. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

Pollutant	lb/hr	ton/yr
VOC	--	13.6
TRS	--	292.1

67. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded.

Pollutant	lb/hr	ton/yr
Methanol	--	13.5
Formaldehyde	--	0.02

68. Pursuant to §19.703 of Regulation #19, 40 CFR Part 52, §18.1003 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, once every calendar quarter, the permittee shall model emissions from the Aeration Basin to demonstrate compliance

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with the permitted emission limits. The permittee shall take a 24-hour composite sample of water entering the Aeration Basin and the sample shall be analyzed for methanol, formaldehyde and total sulfides. The composite sample will consist of a sufficient number of grab samples to accurately characterize the water over a 24-hour period. On the day the composite sample is taken, the permittee shall also record the daily flow rate of the water leaving the Aeration Basin. The concentration and flow data shall be used as inputs for the model. The current physical and operational characteristics of the Aeration Basin shall also be used as model inputs.

The permittee shall maintain records of sample concentration, flow rate data, model results, and total quarterly emissions calculations. Compliance shall be determined using a 4 quarter rolling sum. Records shall be updated by the last day of the month following the calendar quarter, kept on site and provided to Department personnel upon request.

69. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.446(b), the pulping process condensates from some but not necessarily all of the following equipment shall be sent through a hard piping system and delivered to the Aeration Basin for biological treatment:
- A. Multiple Effect Evaporator Hotwell;
 - B. Turpentine Underflow Standpipe;
 - C. Blow Heat Accumulator Overflow;
 - D. NCG HVLC Condenser Seal Tank.
70. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.446(e)(2), the permittee shall discharge the collected pulping process condensate streams below the liquid surface of the Aeration Basin and treat the pulping process condensates to meet the requirements specified in (A) or (B) below:
- A. On an individual HAP basis, using the procedures specified in 63.457(l)(1) or (2), either:
 - 1. Reduce methanol by 92 percent or more by weight and reduce acetaldehyde, methyl ethyl ketone (MEK), and propionaldehyde each by 99 percent or more by weight; or
 - 2. Remove 3.3 kilograms or more of methanol per megagram (6.6 pounds per ton) of ODP, remove 0.034 kilograms or more of acetaldehyde per megagram (0.067 pounds per ton) of ODP, remove 0.017 kilograms or more of MEK per megagram (0.034 pounds per ton) of ODP, and remove 0.003 kilograms or more of propionaldehyde per megagram (0.0067 pounds per ton) of ODP.
 - B. On a methanol basis, using the test procedures in 63.457(l)(3) or (4) to determine the additional condensates to be treated, either:

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1. Reduce methanol by 92 percent or more by weight; or
 2. Remove 3.3 kilograms or more of methanol per megagram (6.6 pounds per ton) of ODP.
71. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(j)(1) and (2), the permittee shall perform the daily monitoring procedures specified in either (a) or (b) below:
 - A. On a daily basis, monitor the following parameters for the Aeration Basin:
 1. Composite daily sample or outlet soluble BOD concentration to monitor for maximum daily and maximum monthly average;
 2. Mixed liquor volatile suspended solids;
 3. Horsepower of aerator unit(s);
 4. Inlet liquid flow;
 5. Liquid temperature;
 6. Comply with the monitoring and sampling requirements contained within 63.453(j)(1)(ii).
 - B. As an alternative to the monitoring requirements in part (A) of this condition, conduct daily monitoring of the site-specific parameters established according to the procedures specified in Specific Condition #73.
72. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(j)(3), the permittee shall conduct a performance test within 45 days after the beginning of each quarter and meet the applicable emission limit outlined in Specific Condition #73.
 - A. The performance test conducted in the first quarter (annually) shall be performed for total HAP and the percent reduction or mass removal obtained from the test shall be at least as great as the total HAP percent reduction or mass removal specified in Specific Condition #70.
 - B. The remaining quarterly performance tests shall be performed for either methanol or total HAP and the percent reduction or mass removal obtained from the test shall be at least as great as the methanol or total HAP percent reduction or mass removal determined in the previous first-quarter test specified in part (A) of this condition..
73. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(n), to establish or reestablish the value for each operating parameter required to be monitored under Specific Condition #71 and #72, the permittee shall use the following procedures:
 - A. The operating parameter shall be continuously recorded during the initial performance test or any subsequent performance tests;

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- 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 Department's approval the rationale for selecting the monitoring parameters necessary to comply with Specific Condition #71;
 - D. Provide for the Department's approval the rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the applicable emission standard.
74. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(o), operation of the basin in conjunction with the condensate collection system below minimum operation parameter values or above maximum operating parameter values established under Subpart S or failure to perform procedures required shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions. Instances where emissions are in excess of the appropriate standard, but are caused by events identified in the mill's Startup, Shutdown, and Malfunction plan (required by 40 CFR Part 63.6), will not be considered in the calculation of periods of excess emissions.
75. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(p), the permittee shall perform all requirements of 63.453(p)(1) and (2) at any point in which monitoring parameters specified in Specific Condition #71 are below minimum operating parameter values or above maximum operating parameter values.
76. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(c)(1), liquid samples shall be collected using the sampling procedures specified in Method 305 of Part 60, Appendix A, including the following:
- A. Where feasible, samples shall be taken from an enclosed pipe prior to the liquid stream being exposed to the atmosphere;
 - B. Otherwise, samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of HAP compounds prior to sampling.
77. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(c)(2), the volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements.

