

ADEQ OPERATING AIR PERMIT

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

Permit No. : 385-AOP-R6

Renewal #1

IS ISSUED TO:

Delta Natural Kraft and Mid-America Packaging, LLC

1701 Jefferson Parkway

Pine Bluff, AR 71611

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:

October 20, 2003

AND

October 19, 2008

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

Date Modified

Delta Natural Kraft and Mid-America Packaging, LLC
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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM10	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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SECTION I: FACILITY INFORMATION

PERMITTEE: Delta Natural Kraft and Mid-America Packaging, LLC

AFIN: 35-00017

PERMIT NUMBER: 385-AOP-R6

FACILITY ADDRESS: 1701 Jefferson Parkway
Pine Bluff, AR 71611

MAILING ADDRESS P.O. Box 20700
Pine Bluff, AR 71611

COUNTY: Jefferson

CONTACT POSITION: Alban Bush, Director of Technical Services

TELEPHONE NUMBER: 870-541-5046

REVIEWING ENGINEER: Amanda Leamons

UTM North South (Y): Zone 15: 3792.0

UTM East West (X): Zone 15: 589.6

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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 (MAP) manufactures multi-wall bags from the paper produced by Delta. Both facilities are permitted under this permit.

This modification to Permit 385-AOP-R5 incorporates the requirements of 40 CFR Part 63, Subpart DDDDD- *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* (Boiler MACT) into the air permit. Delta and MAP combined, operate three boilers which are subject to the standards of the Boiler MACT, the Hog Fuel Boiler (SN-05), the Power Boiler (SN-06) and a natural gas boiler (SN-100). Both SN-06 and SN-100 are classified as existing boilers that burn liquid fuel. Therefore, SN-06 and SN-100 are not subject to the emission standards under the Boiler MACT. However, if the boilers are reconstructed in the future, the boilers will be reclassified as reconstructed boilers and will have to comply with the applicable Boiler MACT standards.

The hog fuel boiler is classified as an existing, large boiler that burns solid fuel and must comply with the emission standards specified in Table 1 of the Boiler MACT by September 13, 2007. With this modification the Boiler MACT conditions and emission standards have been incorporated into the specific conditions for SN-05. Delta will demonstrate compliance with the Boiler MACT through the Health Based Compliance Alternative (HBCA), performance testing and fuel analysis. Overall annual permitted emissions changes resulting from the modification decreased by 0.09 tons of beryllium, 0.02 tons of mercury, and 0.01 tons of selenium; and emissions increased by 0.107 tons of lead, 0.03 tons of cadmium, 0.18 tons of chromium, 4.23 tons of HCl, 1.84 tons of Mn, and 0.15 tons of nickel.

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) are combusted in the lime kiln. Black liquor is pumped from the evaporators to the soap collection

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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 heavy 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 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

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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. The outer layer of the bags is formed with paper printed with graphics specified by the customer. 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 bags, which are shipped to the customer.

MAP has five printing presses, No. 1 through No. 5, which are capable of printing different colors on a single roll of paper. Presses No. 3 through No. 5 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.

The No. 3 Press 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).

The No. 4 Press 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.

The No. 5 Press is equipped with two drying chambers heated by natural gas. After ink has been applied to the paper, the sheet passes through the Between Decks Dryer and the Tunnel Dryer. The No. 5 press does not have the capability to apply water-based lacquer to the sheet like the No. 3 Press and the No. 4 Press.

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.

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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

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective May 28, 2006
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR 63 National Emission Standard for Hazardous Air Pollutants (NESHAP), Subpart S - <i>for the Pulp and Paper Industry</i>
40 CFR 63 NESHAP, Subpart MM - <i>for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand -Alone Semichemical Pulp Mills</i>
40 CFR 63 NESHAP, Subpart KK – <i>for the Printing and Publishing Industry</i>
40 CFR 63 NESHAP, Subpart DDDDD – <i>for Industrial, Commercial, and Institutional Boilers and Process Heaters</i> (Compliance date September 13, 2007)
40 CFR Part 64, Compliance Assurance Monitoring (CAM)

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The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
	Total Allowable Emissions (Pine Bluff Mill and MAP Combined)	PM	146.6	397.6
		PM ₁₀	146.6	397.6
		SO ₂	33.0	123.8
		VOC	593.1	2,193.9
		CO	7,912.8	22,333.1
		NO _x	85.5	329.7
		Pb	0.0337	0.1508
		TRS	41.2	472.3
		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	2.81	12.28
		Iodomethane	0.82	3.56
		Methanol	353.26	1500.92
		2-Methylphenol	5.92	25.86
		MEK	2.08	8.30
		Phenol	8.81	38.56
		Styrene	0.70	2.83
		Toluene	0.28	1.26

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
		Phosphorus	0.08	0.29
		Arsenic	0.01	0.01
		Beryllium	0.01	0.01
		Cadmium	0.01	0.04
		Chromium	0.04	0.18
		Chromium +6	0.01	0.01
		Manganese	0.56	2.42
		Mercury	0.01	0.01
		Nickel	0.04	0.15
		Selenium	0.01	0.01
		Acetone	5.63	64.06
		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
		TSM ⁸	0.085	0.39
		HAP (@SN102-108)	84.5	24.5

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
01	Lime Kiln	PM	7.0	30.7
		PM ₁₀	7.0	30.7
		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	14.9
		Acetaldehyde	0.09	0.35
		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

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
02	Recovery Boiler	PM	17.0	74.5
		PM ₁₀	17.0	74.5
		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	153.3
		Acetaldehyde	14.89	65.22
		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
		Manganese	0.02	0.05
		Mercury	0.001	0.001
		Selenium	0.01	0.01
		Zinc	0.01	0.02

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
03	Lime Slaker	PM	3.0	13.1
		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	6.5	28.5
		PM ₁₀	6.5	28.5
		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
		Phosphorus	0.01	0.02
		Chromium +6	0.01	0.01
		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

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
05	Hog Fuel Boiler	PM	53.6	234.7
		PM ₁₀	53.6	234.7
		SO ₂	4.0	17.6
		VOC	7.1	31.1
		CO	197.6	865.2
		NO _x	42.7	147.9
		Pb	0.03	0.14
		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	1.02	4.47
		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	0.0004	0.0018
		Cadmium	0.008	0.035
		Chromium	0.04	0.18
		Chromium +6	0.01	0.01
		Manganese	0.54	2.37
		Mercury	0.0003	0.0014
		Nickel	0.0324	0.142
		Barium	0.06	0.23
		Copper	0.01	0.03
		Silver	0.01	0.02
		Zinc	0.05	0.22
		TSM – excluding Mn ⁸	0.085	0.39

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
06	Power Boiler	PM	0.6	2.6
		PM ₁₀	0.6	2.6
		SO ₂	0.1	0.5
		VOC	0.5	2.2
		CO	6.4	28.1
		NO _x	7.7	33.8
08A	Washer Hood Exhaust Fan A	These sources are routed to the Lime Kiln (SN-01) as required by NESHAP Subpart S		
08B	Washer Hood Exhaust Fan B			
11	Foam Tank Stack			
10	Fresh Lime Storage	PM	55.0	5.0
		PM ₁₀	55.0	5.0
12	Black Liquor Oxidation Tank Stack	SO ₂	0.5	1.7
		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
		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
		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

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AFIN: 35-00017

EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
13	Digester Building Vent (No. 1 and No. 2)	VOC	5.5	
		TRS	0.2	
		Acetaldehyde	0.03	
		Methanol	0.16	15.2 ¹
		MEK	0.01	0.4 ¹
		Toluene	0.01	0.08 ¹
		Acetone	0.05	0.43 ¹
17	Digester Building Vent No. 3	VOC	2.8	0.02 ¹
		TRS	0.1	0.01 ¹
		Acetaldehyde	0.02	0.12 ¹
		Methanol	0.08	
		MEK	0.01	
		Toluene	0.01	
		Acetone	0.03	
15 (A - J)	Paper Machine Dry End Fans (1, 1A, 1B, 2, 2A, 3, 3A, 4, 5 and 6)	PM	0.3 ²	1.4 ²
		PM ₁₀	0.3 ²	1.4 ²
		SO ₂	0.1 ²	0.1 ²
		VOC	9.5 ^{2,4}	33.8 ^{2,4}
		CO	2.3 ²	10.1 ²
		NO _x	2.8 ²	12.3 ²
		TRS	0.3 ²	0.8 ²
		Acetaldehyde	0.57 ²	2.02 ²
		Acetone	0.69 ²	2.45 ²
		Acrolein	0.13 ²	0.44 ²
		Formaldehyde	0.48 ²	1.71 ²
		Methanol	5.15 ^{2,3}	18.25 ^{2,3}
		MEK	0.10 ²	0.33 ²
		Styrene	0.02 ²	0.07 ²
16A	Fourdrinier Blower A	VOC	6.9 ⁴	24.4 ⁴
		Acetone	0.10	0.36
		Methanol	5.15 ³	18.25 ³
		Acetaldehyde	0.03	0.09
		MEK	0.03	0.08
		Toluene	0.01	0.01

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Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
16B	Fourdrinier Blower B	VOC	5.8 ⁴	20.6 ⁴
		Acetone	0.06	0.20
		Methanol	5.15 ³	18.25 ³
		Acetaldehyde	0.04	0.12
16C	Fourdrinier Blower C	VOC	6.9 ⁴	24.4 ⁴
		Acetone	0.10	0.36
		Methanol	5.15 ³	18.25 ³
		Acetaldehyde	0.03	0.09
		MEK	0.03	0.08
		Toluene	0.01	0.01
18	Paper Machine Vacuum Pumps (1 thru 3)	VOC	11.7 ^{4,5}	41.3 ^{4,5}
		Acetone	1.26 ⁵	4.47 ⁵
		Acetaldehyde	0.90 ⁵	3.19 ⁵
		Styrene	0.09 ⁵	0.33 ⁵
		Acrolein	0.04 ⁵	0.12 ⁵
		Formaldehyde	0.24 ⁵	0.87 ⁵
		Methanol	5.15 ^{3,5}	18.25 ^{3,5}
19A	Paper Machine Vacuum Pump 4	VOC	7.4 ⁴	26.0 ⁴
		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 ³	18.25 ³
		MEK	0.09	0.30
		Toluene	0.01	0.01
19B	Paper Machine Vacuum Pump 5	VOC	7.4 ⁴	26.0 ⁴
		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 ³	18.25 ³
		MEK	0.09	0.30
		Toluene	0.01	0.01

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
19C	Paper Machine Vacuum Pump 6	VOC	7.4 ⁴	26.0 ⁴
		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 ³	18.25 ³
		MEK	0.09	0.30
		Toluene	0.01	0.01
19D	Paper Machine Vacuum Pump 7	VOC	9.5 ⁴	33.6 ⁴
		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 ³	18.25 ³
		MEK	0.17	0.60
		Toluene	0.01	0.01
20	Green Liquor Storage Tank North	VOC	0.8	3.1
		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
		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

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
22	Multi Purpose Tank	VOC	0.8	3.1
		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
23	Dregs Mixer	VOC	0.8	3.1
		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
		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
		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

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
28	East White Liquor Storage Tank and Temporary Railcars	VOC	0.2	0.5
		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
29	West White Liquor Storage Tank	VOC	0.2	0.5
		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
		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
		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

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
32	Weak Wash Storage Tank	VOC	0.8	3.1
		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 Liquor Tank	VOC	0.9	3.8
		TRS	0.1	0.3
		Acetone	0.02	0.07
		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
34	South Weak Black Liquor Tank	VOC	0.9	3.8
		TRS	0.1	0.3
		Acetone	0.02	0.07
		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
35	Green Liquor Clarifier No.1	VOC	0.8	3.1
		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

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
36	High Density Storage Tank No.2	VOC	0.1	0.4
		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
37	High Density Storage Tank No.3	VOC	0.1	0.4
		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
		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
		Methanol	0.13	0.57
		MEK	0.02	0.07
		Styrene	0.01	0.01
		Toluene	0.01	0.01

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
39	Black Liquor Spill Tank	VOC	0.2	0.8
		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
		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
		TRS	--	1.3
		Acetone	--	1.24
		Methanol	--	18.25 ³
		2-Methylphenol	--	0.34
		Acetaldehyde	--	0.09
		Benzene	--	0.01
		MEK	--	0.11
		Styrene	--	0.04
		Toluene	--	0.03
41	Aeration Basin	VOC	--	13.5
		TRS	--	292.1
		Methanol	--	13.5
		Formaldehyde	--	0.01
50	Chip and Hogged Fuel Storage Piles	PM	--	0.1
		PM ₁₀	--	0.1
		VOC	--	4.8

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Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
51	Saveall Tank	VOC	5.5 ⁴	19.5 ⁴
		TRS	0.1	0.1
		Acetone	0.13	0.44
		Acrolein	0.02	0.07
		Methanol	5.15 ³	18.25 ³
		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	VOC	5.5 ⁴	19.5 ⁴
		TRS	0.1	0.1
		Acetone	0.13	0.44
		Acrolein	0.02	0.07
		Methanol	5.15 ³	18.25 ³
		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
		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
		Mercury	--	0.001

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
54	DAF Unit	VOC	5.5 ⁴	19.5 ⁴
		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 ³	18.25 ³
55	No. 3 Strong Black Liquor Storage Tank	VOC	0.2	0.8
		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
		Methanol	0.13	0.57
		MEK	0.02	0.07
		Styrene	0.01	0.01
		Toluene	0.01	0.01
-	LVHC/HVLC System	-	-	-
-	Condensate Collection System	-	-	-
100	Natural Gas Fired Boiler	PM	0.1	0.1
		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	2.8	6.3
		PM ₁₀	2.8	6.3

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EMISSION SUMMARY				
Source No.	Description	Pollutant	Emission Rates	
			lb/hr	ton/yr
102 thru 110	No. 3 Press (Tunnel Dryer & Lacquer Dryer Vents)	PM	0.7	0.7
		PM ₁₀	0.7	0.7
		SO ₂	0.7	0.7
	No. 4 Press (Between Decks Dryer, Tunnel Blower, Auxiliary Blower, & Lacquer Dryer Vents)	VOC	84.5	60.0
		CO	0.7	1.3
		NO _x	1.1	4.6
	No. 5 Press (Between Decks Dryer & Tunnel Dryer Vents) General Building Ventilation	HAP	84.5 ⁶	24.5 ⁷
		Ammonia	4.4	19.3

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

**Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

¹ Total for SN-13 and SN-17.

² Total for entire dry end of the paper machine (SN-15A-J).

³ Methanol contribution (5.15 lb/hr, 18.25 tons/yr) is total methanol for all paper machine sources (SN-15, 16, 18, 19, 40, 51, 52, and 54)

⁴ VOC limits include the methanol contribution from all paper machine sources.

⁵ Total for Vacuum Pumps 1 through 3.

⁶ 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.

⁷ 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.

⁸ TSM is defined as the combination of 8 metallic HAPs -arsenic, beryllium, cadmium, lead, manganese, nickel, and selenium (40 CFR §63.7575). As allowed by 40 CFR §63.7507(b), the facility will comply with the TSM emission standard based on the sum of emissions for 7 selected metals (by excluding Mn) and by using the Health Based Compliance Alternative (Appendix A of the Boiler MACT) for complying with manganese.

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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:

- In some cases, emission factors were used to calculate the emission rates instead of stack test data to facilitate compliance through record keeping.
- Different or additional emission factors were used to calculate some emissions of VOCs and TRS.
- 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.
- 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.
- 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.
- 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 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.

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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.

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:

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- (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.

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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Permit **#385-AOP-R4** was issued October 20, 2003. This was 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 were approved and included in the specific conditions of the permit renewal.

Combined with this renewal of the permit was 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 were already in place to control emissions from SN-01 (Lime Kiln). The scrubber reduces PM emissions so that Delta would be in compliance with CAO LIS 03-029 and the permitted PM emissions from SN-01. Neither modification increased permitted emission rates; however, the replacement of the digester vessel was considered a PSD modification.

Prevention of Significant Deterioration

Delta replaced an old digester vessel, Digester No. 3 (SN-17), with a new vessel in 2003. At the time of the renewal, emission rates for all three digester vessels (SN-13 and SN-17) were re-evaluated 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 did not trigger NSPS Subpart BB because the replacement only involved one of the digestion vessels and not associated digestion system components, the short-term emissions did not increase, and the cost on the component replacement did 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 which 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 was approximately 10% larger in volume than the old vessel that was previously in use. Even though the replacement is larger, the new digester did not have the potential to emit pollutants at a rate greater than the old vessel due to a bottleneck in the papermaking process created by the washing stage. Hourly and annual emissions did 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 were less than the PSD threshold.

The purpose of replacing the digester vessel was not to increase production or emission rates. However, sources affected by the digester included the recovery boiler, lime kiln, smelt

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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 exceeded the PSD threshold for PM₁₀, SO₂, CO, and NO_x, therefore, a PSD application was submitted.

BACT Analysis

A BACT analysis was conducted for the replacement of the digester vessel (SN-17). The BACT analysis addressed each pollutant subject to PSD review emitted by the unit. 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 had to 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 was selected as BACT to control the emissions of TRS from the digester.

With the renewal all emission limits were 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.

Permit #385-AOP-R5 was issued December 21, 2006. Combined with this permit revision were two significant modifications, a minor modification, and an administrative amendment to the air permit.

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The first modification allowed the installation of a new flexographic printing press (No. 5 Press) equipped with two drying chambers heated with natural gas. Each of the new drying chambers associated with the No. 5 Press were vented to the atmosphere as No. 5 Press Between Decks Dryer Vent (SN-109) and No. 5 Press Tunnel Dryer Vent (SN-110). Permitted emissions from the combustion of natural gas at MAP increased slightly as a result of the two new emission units.

The second modification incorporated the MACT II language into the permit. This modification was in accordance with Consent Administration Order LIS #05-024.

The minor modification modified allowable particulate emissions from the Recovery Boiler (SN-02), Smelt Dissolving Tank (SN-04), and the Lime Kiln (SN-01) to comply with the standards established in 40 CFR Subpart MM – National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mills (Subpart MM). As per the calculations submitted by Delta in the application, Delta meets the standard for the Overall PM Limit under §63.862(a)(1)(ii). Therefore, Delta meets the standards of Subpart MM by complying with the Plantwide Bubble Limit allowed in the regulation. There was a combined permitted emission reduction of 50 tpy of PM.

Finally, an administrative amendment was performed which allowed the addition of two new tubers and two new bottomers to the MAP plant as an insignificant activity at the facility.

Overall annual permitted emissions changes resulting from the combined modifications decreased by 49.2 tons of PM/PM₁₀, 5.5 tons of NO_x, and 0.8 tons of CO; and emissions increased by 0.5 tons of SO₂, 0.6 tons of VOC, 0.7 tons of TRS, 0.02 tons of Acetaldehyde, and 0.01 tons of Acetone.