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78. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(c)(3), when gathering liquid samples for HAP analysis, the permittee shall conduct a minimum of three test runs that are representative of normal conditions and average the resulting pollutant concentrations. The minimum sampling time for each test run shall be 1 hour and the grab or composite samples shall be taken at approximately equally spaced intervals over the 1 hour test run period. The owner or operator shall use one of the following procedures to determine total HAP or methanol concentration:
- A. Method 305 in Appendix A adjusted using the equation contained in 63.457(c)(3)(i); or
 - B. NCASI Method DI/MEOH-94, 02, Methanol in Process Liquids by GC/FID, August 1998, Methods Manual, NCASI, Research Triangle Park, NC, for determining methanol concentrations.
 - C. NCASI Method DI/HAPS-99,01, Selected HAPS in condensates by GC/FID, to analyze methanol, acetaldehyde, methyl ethyl ketone, and propionaldehyde in condensate streams. A copy of EPA approval letter can be found in Appendix F.
79. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(c)(4), the permittee shall use Method 405.1 of Part 136 to determine soluble BOD in the effluent stream from a biological treatment unit with the modifications contained in 63.457(c)(4)(i) and (ii).
80. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(c)(5) and (6), the permittee shall perform the procedures contained within 63.457(c)(5) and (6) if the measured concentration HAP in a liquid stream is not detectable.
81. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(g), the permittee shall measure the total HAP concentration as methanol except as specified in Specific Condition #70.
82. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(j), compliance for the mass flow rate and mass per megagram of ODP for liquid streams shall be demonstrated by using the equations outlined in 63.457(j)(1) and (2).
83. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(l), to determine compliance with an open biological treatment system option in Specific Condition #70, the permittee shall comply with 63.457(l)(1) through (5).
84. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.457(n), the permittee shall store inlet and outlet grab samples required to be collected in Specific Condition #82 at 4°C (40°F) to minimize the biodegradation of the organic compounds in the sample.

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SN-05
Hog Fuel Boiler

Source Description

The Hog Fuel Boiler is a 160 million Btu per hour boiler. The boiler is able to burn natural gas and hog fuel (including bark, DLK scrap, secondary fiber rejects, and sawdust used for cleaning small oil spills). The Hog Fuel Boiler was installed prior to 1976. The boiler has never been modified and is therefore not subject to regulation under NSPS Subpart Db. The boiler is equipped with a scrubber and a cyclone. The scrubber was installed in 1985.

Specific Conditions

85. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #88 and #89.

Pollutant	lb/hr	ton/yr
PM ₁₀	53.6	234.7
SO ₂	4.0	17.6
VOC	7.1	31.1
CO	197.6	865.2
NO _x	35.2	154.2
Pb	0.008	0.034

86. Pursuant to §19.503 of Regulation #18 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Hog Fuel Boiler gases which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #91.
87. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Conditions #88 and #89.

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Pollutant	lb/hr	ton/yr
PM	53.6	234.7
Acetone	0.01	0.03
Acetaldehyde	0.02	0.08
Benzene	0.01	0.05
Carbon Disulfide	0.03	0.10
Chloromethane	0.01	0.04
Hydrochloric Acid	0.06	0.24
MEK	0.01	0.01
Phenol	0.01	0.01
Styrene	0.01	0.02
Toluene	0.01	0.01
Mercury	0.006	0.024
Selenium	0.01	0.02
Acrolein	0.01	0.01
Arsenic	0.01	0.01
Barium	0.06	0.23
Beryllium	0.03	0.10
Cadmium	0.01	0.01
Chromium +6	0.01	0.01
Copper	0.01	0.03
Formaldehyde	0.06	0.24
Manganese	0.12	0.53
Methanol	0.23	0.99
Phosphorus	0.03	0.12

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Pollutant	lb/hr	ton/yr
Silver	0.01	0.02
Zinc	0.05	0.22

88. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas and woodwaste shall be the only fuels used in the Hog Fuel Boiler. The Hog Fuel Boiler is only capable of firing natural gas and woodwaste. The permittee shall maintain records which demonstrate that natural gas and woodwaste are the only fuels fired at the Hog Fuel boiler. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.
89. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not burn in excess of 10,044 tons of woodwaste per month or 109,500 tons of woodwaste per twelve consecutive months in the Hog Fuel Boiler.
90. Pursuant to §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, §18.1004 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #89. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7.
91. Pursuant to §19.303 of Regulation #19, 40 CFR Part 64, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor the liquid flow rate to the Hog Fuel Boiler (SN-05) scrubber. The flow rate shall be maintained at a minimum of 150 gpm. When the Hog Fuel Boiler is operating the scrubber liquid flow rate will be continuously monitored.
92. Pursuant to §19.705 of Regulation #19, 40 CFR Part 64, and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Condition #91. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.
93. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Hog Fuel Boiler for PM/PM₁₀ during the first year of each 5-year permit cycle.

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Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5. Testing shall be used to demonstrate compliance with permitted emission rates.

94. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Hog Fuel Boiler for CO during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 10. Testing shall be used to demonstrate compliance with permitted emission rates.
95. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test the Hog Fuel Boiler for NO_x during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E. Testing shall be used to demonstrate compliance with permitted emission rates.