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SECTION IV: SPECIFIC CONDITIONS

SN-13 and 17
Digester Building

Source Description

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.

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 and Digester No. 3 was originally installed prior to 1976. However, the digester vessel was replaced in 2003. The installation of a new digester vessel for Digester No. 3 did undergo PSD review in 2003. The PSD review is included in this section. The digesters are not subject to NSPS Subpart BB.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #3. [Regulation 19, §19.501 et seq., effective December 19, 2004 and 40 CFR Part 52, Subpart E]

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

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2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #3. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Source No.	Description	Pollutant	lb/hr	tpy
13	Digester Building Vent No. 1 & 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	

3. 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.) [Regulation 19, §19.705, Regulation 18, §18.1004, 40 CFR 70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
4. Gases from the digesters (generated during the cooking cycle) must be routed to the Lime Kiln for control. [Regulation 19, §19.801 and §19.901, 40 CFR Part 52 Subpart E, and 40 CFR Part 63, § 63.446(b)]
5. 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 rolling total and each individual month's data shall be submitted in accordance with General Provision #7. [Regulation 19, §19.705, 40 CFR Part 52 Subpart E, Regulation 18, §18.1004, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-08A, 08 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. 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. [Regulation 19, §19.304 and 40 CFR Part 63.443(c)(4)]

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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. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Conditions #10 and #11. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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	1.4
		SO ₂	0.1	0.1
		VOC	9.5*	33.8*
		CO	2.3	10.1
		NO _x	2.8	12.3
		TRS	0.3	0.8
16A	Fourdrinier Blower A	VOC	6.9*	24.4*
16B	Fourdrinier Blower B	VOC	5.8*	20.6*
16C	Fourdrinier Blower C	VOC	6.9*	24.4*

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

* Includes total methanol (5.15 lb/hr and 18.25 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

8. 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. [Regulation 18, §18.501, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
9. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Conditions #10 and #11. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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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	1.4
		Acetaldehyde	0.57	2.02
		Acetone	0.69	2.45
		Acrolein	0.13	0.44
		Formaldehyde	0.49	1.71
		Methanol	5.15*	18.25*
		MEK	0.10	0.33
		Styrene	0.02	0.07
16A	Fourdrinier Blower A	Acetone	0.10	0.36
		Methanol	5.15*	18.25*
		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*	18.25*
		Acetaldehyde	0.04	0.12
16C	Fourdrinier Blower C	Acetone	0.10	0.36
		Methanol	5.15*	18.25*
		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	4.47
		Acetaldehyde	0.90	3.19
		Styrene	0.09	0.33
		Acrolein	0.04	0.12
		Formaldehyde	0.24	0.87
		Methanol	5.15*	18.25*

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Source No.	Description	Pollutant	lb/hr	ton/yr
19A	Paper Machine Vacuum Pump 4	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*	18.25*
		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*	18.25*
		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*	18.25*
		MEK	0.09	0.30
		Toluene	0.01	0.01

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Source No.	Description	Pollutant	lb/hr	ton/yr
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*	18.25*
		MEK	0.17	0.60
		Toluene	0.01	0.01
40	Paper Machine General Building Ventilation	Acetone	--	1.24
		Methanol	--	18.25*
		2-Methylphenol	--	0.34
		Acetaldehyde	--	0.09
		Benzene	--	0.01
		MEK	--	0.11
		Styrene	--	0.04
		Toluene	--	0.03

* Includes total methanol (5.15 lb/hr and 18.25 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

10. 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. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
11. 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. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
12. 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

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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 rolling total and each individual month's data shall be submitted in accordance with General Provision #7. [§19.705, §18.1004, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-36 and 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. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #3. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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

14. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #3. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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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. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Conditions #3, #24, and #25. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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

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Source No.	Description	Pollutant	lb/hr	ton/yr
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. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through Specific Conditions #3, #24, and #25. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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
		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	0.07
		Acetaldehyde	0.01	0.02
		Acrolein	0.01	0.01
		Benzene	0.01	0.01
		Methanol	0.71	3.11

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Source No.	Description	Pollutant	lb/hr	ton/yr
		MEK	0.01	0.02
		Styrene	0.01	0.01
		Toluene	0.01	0.01
34	South Weak Black Liquor Tank	Acetone	0.02	0.07
		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
		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

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Source No.	Description	Pollutant	lb/hr	ton/yr
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. Gases from the evaporators must be routed to the Lime Kiln (SN-01) at all times. [§19.801, 40 CFR Part 52 Subpart E, and 40 CFR Part 63, § 63.466(b)]
18. The No. 3 Strong Black Liquor Storage Tank (SN-55) has a capacity of approximately 568,000 gallons. Only black liquor, which has a vapor pressure of < 3.5 kPa (< 0.508 psi), shall be stored in the tank. The tank is no longer subject to the requirements of 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* due to the capacity and vapor pressure of the liquid stored in the tank. [§19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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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.

The recovery boiler and associated control equipment is subject to the requirements of NESHAP Subpart MM. The effective date of this subpart was March 13, 2004. The subpart requires that affected sources install a COMS to monitor the ESP. However, Delta has EPA approval for alternative monitoring of the ESP. The alternative monitoring has been included in the specific conditions.

Specific Conditions

19. The permittee shall comply with all applicable parts of 40 CFR Part 63 Subpart MM (outlined in Specific Conditions #149 through #166). Subpart MM and Specific Conditions #149 through #166 outline the method for determining overall PM emission limits for affected sources (SN-01, 02, and 04) and for the installation, testing, operation,

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reporting and monitoring of the wet scrubber and ESP for SN-02. [§19.703, 40 CFR Part 52, 40 CFR Part 63, Subpart MM and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

20. 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 #24, #25, #27 through #29, and #32 through #35. Compliance with the CO emission limits are demonstrated by compliance with Specific Condition #36. [Regulation 19, §19.501 et seq., 40 CFR §63.862(a)(1)(ii) and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	ton/yr
PM ₁₀	17.0	74.5
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

21. The permittee shall not exceed the emission rates set forth in the following table. Data from the CEMS (required by Specific Condition #31) 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 #24, #25, #27, and #28. [Regulation 19, §19.801 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	ton/yr
TRS	35.0	153.3
	100 ppm Measured as H ₂ S on a dry basis and on a 12 hour average, corrected to 8% volume oxygen.	

22. 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 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 Conditions #27 and #28. [§19.503 and 40 CFR Part 52 Subpart E]

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23. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #24, #25, #27 through #29, and #32. [Regulation 18, §18.801, 40 CFR §63.862(a)(1)(ii), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	ton/yr
PM	17.0	74.5
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
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

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Pollutant	lb/hr	ton/yr
Styrene	0.41	1.78
Sulfuric Acid	0.17	0.73
Toluene	0.22	0.95
Zinc	0.01	0.02

24. 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. [§18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
25. 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. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]
26. The permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #25. 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 rolling total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR Part 52 Subpart E]
27. The permittee shall monitor the scrubber liquor flow rate to the TRS scrubber. The liquid flow rate shall be maintained at a minimum of 1,524 gpm as determined during the initial performance test. [Regulation 19, §19.303; 40 CFR Part 64; 40 CFR §63.8(f)(2)(i), 40 CFR §63.864 (e)(10), (k)(1), (k)(2); and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- A. When the Recovery Boiler is operating, the liquid flow rate monitor at the scrubber will measure and record the scrubber liquid flow rate at least once every successive 15-minute period and must be certified by the manufacturer to be accurate to within ± 5 percent of the design liquid flow rate.

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- B. The permittee shall implement corrective action when any 3-hour average scrubber liquid flow rate is below 1,524 gpm.
 - C. The permittee shall be considered in violation of the MACT II standard when six or more 3-hour average liquid flow rate values are below 1,524 gpm within any 6-month reporting period.
28. The permittee shall monitor the airflow across the TRS scrubber. The airflow across the scrubber shall be maintained, thus indicating operation of the scrubber fan. [Regulation 19, §19.303, 40 CFR §63.8(f)(2)(i), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- a. When the Recovery Boiler is operating, the airflow across the scrubber will be measured and recorded at least once every successive 15-minute period.
 - b. The permittee shall implement corrective action when any measurement of airflow across the scrubber results in zero airflow.
29. The permittee shall monitor the secondary power at each of the four ESP fields. The total secondary power across the four fields shall be maintained at a minimum of 43.1 kW as determined during the initial performance test. [Regulation 19, §19.303, 40 CFR §63.8(f)(2)(i), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- a. When the Recovery Boiler is operating, the monitors at each field of the ESP shall measure and record secondary voltage and current (thus resulting in total secondary power) at least once every successive 15-minute period.
 - b. The permittee shall implement corrective action when the total secondary power across the ESP falls below 43.1 kW.
 - c. In the event that two of the four fields in the ESP are not operating, the permittee shall stop firing black liquor solids within 15 minutes of the second field ceasing to operate.
30. The permittee shall maintain records which demonstrate compliance with Specific Conditions #27, #28, and #29. 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. [§19.705, 40 CFR Part 64, and 40 CFR Part 52 Subpart E]
31. 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 notwithstanding) and the Department Continuous Emission Monitoring Systems Conditions (See Appendix A). [§19.801, 40 CFR Part 64, and 40 CFR Part 52 Subpart E]

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32. 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. The permittee will perform the PM test using EPA Reference Methods 5 and 202. The permittee will perform the PM₁₀ test using either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM₁₀, the facility will assume all collected particulate is PM₁₀. During the test, the permittee shall operate the plant within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity can not be achieved, the permittee shall be limited to 10 percent above the actual tested throughput. Testing shall be used to demonstrate compliance with permitted emission rates. [Regulation 19, §19.702 and 40 CFR Part 52 Subpart E]
33. 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. [§19.702 and 40 CFR Part 52 Subpart E]
34. 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. [§19.702 and 40 CFR Part 52 Subpart E]
35. 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. [§19.702 and 40 CFR Part 52 Subpart E]

Carbon Monoxide Specific Conditions

36. 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 for compliance demonstration purposes. [§19.703, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
37. Operational and maintenance procedures will be conducted as necessary to maintain CO emissions below permitted levels. [§19.705, 40 CFR Part §70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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38. The permittee shall maintain records which demonstrate compliance with the Specific Condition #37. [§19.705 and 40 CFR Part 52 Subpart E]

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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.