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SN-06
Power Boiler

Source Description

The Power Boiler is a 80 million Btu per hour boiler which fires solely natural gas. The boiler was installed at Delta prior to 1976 and therefore is not subject to regulation under NSPS Subpart Dc.

Specific Conditions

96. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #98.

Pollutant	lb/hr	ton/yr
PM ₁₀	0.6	2.6
SO ₂	0.1	0.2
VOC	0.5	1.9
CO	6.4	28.1
NO _x	7.7	33.4

97. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the Power Boiler gases which exhibit an opacity greater than 5%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #98.
98. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas shall be the only fuel used in the Power Boiler.

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99. Pursuant to §18.801 of Regulation #1 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #98.

Pollutant	lb/hr	ton/yr
PM	0.6	2.6

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SN-50 thru 54
Non-Point Source Emissions

Specific Conditions

100. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #11.

Source No.	Description	Pollutant	lb/hr	ton/yr
50	Chip and Hogged Fuel Storage Piles	PM ₁₀	--	0.1
		VOC	--	4.8
51	Saveall Tank	VOC	5.5 ⁴	19.6 ⁴
		TRS	0.1	0.1
52	Outside White Water Chest	VOC	5.5 ⁴	19.6 ⁴
		TRS	0.1	0.1
53	Landfill	CO	--	0.1
		VOC	--	8.6
		TRS	--	0.1
54	DAF Unit	VOC	5.5 ⁴	19.6 ⁴
		TRS	0.1	0.1

⁴ Includes total methanol (5.2 lb/hr and 18.3 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

101. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates in the following table will not be exceeded. Hourly and annual emission rates set forth in the following table are limited by Specific Condition #11.

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Source No.	Description	Pollutant	lb/hr	ton/yr
50	Chip and Hogged Fuel Storage Piles	PM	--	0.1
51	Saveall Tank	Acetone	0.13	0.44
		Acrolein	0.02	0.07
		Methanol	5.15 ⁴	18.25 ⁴
		Acetaldehyde	0.15	0.53
		Benzene	0.01	0.01
		MEK	0.03	0.09
		Styrene	0.01	0.01
52	Outside White Water Chest	Acetone	0.13	0.44
		Acrolein	0.02	0.07
		Methanol	5.15 ⁴	18.25 ⁴
		Acetaldehyde	0.15	0.53
		Benzene	0.01	0.01
		MEK	0.03	0.09
		Styrene	0.01	0.01
53	Landfill	Acetone	--	0.02
		Acrylonitrile	--	0.01
		Benzene	--	0.01
		Carbon Disulfide	--	0.01
		Chloromethane	--	.01
		MEK	--	0.02
		Toluene	--	0.09
		Mercury	--	0.001

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Source No.	Description	Pollutant	lb/hr	ton/yr
54	DAF Unit	Acetone	0.13	0.44
		Acrolein	0.02	0.07
		Acetaldehyde	0.15	0.53
		Benzene	0.01	0.01
		MEK	0.03	0.09
		Styrene	0.01	0.01
		Methanol	5.15 ⁴	18.25 ⁴

⁴ Includes total methanol (5.2 lb/hr and 18.3 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

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SN-100 thru 108
Mid-America Packaging

Source Description

The natural gas fired boiler (SN-100) used at MAP is a 1.0 million Btu per hour boiler.

Presses No. 1 and No. 2 are not vented directly to the atmosphere. Emissions from these presses are considered fugitive emissions within the building.

The heat input capacity of the No. 3 Press Tunnel Dryer (SN-102) and the Lacquer Dryer (SN-103) is 1.2 million Btu per hour each. Both the No. 3 Press Dryer and Lacquer Dryer are natural gas fired.

The heat input capacity of the No. 4 Press Between Decks Dryer Vent (SN-104) is 0.4 million Btu per hour. The heat input capacity of the No. 4 Press Tunnel Dryer Vent (SN-105) and the Lacquer Dryer Vent (SN-107) is 1.2 million Btu per hour each. The No. 4 Press Between Decks Dryer, the Tunnel Dryer Vent and the Lacquer Dryer Vent are all natural gas fired.

Mid-America will comply with the Incidental Printing Exemption of NESHAP Subpart KK – National Emission Standards for the Printing and Publishing Industry.

Individual HAP emissions are not specifically permitted. The MAP facility's HAP emissions are limited by a TLV table.

Specific Conditions

102. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table and associated footnotes.

The hourly and annual emission rates from natural gas combustion have been based on maximum capacity. The hourly emission rates from adhesive, ink & ink additives, and lacquer usage have been based on maximum capacity. Compliance with the annual emission rates from adhesive, ink & ink additives, and lacquer usage will be demonstrated by compliance with Specific Condition #104. Compliance with the emission rates for SN-101 will be demonstrated by compliance with Specific Condition #109.

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Source No.	Description	Pollutant	lb/hr	ton/yr
100	Natural Gas Fired Boiler	PM ₁₀	0.1	0.1
		SO ₂	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.4
		NO _x	0.1	0.5
101	Mixer Hood Exhaust	PM ₁₀	2.8	6.3
102 thru 108	No. 3 Press (Tunnel Dryer Vent and Lacquer Dryer Vent)	PM ₁₀	0.5	0.5
		SO ₂	0.5	0.5
		VOC	84.5	60.0 ¹
		CO	0.5	2.2
		NO _x	0.9	3.8
	No. 4 Press (Between Decks Dryer Vent, Tunnel Blower Vent, Auxiliary Blower Vent, and Lacquer Dryer Vent)			
	General Building Ventilation			

¹ Emissions from natural gas combustion account for 0.5 ton/yr of this total.

103. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table and its associated footnotes.

The hourly and annual emission rates from natural gas combustion have been based on maximum capacity. The hourly emission rates from adhesive, ink & ink additives, and lacquer usage have been based on maximum capacity. Compliance with the annual emission rates from adhesive, ink & ink additives, and lacquer usage will be demonstrated by compliance with Specific Condition #104. Compliance with the emission rates for SN-101 will be demonstrated by compliance with Specific Condition #109.

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Source No.	Description	Pollutant	lb/hr	ton/yr
100	Natural Gas Fired Boiler	PM	0.1	0.1
101	Mixer Hood Exhaust	PM	2.8	6.3
102 thru 108	No. 3 Press (Tunnel Dryer Vent and Lacquer Dryer Vent)	PM	0.5	0.5
		HAP ³	84.5	24.5
		Ammonia	4.4	19.3
	No. 4 Press (Between Decks Dryer Vent, Tunnel Blower Vent, Auxiliary Blower Vent, and Lacquer Dryer Vent)			
	General Building Ventilation			

¹ The limit for any combination of HAPs applied to product on the flexographic printing presses is 5.29 tons per twelve consecutive months.

² The limit for the total combination of HAPs is 24.5 tons per twelve consecutive months, which includes the 5.29 tons per twelve consecutive months total HAPs applied to product on the flexographic presses.

³ Because the raw materials at SN-102 through SN-108 contain only organic HAPs, the hourly emission rate has been set to equal the hourly VOC emission rate for these sources.

Annual VOC and HAP Emission Rates

104. Pursuant to §19.705 of Regulation #19, 40 CFR Part 52 Subpart E, §18.1004 of Regulation #18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, for SN-102 thru SN-108, the permittee shall calculate total VOC and HAP emissions each month based on that month's usage of adhesives, ink & ink additives, lacquers, and cleaners. Monthly emissions will be compared to the annual limit on a twelve month rolling basis.

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The VOC and HAP emission records, including exempted HAP usage and emissions, shall be reported in accordance with General Provision 7.

Opacity Limits

105. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the Natural Gas Fired Boiler (SN-100), the No. 3 Press Tunnel Dryer Vent (SN-102), the No. 3 Lacquer Dryer Vent (SN-103), the No. 4 Press Between Decks Dryer Vent (SN-104), the No. 4 Press Tunnel Dryer Vent (SN-105) or the No. 4 Press Lacquer Dryer Vent (SN-107) gases which exhibit an opacity greater than 5%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limits shall be demonstrated by compliance with Specific Condition #108.
106. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Mixer Hood Exhaust (SN-101) gases which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with the opacity limit shall be demonstrated by compliance with Specific Condition #107.
107. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, weekly observations of the opacity from the Mixer Hood Exhaust shall be conducted by personnel familiar with the permittee's visible emissions. The permittee shall accept such observations for demonstration of compliance. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this Specific Condition. These records shall be updated daily, kept on site, and made available to Department personnel upon request.
 - A. The date and time of the observation.
 - B. If visible emissions which appeared to be above the permitted limit were detected.
 - C. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.

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- D. The name of the person conducting the opacity observations.

Natural Gas Usage

108. Pursuant to §19.705 of Regulation #19, §18.1004 of Regulation #18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, natural gas shall be the only fuel used for the Natural Gas Fired Boiler (SN-100), No. 3 Press Tunnel Dryer (SN-102), the No. 3 Press Lacquer Dryer (SN-103), the No. 4 Press Between Decks Dryer Vent (SN-104), the No. 4 Press Tunnel Dryer Vent (SN-105) and the No. 4 Press Lacquer Dryer Vent (SN-107).

Starch Usage

109. Pursuant to §19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not use in excess of 260,480 pounds of starch per month or 3,124,800 pounds of starch per twelve consecutive months.
110. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #109. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7.

NESHAP Subpart KK

111. Mid-America Packaging is subject to and shall comply with applicable provisions of 40 CFR Part 63 Subpart A – General Provisions and 40 CFR Part 63 Subpart KK – National Emission Standards for the Printing and Publishing Industry. A copy of Subpart KK is provided in Appendix D. Applicable provisions include, but are not limited to, the following:
- A. Pursuant to 40 CFR §63.821(b)(2), the permittee shall apply no more than 881 lb per month, for every month, of organic HAP on product and packaging rotogravure or wide-web flexographic printing presses.
 - B. Pursuant to 40 CFR §63.829(e)(2), the permittee shall maintain records of the total volume and organic HAP content of each material applied on product and packaging rotogravure or wide-web flexographic printing presses during each month.

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C. Pursuant to 40 CFR §63.830(b)(1), the permittee shall submit the reports specified to the Administrator: an initial notification required in 40 CFR §63.9(b).

112. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the facility-wide Hazardous Air Pollutant (HAP) content limits set forth in the following tables. Materials which are not compliant with the requirements of this table may be exempted from this condition provided they meet all the requirements of Specific Condition #114.