The Smelt Dissolving Tank and associated controls are subject to NESHAPS Subpart MM. The compliance date was March 13, 2004.

Specific Conditions

39. The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart MM (outlined in Specific Conditions #149 through #166). Subpart MM and Specific Conditions #149 through #166 outline the method for determining overall PM emission limits for affected sources (SN-01, 02, and 04) and for the installation, testing, operation, reporting and monitoring of the wet scrubber for SN-04. [§19.703, 40 CFR Part 52, 40 CFR Part 63, Subpart MM and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
40. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #3, #25, #45 and #46. [Regulation 19, §19.501 et seq., 40 CFR §63.862(a)(1)(ii), and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	ton/yr
PM ₁₀	6.5	28.5
SO ₂	0.4	1.4

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Pollutant	lb/hr	ton/yr
VOC	3.8	16.3
NO _x	0.7	2.9

41. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #3, #25, and #44. [Regulation 19, §19.801 et seq. and 40 CFR Part 52, Subpart E]

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	

42. 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 Conditions #45 and #46. [§19.503 and 40 CFR Part 52 Subpart E]
43. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #3, #25, #45 and #46. [Regulation 18, §18.801, 40 CFR §63.862(a)(1)(ii), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	ton/yr
PM	6.5	28.5
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

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Pollutant	lb/hr	ton/yr
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

44. 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 Condition #3 and EPA Reference Method 16. Data reduction shall be performed as set forth in 40 CFR 60.8. [§19.801 and 40 CFR Part 52 Subpart E]
45. The permittee shall monitor the pressure differential across the scrubber. The pressure differential shall be maintained at a minimum of 2.9 inches of water as determined during the initial performance test. [Regulation 19, §19.303, 40 CFR Part 64, 40 CFR §638(f)(2)(i), 40 CFR §63.864 (e)(10), (k)(1), (k)(2); and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
 - a. When the Smelt Dissolving Tank is operating, the pressure differential monitor at the scrubber will measure and record the pressure differential at least once every successive 15-minute period and must be certified by the manufacturer to be accurate to within a gage pressure of ± 500 pascals (± 2 inches of water gage pressure)
 - b. The permittee shall implement corrective action when any 3-hour average pressure differential is below 2.9 inches of water.
 - c. The permittee shall be considered in violation of the MACT II standard when six or more 3-hour average pressure differential values are below 2.9 inches of water within any 6-month reporting period.
46. The permittee shall monitor the liquid flow rate across the scrubber. The liquid flow rate shall be maintained at a minimum of 25.6 gpm as determined during the initial performance test. [Regulation 19, §19.303, 40 CFR Part 64, 40 CFR §638(f)(2)(i), 40 CFR §63.864 (e)(10), (k)(1), (k)(2); and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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- a. When the Smelt Dissolving Tank is operating, the liquid flow rate monitor at the scrubber will measure and record the scrubber liquid flow rate at least once every successive 15-minute period and must be certified by the manufacturer to be accurate to within ± 5 percent of the design liquid flow rate.
 - b. The permittee shall implement corrective action when any 3-hour average scrubber liquid flow rate is below 25.6 gpm.
 - c. The permittee shall be considered in violation of the MACT II standard when six or more 3-hour average liquid flow rate values are below 25.6 gpm within any 6-month reporting period.
47. The permittee shall maintain records which demonstrate compliance with Specific Conditions #45 and #46. 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. [§19.705, 40 CFR Part 64, and 40 CFR Part 52 Subpart E]

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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

48. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #60. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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
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

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Source No.	Description	Pollutant	lb/hr	ton/yr
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

49. 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 #50. [§19.503 and 40 CFR Part 52 Subpart E]
50. 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. [§19.705 and 40 CFR Part 52 Subpart E]
- 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.
51. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #60. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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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
		Styrene	0.01	0.01
		Toluene	0.01	0.01
24	Dregs Washer	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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Source No.	Description	Pollutant	lb/hr	ton/yr
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	0.01
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

52. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #60. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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 Storage Tank	VOC	0.2	0.5

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Source No.	Description	Pollutant	lb/hr	ton/yr
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

53. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #60. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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
		Styrene	0.01	0.01
		Toluene	0.01	0.01

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Source No.	Description	Pollutant	lb/hr	ton/yr
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	0.01
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 #12 and the source group for the Condensate Collection System begins on page #12.

The Lime Kiln and associated control equipment (wet scrubber) are subject to NESHAP Subpart MM. The compliance date for this subpart was March 13, 2004. The conditions for this subpart are listed in a separate source category, beginning on Page #12 of this permit.

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, 2005, 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.

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54. The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart MM (outlined in Specific Conditions #149 through #166). Subpart MM and Specific Conditions #149 through #166 outline the method for determining overall PM emission limits for affected sources (SN-01, 02, and 04) and for the installation, testing, operation, reporting and monitoring of the scrubber for SN-01. [§19.703, 40 CFR Part 52, 40 CFR Part 63, Subpart MM and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
55. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #3, #59, #60, #62, #63, and #70. [Regulation 19, §19.501 et seq., 40 CFR §63.862(a)(1)(ii), and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	ton/yr
PM ₁₀	7.0	30.7
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

56. The permittee shall not exceed the emission rates set forth in the following table. Data from the CEMS (required by Specific Condition #68) 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, #59 and #60. [Regulation 19, §19.801 and 40 CFR Part 52 Subpart E]

Pollutant	lb/hr	ton/yr
TRS	3.4	14.9
	40 ppm measured as H ₂ S on a dry basis and on a twelve hour average, corrected to 10% volume oxygen	

57. 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

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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 Conditions #62 and #63. [§19.503 and 40 CFR Part 52 Subpart E]

58. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #3, #59, #60, #62, #63, and #70. [Regulation 18, §18.801, 40 CFR §63.862(a)(1)(ii), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	ton/yr
PM	7.0	30.7
Acetaldehyde	0.09	0.35
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

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59. Natural gas shall be the only fuel used in the Lime Kiln. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
60. The permittee shall not use in excess of 4,143 tons of lime (reburned lime + fresh lime) per month or 44,717 tons of lime (reburned lime + fresh lime) per twelve consecutive months. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
61. The permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #60. 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. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
62. The permittee shall monitor the pressure differential across the AP Tech (Venturi) scrubber. The pressure differential shall be maintained at a minimum of 22.4 inches of water as determined during the initial performance test. [Regulation 19, §19.303; 40 CFR Part 64; 40 CFR §63.8 (f)(2)(i); 40 CFR §63.864 (e)(10), (k)(1), (k)(2); and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
 - a. When the Lime Kiln is operating the pressure drop monitor at the scrubber will measure and record the pressure differential at least once every successive 15-minute period and must be certified by the manufacturer to be accurate to within a gage pressure of ± 500 pascals (± 2 inches of water gage pressure).
 - b. The permittee shall implement corrective action when any 3-hour average pressure differential is below 22.4 inches of water.
 - c. The permittee shall be considered in violation of the MACT II standard when six or more 3-hour average pressure differential values are below 22.4 inches of water within any 6-month reporting period.
63. 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 147.6 gpm as determined during the initial performance test. [Regulation 19, §19.303; 40 CFR Part 64; 40 CFR §63.8 (f)(2)(i); 40 CFR §63.864 (e)(10), (k)(1), (k)(2); and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
 - a. When the Lime Kiln is operating, the liquid flow rate monitor at the scrubber will measure and record the scrubber liquid flow rate at least once every successive

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- 15-minute period and must be certified by the manufacturer to be accurate to within ± 5 percent of the design liquid flow rate.
- b. The permittee shall implement corrective action when any 3-hour average scrubber liquid flow rate is below 147.6 gpm.
 - c. The permittee shall be considered in violation of the MACT II standard when six or more 3-hour average liquid flow rate values are below 147.6 gpm within any 6-month reporting period.
64. The permittee shall maintain records which demonstrate compliance with Specific Conditions #62 and #63. 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. [§19.705, 40 CFR Part 64, and 40 CFR Part 52 Subpart E]
65. The permittee shall maintain a temperature of at least 1200°F and a residence time of 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). [§19.801 and 40 CFR Part 52 Subpart E]
66. 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 #67. [§19.801 and 40 CFR Part 52 Subpart E]
67. The permittee shall record and report on a semi-annual basis, periods of excess emissions for which 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. [§19.304 and 40 CFR §63.443(e)(3)]
68. 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). [§19.801 and 40 CFR Part 52 Subpart E]

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69. 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. [§19.304, and 40 CFR Part 63, Subpart S, §63.443(d)(4)]
70. The permittee shall test the Lime Kiln for PM and PM₁₀ once every five years. Testing shall be performed in accordance with Plantwide Condition #3. The permittee will perform the PM test using EPA Reference Methods 5 and 202. The permittee will perform PM₁₀ test using either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM₁₀, the facility will assume all collected particulate is PM₁₀. Testing shall be used to demonstrate compliance with permitted emission rates. Upon failure of a stack test, the permittee shall stack test annually at the Lime Kiln until two consecutive years are below the limits specified in Specific Condition #55. During the test, the permittee shall operate the plant within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity can not be achieved, the permittee shall be limited to 10 percent above the actual tested throughput. [Regulation 19, §19.702 and 40 CFR Part 52 Subpart E]

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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

71. The permittee shall not exceed the emission rates set forth in the following table.
[Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	--	13.5
TRS	--	292.1

72. The permittee shall not exceed the emission rates set forth in the following table.
[Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Methanol	--	13.5
Formaldehyde	--	0.02

73. Once every calendar quarter, the permittee shall model emissions from the Aeration Basin to demonstrate compliance with the permitted emission limits. The permittee shall

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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. [§19.703, 40 CFR Part 52, §18.1003, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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.