Minimum HAP TLV (mg/m ³)	Maximum Allowable Content (wt %)
99.11	100%
89.20	90%
79.29	80%
69.38	70%
59.47	60%
49.56	50%
39.64	40%
29.73	30%

Minimum HAP TLV (mg/m ³)	Maximum Allowable Content (wt %)
19.82	20%
9.91	10%
4.96	5%
3.96	4%
2.97	3%
1.98	2%
0.99	1%
*	>1%

*Several materials used contain trace amounts (<1%) of HAPs with low TLVs such as acrylamide. Such HAPs in trace amounts are not covered under the limits of this table.

113. Pursuant to §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits set in Specific Condition #112, and which may be used by the Department for enforcement purposes. Compliance shall be determined by inspecting the ACGIH Threshold Limit Values (TLVs) as listed on current MSDS, or in the most recently published ACGIH handbook of TLVs and Biological Exposure Indices (BEIs) and properly noting on the monthly HAP records whether the material in question is compliant with the table contained in Specific Condition #112. These records shall be maintained on site and shall be provided to the Department upon request.

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114. Pursuant to §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, certain HAP containing materials that are unable to meet the requirements of Specific Condition #112 may be exempted provided that all of the following conditions are met. Any exemptions that are claimed must be noted in the HAP records.
- A. Emissions of exempted pollutants shall not exceed 200 lb of any single HAP during any one month.
 - B. This exemption may only be claimed if the source material of the HAP is used for small quantity application. This exemption may not be claimed for any HAP emissions resulting from usages of bulk process materials (such as inks) that are used in large quantities on a regular basis. The Department shall reserve the right to determine whether a material qualifies under this condition.
 - C. Total emissions of any single HAPs that are claimed as an exemption may not exceed 1 tpy and the combined HAP emissions that are claimed as an exemption may not exceed 2.5 tpy.

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HVLC/LVHC Closed-Vent System

Source Description

40 CFR Part 63, Subpart S requires that Pulp and Paper Mills install a system in which to control Low Volume High Concentration (LVHC) and High Volume Low Concentration (HVLC) gases. Vapors from the following sources are routed through the closed-vent system and sent to the Lime Kiln for incineration:

LVHC Gases	Multiple Effect Evaporator Hotwell
	Turpentine Condensers
	Turpentine Decanter
	Blow Heat Secondary Condenser
	Foul Condensate Collection Tank
HVLC Gases	Brownstock Washers
	Foam Tank
	Black Liquor Filter
	Rejects Surge Tank
	Hot Stock Surge Tank

Delta is currently collecting several sources of LVHC gases. These gases are fed to the Lime Kiln (SN-01) for treatment. Emissions from the Evaporator Hotwell, Turpentine Decanter, Turpentine Condenser, and Blow Tank Secondary Condenser are currently collected and treated. The Foul Condensate Tank is collected and treated as well. Delta collects the gases, send them to a packed tower scrubber to recover sulfur for the process and destroy the gases in the Lime Kiln (SN-01).

The First through Forth Stage Washer Hoods are collectively called the Brown Stock Washer System. To comply with the MACT requirements, the HVLC gases will be collected and sent

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through the NCG HVLC Condenser and then to the NCG HVLC Heater to reduce moisture content, and destroy the gases in the Lime Kiln.

Specific Conditions

115. Pursuant to 40 CFR 70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the NCG pre-scrubber shall be operated at all times when LVHC gases are being collected and treated in the Lime Kiln (SN-01) except that the permittee may bypass this scrubber for 200 hours/year for maintenance activities.
116. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.443(c), the enclosures and closed-vent system shall meet the requirements specified in §63.450- Standards For Enclosures and Closed-Vent Systems; §63.453(k)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements.
 - A. Pursuant to §63.450(b), each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.
 - B. Pursuant to §63.450(c), each component of the closed-vent system that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d).
 - C. Pursuant to §63.450(d), each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations shall comply with either of the following requirements:
 1. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. In loop seals, temperature measurement is an acceptable method of demonstrating gas flow.

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2. For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.
3. Pursuant to §63.453(k), the closed-vent system shall comply with the following requirements:
 - a. Pursuant to §63.453(k)(1), for each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every 30 days to ensure the opening is maintained in the same closed and sealed position as during the performance test except when necessary to use the opening for sampling, inspection, maintenance, or repairs.
 - b. Pursuant to §63.453(k)(2), each closed-vent system shall be visually inspected every 30 days 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. Pursuant to §63.453(k)(3), for positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks measured initially and annually by complying with the following procedures found in §63.457(d):
 - (1) Method 21, of Part 60, appendix A;
 - (2) The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used;
 - (a) Zero air (less than 10 parts per million by volume of hydrocarbon in air) and;
 - (b) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

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- d. Pursuant to §63.453(k)(4), demonstrate initially and annually that each enclosure opening is maintained at negative pressure by using one of the following procedures found in §63.457(e):
 - (1) An anemometer to demonstrate flow into the enclosure opening;
 - (2) Measure the static pressure across the opening;
 - (3) Smoke tubes to demonstrate flow into the enclosure opening;
 - (4) Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.
 - e. Pursuant to §63.453(k)(5), the valve or closure mechanism on each bypass line that is not computer controlled shall be inspected at least once every 30 days 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. Pursuant to §63.453(k)(6), if an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, 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:
 - (1) A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.
 - (2) The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delays in corrective repairs beyond 15 calendar days are allowed in cases where the corrective actions or repairs are technically infeasible without a process unit shutdown or where the emissions resulting from immediate repair would be greater than the emissions likely to result from the delay of the repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.
- D. Pursuant to §63.454(b), for each applicable enclosure opening, closed-vent system, and closed collection system, the owner or operator shall prepare and

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maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

1. Date of inspection;
 2. The equipment type and identification;
 3. Results of negative pressure tests for enclosures;
 4. Results of leak detection tests
 5. The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);
 6. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
 7. Repair methods applied in each attempt to repair the defect or leak;
 8. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
 9. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
 10. The date of successful repair or the defect or leak;
 11. The position and duration of the opening of bypass line valves and the condition of any valve seals; and
 12. The duration of the use of bypass valves on computer controlled valves.
117. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.10(e)(3)(i), an excess emission and continuous monitoring system performance report shall be submitted to the EPA and to the Department semi-annually.

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Condensate Collection System

Source Description

The Condensate Collection System collects the condensates and recycles them while the gases are sent through a closed system for control. Because the non-condensable gases are sent to closed-vent system (and thus, sent to the Lime Kiln) for control, there are no emissions from this source.

118. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.446(b), the pulping process condensates from some but not necessarily all of the following equipment systems shall be treated to meet the requirements set forth in Specific Condition #119 through #126.
 - A. Multiple Effect Evaporator Hotwell;
 - B. Turpentine Underflow Standpipe;
 - C. Blow Heat Accumulator Overflow;
 - D. NCG HVLC Condenser Seal Tank.
119. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.446(c)(3), pulping process condensates from equipment systems listed in Specific Condition #118 shall be collected where the total HAP mass is at least 7.2 pounds of total HAP per ton of oven dried pulp.
120. Pursuant to 40 CFR 63.446(d)(1), the collected pulping process condensates shall be conveyed in a closed collection system that is designed and operated to meet the individual drain system requirements specified in 40 CFR 63.960, 63.961, and 63.962 of Subpart RR of this part except closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, instead of in accordance with 40 CFR 63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(B)(5)(iii). The closed collection system will meet the specified requirements by being a hard-piped individual drain system per 40 CFR 63.962 (a)(2). The Foul Condensate Collection Tank will be equipped with a water seal per 40 CFR 63.962(b)(2)(i)(A).
121. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.446(d)(2), the condensate tank located within the closed collection system must meet the following requirements:
 - A. The fixed roof and all openings (e.g. access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated with an instrument reading of less than 500 parts per million above background, and

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vented into a closed-vent system that meets the requirements of Specific Condition #116 for the HVLC system and routed to a control device that meets the conditions of Specific Condition #64 for the Lime Kiln as a control device.

- B. Each opening shall be maintained in a closed, sealed position (e.g. covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.
122. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(l), the closed condensate system shall meet the requirements specified in §63.453(a) and (i) CMS Requirements; §63.453(l)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements.
- A. Pursuant to §63.453(a) and (i), the permittee shall install, calibrate, certify, operate, and maintain (according to manufacturer's specifications) a continuous monitoring system (CMS) to measure the appropriate parameters that shall be submitted to the Department prior to the initial performance test.
 - B. Pursuant to §63.453(l)(1), the permittee shall conduct a visual inspection of each condensate closed collection system at least every 30 days. The visual inspections shall verify that the appropriate liquid level in the water seal on the Foul Condensate Collection Tank are being maintained and identify any other defects that could reduce water seal control effectiveness. In addition, the permittee shall visually inspect the unburied portion of the collection system piping to verify that no defects are present.
 - C. Pursuant to §63.453(l)(2), the Foul Condensate Collection Tank shall be operated with no detectable leaks as specified in §63.446(d)(2)(i) measured initially and annually by the following procedures specified in §63.457(d):
 - 1. Method 21, of 40 CFR Part 60, Appendix A;
 - 2. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used;
 - a. Zero air (less than 10 parts per million by volume of hydrocarbon in air) and;

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- b. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.
 - D. Pursuant to §63.453(l)(3), if an inspection required by §63.453(l)(1) identifies visible defects in the closed collection system, or if an instrument reading of 500 parts per million or greater above background is measured, the first efforts at repair of the defect will be no later than 5 calendar days after detection. Repair will be completed as soon as possible but no later than 15 calendar days after detection unless the repair of the defect requires emptying or temporary removal from service of the collection system. The defect will be repaired the next time the process generating the wastewater stops operation. The repair of the defect will be completed before the process resumes operation.
 - E. Pursuant to §63.454(b), 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 and shall record the following information for each inspection:
 - 1. Date of inspection;
 - 2. The equipment type and identification;
 - 3. Results of negative pressure tests for enclosures;
 - 4. Results of leak detection tests
 - 5. The nature of the defect or leak and the method of detection, i.e. visual inspection or instrument detection;
 - 6. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
 - 7. Repair methods applied in each attempt to repair the defect or leak;
 - 8. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
 - 9. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
 - 10. The date of successful repair or the defect or leak;
 - 11. The position and duration of the opening of bypass line valves and the condition of any valve seals; and
 - 12. The duration of the use of bypass valves on computer controlled valves.
123. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, a CMS shall be installed and operated in accordance with a compliance schedule for the condensate collection system.