74. 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: [§19.304 and 40 CFR Part 63, Subpart S, §63.446(b)]
- a. Multiple Effect Evaporator Hotwell;
 - b. Turpentine Underflow Standpipe;
 - c. Blow Heat Accumulator Overflow; and
 - d. NCG HVLC Condenser Seal Tank.
75. 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: [§19.304 and 40 CFR Part 63, Subpart S, §63.446(e)(2)]
- a. On an individual HAP basis, using the procedures specified in 63.457(l)(1) or (2), either:
 - i. 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
 - ii. 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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- i. Reduce methanol by 92 percent or more by weight; or
 - ii. Remove 3.3 kilograms or more of methanol per megagram (6.6 pounds per ton) of ODP.
- 76. The permittee shall perform the daily monitoring procedures specified in either (a) or (b) below: [§19.304 and 40 CFR Part 63, Subpart S, §63.453(j)(1) and (2)]
 - 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 #78.
- 77. 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 #78. [§19.304 and 40 CFR Part 63, Subpart S, §63.453(j)(3)]
 - 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 #75.
 - 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.
- 78. To establish or reestablish the value for each operating parameter required to be monitored under Specific Condition #76 and #77, the permittee shall use the following procedures: [§19.304 and 40 CFR Part 63, Subpart S, §63.453(n)]
 - a. The operating parameter shall be continuously recorded during the initial performance test or any subsequent performance tests;
 - 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;

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- 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 #76;
 - 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.
79. 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. [§19.304 and 40 CFR Part 63, Subpart S, §63.453(o)]
80. The permittee shall perform all requirements of 63.453(p)(1) and (2) at any point in which monitoring parameters specified in Specific Condition #76 are below minimum operating parameter values or above maximum operating parameter values. [§19.304 and 40 CFR Part 63, Subpart S, §63.453(p)]
81. Liquid samples shall be collected using the sampling procedures specified in Method 305 of Part 60, Appendix A, including the following: [§19.304 and 40 CFR Part 63, Subpart S, §63.457(c)(1)]
- 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.
82. The volumetric flow rate measurements to determine actual mass removal shall be taken at the same time as the concentration measurements. [§19.304 and 40 CFR Part 63, Subpart S, §63.457(c)(2)]
83. 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

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following procedures to determine total HAP or methanol concentration: [§19.304 and 40 CFR Part 63, Subpart S, §63.457(c)(3)]

- 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.
84. 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). [§19.304 and 40 CFR Part 63, Subpart S, §63.457(c)(4)]
 85. 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. [§19.304 and 40 CFR Part 63, Subpart S, §63.457(c)(5) and (6)]
 86. The permittee shall measure the total HAP concentration as methanol except as specified in Specific Condition #75. [§19.304 and 40 CFR Part 63, Subpart S, §63.457(g)]
 87. 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). [§19.304 and 40 CFR Part 63, Subpart S, §63.457(j)]
 88. To determine compliance with an open biological treatment system option in Specific Condition #75, the permittee shall comply with 63.457(l)(1) through (5). [§19.304 and 40 CFR Part 63, Subpart S, §63.457(l)]
 89. The permittee shall store inlet and outlet grab samples required to be collected in Specific Condition #87 at 4°C (40°F) to minimize the biodegradation of the organic compounds in the sample. [§19.304 and 40 CFR Part 63, Subpart S, §63.457(n)]

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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 multicyclone. The scrubber was installed in 1985.

The boiler is subject to the Boiler MACT, NESHAP Subpart DDDDD and shall comply with applicable limits by September 13, 2007.

Specific Conditions

90. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #93, #94, #96, #97, #98, #101, #107 and #111. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	53.6	234.7
SO ₂	4.0	17.6
VOC	7.1	31.1
CO	197.6	865.2
NO _x	42.7	147.9
Pb	0.03	0.14

91. The permittee shall not cause to be discharged to the atmosphere from the Hog Fuel Boiler gases which exhibit 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 #101. [§19.503 and 40 CFR Part 52 Subpart E]

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92. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #93, #94, #96, #101, #107, and #111. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	ton/yr
PM	53.6	234.7
Acetone	0.01	0.03
Acetaldehyde	0.02	0.08
Acrolein	0.01	0.01
Barium	0.06	0.23
Benzene	0.01	0.05
Beryllium	0.0004	0.0018
Cadmium	0.008	0.035
Carbon Disulfide	0.03	0.10
Chloromethane	0.01	0.04
Chromium	0.04	0.18
Chromium +6	0.01	0.01
Copper	0.01	0.03
Formaldehyde	0.06	0.24
Hydrochloric Acid	1.02	4.47
Manganese	0.54	2.37
MEK	0.01	0.01
Methanol	0.23	0.99
Mercury	0.0003	0.0014
Nickel	0.0324	0.142
Phenol	0.01	0.01
Phosphorus	0.03	0.12
Silver	0.01	0.02
Styrene	0.01	0.02
Toluene	0.01	0.01
Zinc	0.05	0.22

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Pollutant	lb/hr	ton/yr
TSM (excluding Mn)*	0.085	0.39

* TSM is defined as the combination of 8 metallic HAPs -arsenic, beryllium, cadmium, lead, manganese, nickel, and selenium (40 CFR §63.7575). As allowed by 40 CFR §63.7507(b), the facility will comply with the TSM emission standard based on the sum of emissions for 7 selected metals (by excluding Mn) and by using the Health Based Compliance Alternative (Appendix A of the Boiler MACT) for complying with manganese.

93. 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. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
94. 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. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
95. The permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #94. 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 rolling total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705, 40 CFR Part 52 Subpart E, §18.1004, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
96. The permittee shall test the Hog Fuel Boiler for PM/PM₁₀ during the first year of each 5-year permit cycle. Testing shall be performed in accordance with Plantwide Condition #3. The permittee will perform the PM test using EPA Reference Methods 5 and 202. The permittee will perform the PM₁₀ test using either EPA Reference Methods 201A and 202 or 5 and 202. By using Method 5 and 202 for PM₁₀, the facility will assume all collected particulate is PM₁₀. During the test, the permittee shall operate the plant within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity can not be achieved, the permittee shall be limited to 10 percent above the actual tested throughput. Testing shall be used to demonstrate compliance with permitted emission rates. [Regulation 19, §19.702 and 40 CFR Part 52 Subpart E]

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97. 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. [§19.702 and 40 CFR Part 52 Subpart E]
98. 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. [§19.702 and 40 CFR Part 52 Subpart E]

NESHAP DDDDD (Boiler MACT)

99. The Hog Fuel Boiler is subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*. Due to its construction date, size, and fuel combusted, the Hog Fuel Boiler is included in the Existing Large Solid Fuel Subcategory. Applicable provisions of Subpart DDDDD include, but are not limited to, the following specific conditions. [§19.304 and 40 CFR §60.40c]
100. The permittee shall not discharge to the atmosphere any gases from the Hog Fuel Boiler that contain in excess of the following listed pollutant limits. [Regulation No. 19 §19.304 and 40 CFR §63.7500]

Pollutant	Emission Limit (lb/MM Btu)
PM or TSM*	0.07 or 0.001
Mercury (Hg)	9.0×10^{-6}
HCl	0.09

* TSM is defined as the combination of the 8 metallic hazardous air pollutants - arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium (40 CFR §63.7575). As allowed by 40 CFR §63.7507(b), the facility will comply with the TSM emission standard based on the sum of emissions for 7 selected metals (by excluding Mn) and by using the Health Based Compliance Alternative (HBCA) (Appendix A of the Boiler MACT – *See Appendix H of this permit*)

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101. The permittee shall monitor the liquid flow rate to the Hog Fuel Boiler (SN-05) scrubber and shall monitor the scrubber fan amperage. The flow rate shall be maintained at a minimum of 170.1 gpm. When the Hog Fuel Boiler is operating the scrubber liquid flow rate and scrubber fan amperage will be continuously monitored. [§19.303, 40 CFR Part 64, 40 CFR §63.7500(a)(2), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
102. The permittee shall maintain records which demonstrate compliance with Specific Condition #101. 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. [§19.705, 40 CFR Part 64, 40 CFR Part 52 Subpart E, and 40 CFR Part 63, Subpart DDDDD]
103. The permittee shall demonstrate initial compliance no later than 180 days after the compliance dates that is specified for the emissions source, which is 180 days after September 13, 2007 for existing sources. The permittee submitted notification of Compliance Status report to the ADEQ and EPA on August 15, 2006, which stated that initial compliance was demonstrated for SN-05. Therefore, the permittee has satisfied the requirements of this condition. [Regulation 19 §19.304 and 40 CFR §63.7510(d)]
104. The permittee shall demonstrate initial compliance through performance testing, fuel analysis, and/or the health based compliance alternative for HCl and TSM. The permittee has demonstrated initial compliance for the Hog Fuel Boiler through fuel analysis according to §63.7521, §63.7530(d) and Table 6 of Subpart DDDDD and by using the HBCA for TSM/manganese. [Regulation 19 §19.304, 40 CFR §63.7530(d), and 40 CFR §63.7507(b)]
105. To demonstrate continuous compliance with the Boiler MACT emissions limits, the permittee shall keep records of the type and amount of fuel combusted during the reporting period to demonstrate that all fuel types and mixtures would result in lower emissions of TSM, HCl, and Hg than the applicable emission limit for each pollutant. [Regulation 19, §19.304 and 40 CFR §63.7540]
106. The following parameters were used to determine the eligibility for the health-based compliance alternative for TSM. The permittee is limited to these parameters. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart DDDDD, Appendix A]
 - a. Fuel types: wood waste and natural gas;
 - b. Maximum heat input rate: 160 MMBtu/hr for SN-05;
 - c. Control devices: wet scrubber and cyclone;