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124. Pursuant to 40 CFR Part 63.453(n), to establish or reestablish the value for each operating parameter required to be monitored under 63.453(l), the permittee shall use the following procedures:
 - A. The operating parameter shall be continuously recorded during the initial performance test or any subsequent performance tests.
 - B. Determination 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 recommendation.
125. Pursuant to 40 CFR 63.457(j), the permittee shall use the equations contained within 63.457(j)(1) and (2) to demonstrate compliance with the mass flow rate and mass per megagram ODP requirements for liquid streams specified in 63.446.
126. Pursuant to §19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.453(o), operation of the condensate collection system below minimum operation parameter values or above maximum operating parameter values established under Subpart S or failure to perform procedures required shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions. Instances where emissions are in excess of the appropriate standard, but are caused by events identified in the mill's Startup, Shutdown, and Malfunction plan (required by 40 CFR part 63.6) will not be considered in the calculation of periods of excess emissions.

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SECTION V: PLANTWIDE CONDITIONS

1. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance if the work involved in the construction or modification is suspended for a total of 18 months or more.
3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 - A. Sampling ports adequate for applicable test methods
 - B. Safe sampling platforms
 - C. Safe access to sampling platforms
 - D. Utilities for sampling and testing equipment
5. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

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6. Pursuant to Regulation #26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.
7. Pursuant to §18.801 of Regulation #18, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
8. Pursuant to §18.901 of Regulation #18, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants from becoming airborne.
9. Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, all monitoring devices used for determining proper operation of control equipment shall:
 - A. Operate annually a minimum of 95% of the time the control equipment is being used or
 - B. Have records that demonstrate the pollution control equipment was operating properly while the monitoring device was not working. The permittee shall maintain written procedures for determining proper operation of the control equipment when not using continuous monitoring device.
10. Regulatory references to 40 CFR Part 63 Subpart A and Subpart S in this permit shall apply as promulgated and on the dates specified in the regulation.
11. Pursuant to 40 CFR Part 63.6, the permittee shall develop a startup, shutdown, and malfunction (SSM) plan containing operation and maintenance requirements. This plan shall be maintained on site, provided to Department personnel upon request, and submitted to the Department upon completion.
12. Pursuant to 40 CFR 63.9, the permittee shall comply with all notification requirements including initial notifications, notification of performance tests, continuous monitoring system performance evaluations, and source compliance status.
13. Pursuant to 40 CFR Part 63.10, the permittee shall maintain the following records in order to demonstrate compliance with the applicable provisions of 40 CFR Part 63, Subpart S. These records shall be maintained on site and provided to Department personnel upon request.

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- A. Startup, Shutdown, Malfunction, and Maintenance records;
 - B. Continuous Monitoring System Records.
14. Pursuant to 40 CFR Part 63.10, the permittee shall submit the following reports on a semi-annual basis to the Department in order to demonstrate compliance with the applicable provisions of 40 CFR Part 63, Subpart S.
- A. Excess Emission Reports;
 - B. Monitoring System Performance Reports;
 - C. Startup, Shutdown, and Malfunction Reports.

Title VI Provisions:

15. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
- A. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - B. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - C. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 - D. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
16. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- A. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - B. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - C. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - D. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)

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- E. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - F. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
17. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
18. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger busses using HCFC-22 refrigerant.
19. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

NESHAP Requirements:

20. The facility is subject to and shall comply with applicable provisions of 40 CFR Part 63 Subpart S - National Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. A copy of Subpart S is provided in Appendix C.
21. Pursuant to '19.304 of Regulation 19, 40 CFR Part 63, Subpart MM, and A.C.A. '8-4-203 as referenced by '8-4-304 and '8-4-311, the permittee shall submit a permit modification application demonstrating how Delta Natural Kraft will comply with 40 CFR Part 63, Subpart MM – *National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills* or the permittee will submit a notification citing how the current permit demonstrates compliance with the subpart.

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22. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in item A of this condition.

A. The following have been specifically identified as applicable requirements based upon information submitted by the permittee in an application dated January 15, 2003.

Source	Regulation	Description
Facility	Arkansas Regulation #19	Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Facility	Arkansas Regulation #26	Regulations of the Arkansas Operating Permit Program
MAP	40 CFR Part 63 Subpart A	General Provisions
MAP	40 CFR Part 63 Subpart KK	National Emission Standards for the Printing and Publishing Industry
55	40 CFR Part 60 Subpart A	General Provisions
55	40 CFR Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Delta	40 CFR 63 Subpart S	NESHAP for pulp and paper

B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in an application dated January 15, 2003.

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
National Emission Standards for the Printing and Publishing Industry	40 CFR Part 63 Subpart KK	Pine Bluff Mill	Because the Pulp and Paper mill creates the emitted HAPs as an impurity in the

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Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
			production process, the mill itself is not subject to the regulation (40 CFR §63.820(a)(2)).
Standards of Performance for Kraft Pulp Mills	40 CFR Part 60 Subpart BB	01	pre-1976
Standards of Performance for Kraft Pulp Mills	40 CFR Part 60 Subpart BB	02	pre-1976
Standards of Performance for Kraft Pulp Mills	40 CFR Part 60 Subpart BB	04	pre-1976
Standards of Performance for Kraft Pulp Mills	40 CFR Part 60 Subpart BB	08A and 08B	pre-1976
Standards of Performance for Kraft Pulp Mills	40 CFR Part 60 Subpart BB	13 and 17	pre-1976
Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	40 CFR Part 60 Subpart Db	05	pre-1976
Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	40 CFR Part 60 Subpart Dc	06	pre-1976

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SECTION VI: COMPLIANCE PLAN

Delta Natural Kraft and Mid-America Packaging are currently in compliance with all applicable requirements and will continue to comply with all applicable requirements upon issuance of this renewed Title V permit. Delta and Mid-America will meet on a timely basis all applicable requirements that become effective during the permit term.

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SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated January 15, 2003.

Group A Insignificant Activities			
Source No.	Location	Description	Justification
MISC-I-02	Delta	Maintenance Welding Hood Vent	A. 7
FS-I-01	Delta	Air Compressor Diesel Tank #1 (550 gallons)	A. 3
FS-I-02	Delta	Air Compressor Diesel Tank #2 (550 gallons)	A. 3
FS-I-03	Delta	Diesel Fire Pump Tank (1,000 gallons)	A. 3
FS-I-04	Delta	Recovery Diesel Tank (1,000 gallons)	A. 3
FS-I-05	Delta	Kerosene Tank #1 (1,000 gallons)	A. 3
FS-I-06	Delta	Kerosene Tank #2 (1,000 gallons)	A. 3
FS-I-07	Delta	Taxable Diesel Tank (140 gallons)	A. 3
FS-I-09	Delta	Kerosene Truck Tank (140 gallons)	A. 3
---	Delta	Portable Kerosene Heaters (152,000 BTU/hr)	A. 5
I-01	Mid-	Natural Gas Fired Boiler	A. 1

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Group A Insignificant Activities			
Source No.	Location	Description	Justification
MISC-I-02	Delta	Maintenance Welding Hood Vent	A. 7
	America	(1 MMBTU/hr)	
PM-1-02	Delta	Paper Machine Press Transfer Blowbox (250,000 BTU/hr)	A. 1
FS-I-08	Delta	Woodyard Diesel Tank	A. 13
FS-I-10	Delta	Unleaded Gasoline Tank	A. 13
I-02	Delta	Rolawash Storage Tank	A. 13

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

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SECTION VIII: GENERAL PROVISIONS

1. Pursuant to 40 C.F.R. 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to 40 C.F.R. 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
3. Pursuant to §26.4 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
4. Pursuant to 40 C.F.R. 70.6(a)(1)(ii) and §26.7 of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(A) and §26.7 of Regulation #26, records of monitoring information required by this permit shall include the following:
 - A. The date, place as defined in this permit, and time of sampling or measurements;
 - B. The date(s) analyses were performed;
 - C. The company or entity that performed the analyses;
 - D. The analytical techniques or methods used;
 - E. The results of such analyses; and

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- F. The operating conditions existing at the time of sampling or measurement.
6. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(B) and §26.7 of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
7. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(A) and §26.7 of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

8. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the occurrence. The initial report may be made by telephone and shall include:
- A. The facility name and location,
 - B. The process unit or emission source which is deviating from the permit limit,
 - C. The permit limit, including the identification of pollutants, from which deviation occurs,
 - D. The date and time the deviation started,
 - E. The duration of the deviation,
 - F. The average emissions during the deviation,
 - G. The probable cause of such deviations,
 - H. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and

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I. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence and such report will serve as both the initial report and full report.

9. Pursuant to 40 C.F.R. 70.6(a)(5) and §26.7 of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
10. Pursuant to 40 CFR Part 63.6, the permittee shall develop a startup, shutdown, and malfunction (SSM) plan containing operation and maintenance requirements. This plan shall be maintained on site, provided to the Department upon request, and submitted to the Department upon completion.
11. Pursuant to 40 CFR Part 63.10, the permittee shall maintain the following records in order to demonstrate compliance with the applicable provisions of 40 CFR Part 63, Subpart S. These records shall be maintained on site and provided to Department personnel upon request:
 - A. Startup, shutdown, malfunction, and maintenance records;
 - B. Continuous monitoring system records.
12. Pursuant to 40 CFR Part 63.10, the permittee shall submit the following reports on a semi-annual basis to the Department in order to demonstrate compliance with the applicable provisions of 40 CFR Part 63, Subpart S:
 - A. Excess emission reports;
 - B. Monitoring system performance reports;
 - C. Startup, shutdown, malfunction reports.

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13. Pursuant to 40 C.F.R. 70.6(a)(6)(i) and §26.7 of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
14. Pursuant to 40 C.F.R. 70.6(a)(6)(ii) and §26.7 of Regulation #26, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
15. Pursuant to 40 C.F.R. 70.6(a)(6)(iii) and §26.7 of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
16. Pursuant to 40 C.F.R. 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
17. Pursuant to 40 C.F.R. 70.6(a)(6)(v) and §26.7 of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.
18. Pursuant to 40 C.F.R. 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
19. Pursuant to 40 C.F.R. 70.6(a)(8) and §26.7 of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.

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20. Pursuant to 40 C.F.R. 70.6(a)(9)(i) and §26.7 of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
21. Pursuant to 40 C.F.R. 70.6(b) and §26.7 of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.
22. Pursuant to 40 C.F.R. 70.6(c)(1) and §26.7 of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
23. Pursuant to 40 C.F.R. 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
 - A. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - C. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - D. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.
24. Pursuant to 40 C.F.R. 70.6(c)(5) and §26.7 of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:

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- A. The identification of each term or condition of the permit that is the basis of the certification;
 - B. The compliance status;
 - C. Whether compliance was continuous or intermittent;
 - D. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - E. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.
25. Pursuant to §26.7 of Regulation #26, nothing in this permit shall alter or affect the following:
- A. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - B. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - C. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 - D. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
26. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F

APPENDIX G