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- d. Opacity Limits: Less than or equal to 20% (6-minute average) except for one 6-minute period per hour of not more than 27%;
 - e. Fuel mix (annual average): 100% Biomass Fuel;
 - f. Maximum emission rates: 0.54 lb Mn/hr for SN-05;
 - g. Minimum Stack Heights: 69 ft (21 m) for SN-05; and
 - h. Minimum distance to the property boundary: 605 ft (184 m) from SN-05.
107. The permittee must update the eligibility demonstration and resubmit it each time that any of the parameters that defined the affected source as eligible for the health-based compliance alternatives changes in a way that could result in increased HAP emissions or increased risk from exposure to emissions. These parameters include, but are not limited to, fuel type, fuel mix (annual average), type of control devices, HAP emission rate, stack height, process parameters (e.g., heat input capacity), relevant reference values, and locations where people live. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart DDDDD, Appendix A, Section 11(a)]
108. If the permittee is updating the eligibility demonstration to account for an action that is under the permittee's control (e.g. change in heat input capacity of your boiler), the permittee must submit the revised eligibility demonstration to the permitting authority prior to making the change and revise this permit to incorporate the change. If the affected source is no longer eligible for the health-based compliance alternatives, then the permittee must comply with the applicable emission limits, operating limits, and compliance requirements in 40 CFR Part 63, Subpart DDDDD prior to making the process change and revising the permit. If the permittee is updating the eligibility demonstration to account for an action that is outside of the permittee's control (e.g. change in a reference value), and that change causes the source to no longer be able to meet the criteria for the health-based compliance alternatives, the source must comply with the applicable emission limits, operating limits, and compliance requirements in 40 CFR Part 63, Subpart DDDDD within 3 years. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart DDDDD, Appendix A, Section 11(b)]
109. The permittee must keep records of the information used in developing the eligibility demonstration for the affected source, including all of the information specified in Section 8 of Appendix A to 40 CFR Part 63, Subpart DDDDD. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart DDDDD, Appendix A, Section 12]

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110. The permittee shall test SN-05 for manganese while operating at 90% or greater capacity. Emission results shall be extrapolated to correlate with 100% of the permitted capacity to determine compliance. The manganese tests shall be performed using EPA Reference Method 29. These tests shall be conducted in accordance with Plantwide Condition #3. The initial testing was conducted on June 15, 2006 for SN-05. Subsequent tests shall be performed every five years from the date of the previous test. Results of this testing shall be submitted to the address listed in General Provision #7. [§19.304 of Regulation 19]
111. The permittee shall conduct subsequent fuel analysis according to 40 CFR §63.7521 no later than 5 years from the previous analysis for each fuel type and shall conduct fuel analysis prior to introducing a new fuel type. [Regulation 19, §19.304 and 40 CFR §63.7515(f)]
112. The permittee shall report the results of subsequent fuel analyses within 60 days after the completion of the fuel analysis. [Regulation 19, §19.304 and 40 CFR §63.7515(g)]
113. The permittee shall develop and implement a Startup, Shutdown, Malfunction (SSM) Plan according to the provisions in 40 CFR §63.6(e)(3) or obtain a variance from the US EPA Region VI. [Regulation 19, §19.304 and 40 CFR §63.7505]
114. The permittee shall submit all applicable notifications by the dates specified in 40 CFR §63.7545. [Regulation 19, §19.304 and 40 CFR §63.7515]
115. The permittee shall submit a compliance report semi-annually. The first compliance report shall be postmarked or delivered no later than July 31, 2008 and shall cover the reporting period between September 13, 2007 and June 30, 2008. Each report thereafter shall be postmarked or delivered no later than January 31 or July 31, whichever date is the first date following the end of the semi-annual reporting period. [Regulation 19, §19.304 and 40 CFR §63.7550]
116. The permittee shall maintain records in accordance with 40 CFR §63.7555. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19, §19.304 and 40 CFR §63.7555]

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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.

The boiler is subject to the Boiler MACT, NESHAP Subpart DDDDD and classified as an existing boiler that burns liquid fuel. Therefore, SN-06 does not have emission standards under the Boiler MACT. However, if the boiler is reconstructed in the future, the boiler will be reclassified as a reconstructed boiler and will have to comply with the applicable Boiler MACT standards.

Specific Conditions

117. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #119. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.6	2.6
SO ₂	0.1	0.5
VOC	0.5	2.2
CO	6.4	28.1
NO _x	7.7	33.8

118. 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 #119. [§18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
119. Natural gas shall be the only fuel used in the Power Boiler. [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

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120. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #119. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.6	2.6

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SN-50 thru 54
Non-Point Source Emissions

Specific Conditions

121. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #11. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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*	19.5*
		TRS	0.1	0.1
52	Outside White Water Chest	VOC	5.5*	19.5*
		TRS	0.1	0.1
53	Landfill	CO	--	0.1
		VOC	--	8.6
		TRS	--	0.1
54	DAF Unit	VOC	5.5*	19.5*
		TRS	0.1	0.1

* Includes total methanol (5.15 lb/hr and 18.25 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

122. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #11. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source No.	Description	Pollutant	lb/hr	ton/yr
50	Chip and Hogged Fuel Storage Piles	PM	--	0.1

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Source No.	Description	Pollutant	lb/hr	ton/yr
51	Saveall Tank	Acetone	0.13	0.44
		Acrolein	0.02	0.07
		Methanol	5.15*	18.25*
		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*	18.25*
		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	--	0.01
		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*	18.25*

* Includes total methanol (5.15 lb/hr and 18.25 ton/yr) for all paper machine sources (SN-15, 16, 17, 18, 19, 40, 51, 52, 54).

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SN-100 thru 110
Mid-America Packaging

Source Description

The natural gas fired boiler (SN-100) used at MAP is a 1.0 million Btu per hour boiler. The natural gas fired boiler is subject to the Boiler MACT, NESHAP Subpart DDDDD and classified as an existing boiler that burns liquid fuel. Therefore, SN-100 does not have emission standards under the Boiler MACT. However, if the boiler is reconstructed in the future, the boiler will be reclassified as a reconstructed boiler and will have to comply with the applicable Boiler MACT standards.

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 capacities of the No. 3 Press Tunnel Dryer (SN-102) and the Lacquer Dryer (SN-103) are 1.2 MMBtu 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 MMBtu 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 MMBtu per hour each. The No. 4 Press Between Decks Dryer, the Tunnel Dryer Vent and the Lacquer Dryer Vent are all natural gas fired.

The heat input capacity of the No. 5 Press Between Decks Dryer (SN-109) is 0.8 MMBtu/hr. The heat input capacity of the No. 5 Press Tunnel Dryer (SN-110) is 1.0 MMBtu/hr. Both the Between Decks Dryer and the Tunnel Dryer are 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

123. The permittee shall not exceed the emission rates set forth in the following table and associated footnotes.

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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 #125. Compliance with the emission rates for SN-101 will be demonstrated by compliance with Specific Condition #131. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

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 110	No. 3 Press (Tunnel Dryer Vent and Lacquer Dryer Vent)	PM ₁₀	0.7	0.7
		SO ₂	0.7	0.7
		VOC	84.5	60.0 ¹
	No. 4 Press (Between Decks Dryer Vent, Tunnel Blower Vent, Auxiliary Blower Vent, and Lacquer Dryer Vent)	CO	0.7	1.3
		NO _x	1.1	4.6
	No. 5 Press (Between Decks Dryer Vent and Tunnel Dryer Vent)			
	General Building Ventilation			

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

124. 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 #125. Compliance with the

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emission rates for SN-101 will be demonstrated by compliance with Specific Condition #131. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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 110	No. 3 Press (Tunnel Dryer Vent and Lacquer Dryer Vent)	PM	0.7	0.7
		HAP ^{1,2,3}	84.5	24.5
	No. 4 Press (Between Decks Dryer Vent, Tunnel Blower Vent, Auxiliary Blower Vent, and Lacquer Dryer Vent)	Ammonia	4.4	19.3
	No. 5 Press (Between Decks Dryer Vent and Tunnel 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

125. 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. The VOC and HAP emission records, including exempted HAP usage and emissions, shall be reported in accordance with General Provision 7. [§19.705, 40 CFR

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Part 52 Subpart E, §18.1004, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

126. The permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #125. 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. [Regulation 19 §19.705, Regulation 18 §18.1004, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Opacity Limits

127. 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), the No. 4 Press Lacquer Dryer Vent (SN-107) or No. 5 Press (Between Decks Dryer Vent and Tunnel Dryer Vent) 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 #130. [§18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
128. 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 #129. [§19.503 and 40 CFR Part 52 Subpart E]
129. 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. [§19.705 and 40 CFR Part 52 Subpart E]

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

Natural Gas Usage

130. 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). [§19.705, §18.1004, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

Starch Usage

131. 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. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6]
132. The permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #131. 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. [§19.705 and 40 CFR Part 52 Subpart E]

NESHAP Subpart KK

133. 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: [§19.304 and 40 CFR Part 63, Subpart KK]

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- a. 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. [40 CFR §63.821(b)(2)]
 - b. 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. [40 CFR §63.829(e)(2)]
 - c. The permittee shall submit the reports specified to the Administrator: an initial notification required in 40 CFR §63.9(b). [40 CFR §63.830(b)(1)]
134. 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 #136. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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.

135. The permittee shall maintain records which demonstrate compliance with the limits set in Specific Conditions #133 and #134, 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 #134. These records shall be

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maintained on site and shall be provided to the Department upon request. [§18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

136. Certain HAP containing materials that are unable to meet the requirements of Specific Condition #134 may be exempted provided that all of the following conditions are met. Any exemptions that are claimed must be noted in the HAP records. [§18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 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, sends them to a packed tower scrubber to recover sulfur for the process, and then destroys the gases in the Lime Kiln (SN-01).

The First through Fourth 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 through the NCG HVLC Condenser and NCG HVLC Heater to reduce moisture content, and then to the Lime Kiln for destruction.

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Specific Conditions

137. 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. [40 CFR 70.6 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
138. 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. [§19.304 of Regulation 19, and 40 CFR Part 63, Subpart S, §63.443(c)]
- a. 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. [40 CFR §63.450(b)]
- b. 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). [40 CFR §63.450(c)]
- c. 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: [40 CFR §63.450(d)]
- i. 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.
- ii. 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

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car seal or a seal placed on the valve or closure mechanism in such a way that the valve or closure mechanism cannot be opened without breaking the seal.

- iii. The closed-vent system shall comply with the following requirements: [40 CFR §63.453(k)]
 - A. 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. [40 CFR §63.453(k)(1)]
 - B. 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. [40 CFR §63.453(k)(2)]
 - C. 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): [40 CFR §63.453(k)(3)]
 - 138.c.iii.C.1. Method 21, of Part 60, appendix A;
 - 138.c.iii.C.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;
 - 138.c.iii.C.2.1. Zero air (less than 10 parts per million by volume of hydrocarbon in air) and;
 - 138.c.iii.C.2.2. 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. 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): [40 CFR §63.453(k)(4)]
 - 138.c.iii.D.1. An anemometer to demonstrate flow into the enclosure opening;
 - 138.c.iii.D.2. Measure the static pressure across the opening;
 - 138.c.iii.D.3. Smoke tubes to demonstrate flow into the enclosure opening;

138.c.iii.D.4. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

E. 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. [40 CFR §63.453(k)(5)]

F. 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: [40 CFR §63.453(k)(6)]

138.c.iii.F.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.

138.c.iii.F.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. 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: [40 CFR §63.454(b)]

- i. Date of inspection;
- ii. The equipment type and identification;
- iii. Results of negative pressure tests for enclosures;
- iv. Results of leak detection tests
- v. The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);
- vi. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
- vii. Repair methods applied in each attempt to repair the defect or leak;
- viii. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

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- ix. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
 - x. The date of successful repair or the defect or leak;
 - xi. The position and duration of the opening of bypass line valves and the condition of any valve seals; and
 - xii. The duration of the use of bypass valves on computer controlled valves.
139. An excess emission and continuous monitoring system performance report shall be submitted to the EPA and to the Department semi-annually. [Regulation 19, §19.304 and 40 CFR §63.10(e)(3)(i)]

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.

140. 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 Conditions #141 through #148. [Regulation 19, §19.304 and 40 CFR §63.446(b)]
 - a. Multiple Effect Evaporator Hotwell;
 - b. Turpentine Underflow Standpipe;
 - c. Blow Heat Accumulator Overflow;
 - d. NCG HVLC Condenser Seal Tank.
141. Pulping process condensates from equipment systems listed in Specific Condition #140 shall be collected where the total HAP mass is at least 7.2 pounds of total HAP per ton of oven dried pulp. [Regulation 19, §19.304 and 40 CFR §63.446(c)(3)]
142. 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). [Regulation 19, §19.304 and 40 CFR §63.446(d)(1)]
143. The condensate tank located within the closed collection system must meet the following requirements: [Regulation 19, §19.304 and 40 CFR §63.446(d)(2)]
 - 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 vented into a closed-vent system that meets the requirements of Specific Condition #138 for the HVLC system and routed to a control device that meets the conditions of Specific Condition #69 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

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stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

144. 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. [Regulation 19, §19.304 and 40 CFR §63.453(1)]
- a. 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. [40 CFR §63.453(a) and (i)]
 - b. 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. [40 CFR §63.453(l)(1)]
 - c. 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): [40 CFR §63.453(l)(2)]
 - i. Method 21, of 40 CFR Part 60, Appendix A;
 - ii. 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.
 - d. 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. [40 CFR §63.453(l)(3)]

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- e. 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: [40 CFR §63.454(b)]
 - i. Date of inspection;
 - ii. The equipment type and identification;
 - iii. Results of negative pressure tests for enclosures;
 - iv. Results of leak detection tests
 - v. The nature of the defect or leak and the method of detection, i.e. visual inspection or instrument detection;
 - vi. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;
 - vii. Repair methods applied in each attempt to repair the defect or leak;
 - viii. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
 - ix. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;
 - x. The date of successful repair or the defect or leak;
 - xi. The position and duration of the opening of bypass line valves and the condition of any valve seals; and
 - xii. The duration of the use of bypass valves on computer controlled valves.
- 145. A CMS shall be installed and operated in accordance with a compliance schedule for the condensate collection system. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart S]
- 146. 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: [40 CFR Part 63.453(n)]
 - 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.
- 147. 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. [40 CFR 63.457(j)]
- 148. 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

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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.

[Regulation 19, §19.304 and 40 CFR §63.453(o)]

Subpart MM Conditions

Source Description

These conditions pertain to the requirements of NESHAP Subpart MM. The following specific conditions outline the procedures for determining an overall PM emission limit as well as the testing, maintenance, operation, monitoring, record keeping, and reporting requirements for affected sources. The requirements of this subpart are applicable to the Lime Kiln (SN-01), the Recovery Furnace (SN-02) and the Smelt Dissolving Tank (SN-04). Emissions limits for these sources are included in the specific conditions for each source. The emission limits for these sources may be updated following the performance test performed in accordance with the requirements of Subpart MM.

The compliance date for Subpart MM was March 13, 2004. The facility has 180 days from the compliance date to perform the performance test prescribed in the subpart. Delta is choosing to comply with the overall PM emission limit provision outlined in Subpart MM.

Specific Conditions

149. The permittee must establish PM emissions limits for each existing kraft or soda recovery furnace (SN-02), smelt dissolving tank (SN-04), and lime kiln (SN-01) that operates 6,300 hours per year or more by [40 CFR §63.862(a)(1)(ii)]:
- a. Establishing an overall PM emission limit for each existing process unit in the chemical recovery system at the kraft or soda pulp mill using the methods in 40 CFR Part 63 §63.865(a)(1) and (2).
 - b. The emissions limits for each kraft recovery furnace, smelt dissolving tank, and lime kiln that are used to establish the overall PM limit must not be less stringent than the emissions limitations required by §60.282 of 40 CFR Part 60 for any kraft recovery furnace, smelt dissolving tank, or lime kiln that is subject to the requirements of §60.282.
 - c. Each owner or operator of an existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln must ensure that the PM emissions discharged to the atmosphere from each of these sources are less than or equal to the applicable PM emissions limits, established using the methods in 40 CFR §63.865(a)(1), that are used to establish the overall PM emissions limits.
 - d. Each owner or operator of an existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln must reestablish the emissions limits determined in section (a) of this condition if either of the following actions are taken:
 - i. The air pollution control system for any existing kraft or soda recovery furnace, smelt dissolving tank, or lime kiln for which an emission limit was established in section a of this condition is modified (as defined in 40 CFR §63.861) or replaced; or

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- ii. Any kraft or soda recovery furnace, smelt dissolving tank, or lime kiln for which an emission limit was established is shut down for more than 60 consecutive days.
- 150. For each monitoring system required in 40 CFR §63.864, the permittee must develop and make available for inspection by the Administrator, upon request, a site-specific monitoring plan that addresses the following provisions [40 CFR §63.864(a)]:
 - A. Installation of the sampling probe or other interface at a measurement location relative to each affected source or process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
 - B. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and
 - C. Performance evaluation procedures and acceptance criteria (e.g., calibrations).
 - D. Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii);
 - E. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(2); and
 - F. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), (e)(2)(i) and §63.866.
- 151. The permittee must conduct a performance evaluation of each monitoring system of each affected source in accordance with the site-specific monitoring plan [40 CFR §63.864(b)].
- 152. The permittee must operate and maintain the monitoring system of each affected source in continuous operation according to the site-specific monitoring plan [40 CFR §63.864(c)].
- 153. As an alternative to installing a continuous opacity monitoring system (COMS) to monitor emissions from the recovery boiler (SN-02) equipped with an ESP, the permittee has been granted approval by EPA to monitor the secondary power at each of the four ESP fields. The total secondary power across the four fields shall be maintained at a minimum of 43.1 kW as determined during the initial performance test. Compliance with this condition shall be demonstrated through Specific Condition #29. [Regulation 19, §19.303, 40 CFR §63.8(f)(2)(i), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 154. The permittee must install, calibrate, maintain, and operate a continuous parameter monitoring system (CPMS) compliant with 40 CFR §63.864(e), that can be used to determine and record the pressure drop across the affected scrubbers and the scrubbing liquid flow rate using the procedures in §63.8(c), as well as the following procedures [40 CFR §63.864 (e)(10)]:

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- a. The monitoring device used for the continuous measurement of the pressure drop of the gas stream across the scrubber(s) must be certified by the manufacturer to be accurate to within a gage pressure of ± 500 pascals (± 2 inches of water gage pressure); and
 - b. The monitoring device used for continuous measurement of the scrubbing liquid flow rate must be certified by the manufacturer to be accurate within ± 5 percent of the design scrubbing liquid flow rate.
155. The permittee must determine the operating range for the monitoring parameters of the wet scrubber using the following methods [40 CFR §63.864 (j)]:
- a. The permittee must conduct an initial performance test required in §63.865 for the wet scrubber; or
 - b. The permittee may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required in 40 CFR Part 63 Subpart MM. The permittee must certify that all control techniques and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained.
 - c. The permittee may establish expanded or replacement operating ranges for the monitoring parameter values listed in Specific Condition 0 [§63.864 (e)(10)] and established in Specific Condition 155 a or b [§63.864 (j)(1) or (2)] during subsequent performance tests using the test methods in 40 CFR §63.865.
 - d. The permittee must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.
 - e. During the period of each performance test for the wet scrubber, the permittee must record the pressure drop across the scrubber and the scrubbing liquid flow rate over the same time period as the performance test while the vent stream is routed and constituted normally. The permittee must locate the pressure and flow monitoring devices in positions that provide representative measurements of these parameters.
 - f. During the period, if any, between the compliance date specified for the affected source in 40 CFR §63.863 and the date upon which monitoring systems have been installed and validated and any applicable operating ranges for monitoring parameters have been set, the owner or operator of the affected source or process unit must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
156. The permittee is required to implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared under 40 CFR §63.866(a), if the following monitoring exceedances occur [40 CFR §63.864 (k)(1)].

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- a. For a new or existing kraft or soda recovery furnace or lime kiln equipped with an ESP, when the average of ten consecutive 6-minute averages result in a measurement greater than 20 percent opacity; and
 - b. For a existing kraft or soda recovery furnace, kraft or soda smelt dissolving tank, kraft or soda lime kiln, or sulfite combustion unit equipped with a wet scrubber, an exceedence occurs when any 3-hour average parameter value is outside the range of values established in §63.864(j) and Specific Condition 155.
157. The permittee is in violation of the standards of §63.862 if the following monitoring exceedances occur [40 CFR §63.864 (k)(2)].
- a. For an existing kraft or soda recovery furnace equipped with an ESP, when opacity is greater than 35 percent for 6 percent or more of the operating time within any quarterly period;
 - b. For a new kraft or soda recovery furnace or a new or existing lime kiln equipped with an ESP, when opacity is greater than 20 percent for 6 percent or more of the operating time within any quarterly period; and
 - c. For a new or existing kraft or soda recovery furnace, kraft or soda smelt dissolving tank, kraft or soda lime kiln, or sulfite combustion unit equipped with a wet scrubber, an exceedence occurs when six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in paragraph §63.864(j) and Specific Condition 155.
158. The permittee shall conduct an initial performance test using the test methods and procedures listed in §63.7 and §63.865(b) [40 CFR §63.865].
159. The owner or operator of a process unit seeking to comply with a PM emission limit under §63.862(a)(1)(ii)(A) and Specific Condition 149 must use the following procedures [40 CFR §63.865(a)]:
- a. Determine the overall PM emission limit for the chemical recovery system at the mill using Equation 1 of §63.862(a)(1) [See attachment].
 - b. Establish an emission limit for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln; and, using these emissions limits, determine the overall PM emission rate for the chemical recovery system at the mill using the procedures in paragraphs (a)(2)(i) through (v) of §63.865, such that the overall PM emission rate calculated in paragraph (a)(2)(v) of §63.865 is less than or equal to the overall PM emission limit determined in paragraph (a)(1) of §63.865, as appropriate.
 - i. The PM emission rate from each affected recovery furnace must be determined using Equation 2 of §63.865 (a)(2)(i).
 - ii. The PM emission rate from each affected smelt dissolving tank must be determined using Equation 3 of §63.865 (a)(2)(ii).
 - iii. The PM emission rate from each affected lime kiln must be determined using Equation 4 of §63.865 (a)(2)(iii).

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- iv. If more than one similar process unit is operated in the chemical recovery system at the kraft or soda pulp mill, Equation 5 of §63.865 (a)(2)(iv) must be used to calculate the overall PM emission rate from all similar process units in the chemical recovery system at the mill and must be used in determining the overall PM emission rate for the chemical recovery system at the mill.
 - v. The overall PM emission rate for the chemical recovery system at the mill must be determined using Equation 6 of §63.865 (a)(2)(v).
 - vi. After the Administrator has approved the PM emissions limits for each kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, the owner or operator complying with an overall PM emission limit established in §63.862(a)(1)(ii) must demonstrate compliance with the HAP metals standard by demonstrating compliance with the approved PM emissions limits for each affected kraft or soda recovery furnace, smelt dissolving tank, and lime kiln, using the test methods and procedures in §63.865(b).
160. The permittee must use the following procedures to show compliance with §63.862 (a) [40 CFR §63.865(b)].
- a. For purposes of determining the concentration or mass of PM emitted from each kraft or soda recovery furnace, sulfite combustion unit, smelt dissolving tank, or lime kiln, Method 5 or 29 in appendix A of 40 CFR part 60 must be used, except that Method 17 in appendix A of 40 CFR part 60 may be used in lieu of Method 5 or Method 29 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205°C (400°F). For Methods 5, 29, and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf), and water must be used as the cleanup solvent instead of acetone in the sample recovery procedure.
 - b. For sources complying with 40 CFR §63.862(a) or (b), the PM concentration must be corrected to the appropriate oxygen concentration using Equation 7 of §63.865(b)(2).
 - c. Method 3A or 3B in appendix A of 40 CFR Part 60 must be used to determine the oxygen concentration. The voluntary consensus standard ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference—see §63.14) may be used as an alternative to using Method 3B. The gas sample must be taken at the same time and at the same traverse points as the particulate sample.
 - d. For purposes of complying with §63.862(a)(1)(ii)(A), the volumetric gas flow rate must be corrected to the appropriate oxygen concentration using Equation 8 of §63.865 (b) (4).
 - e.
 - i. For purposes of selecting sampling port location and number of traverse points, Method 1 or 1A in appendix A of 40 CFR part 60 must be used;
 - ii. For purposes of determining stack gas velocity and volumetric flow rate, Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A of 40 CFR part 60 must be used;
 - iii. For purposes of conducting gas analysis, Method 3, 3A, or 3B in appendix A of 40 CFR part 60 must be used. The voluntary consensus standard

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- ANSI/ASME PTC 19.10-1981--Part 10 (incorporated by reference--see §63.14) may be used as an alternative to using Method 3B; and
- iv. For purposes of determining moisture content of stack gas, Method 4 in appendix A of 40 CFR part 60 must be used.
 - f. Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the CaO production rate.
161. The permittee must develop and implement a written plan as described in §63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and control systems used to comply with the standards. In addition to the information required in §63.6(e), the plan must include the following requirements [40 CFR §63.866 (a)].
- a. Procedures for responding to any process parameter level that is inconsistent with the level(s) established under §63.864(j)(2) and Interim Condition 6 b, including the procedures in paragraphs (a)(1)(i) and (ii) of §63.866, as follows:
 - b. Procedures to determine and record the cause of an operating parameter exceedance and the time the exceedance began and ended; and
 - c. Corrective actions to be taken in the event of an operating parameter exceedance, including procedures for recording the actions taken to correct the exceedance.
 - d. The startup, shutdown, and malfunction plan also must include the schedules listed in paragraphs (a)(2)(i) and (ii) of §63.866, as follows:
 - i. A maintenance schedule for each control technique that is consistent with, but not limited to, the manufacturer's instructions and recommendations for routine and long-term maintenance; and
 - ii. An inspection schedule for each continuous monitoring system required under §63.864 to ensure, at least once in each 24-hour period, that each continuous monitoring system is properly functioning.
162. The permittee must maintain records of any occurrence when corrective action is required under §63.864(k)(1) and Specific Condition 156, and when a violation is noted under §63.864(k)(2) and Interim Condition 9 [40 CFR §63.866 (b)].
163. In addition to the general records required by §63.10(b)(2), the permittee must maintain records of the following information [40 CFR §63.866 (c)].
- a. Records of black liquor solids firing rates in units of Mg/d or ton/d for all recovery furnaces and semichemical combustion units;
 - b. Records of CaO production rates in units of Mg/d or ton/d for all lime kilns;
 - c. Records of parameter monitoring data required under §63.864, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

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- d. Records and documentation of supporting calculations for compliance determinations made under §63.865(a) through (e); and
 - e. Records of monitoring parameter ranges established for each affected source or process unit.
164. The permittee must submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 of 40 CFR Part 63 Subpart MM [40 CFR §63.867 (a)(1)].
165. The permittee must comply with the additional reporting requirements for HAP metals standards listed, as follows [40 CFR §63.867(b)]:
- a. Any owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in §63.862(a)(1)(ii) and Interim Condition 1 must submit the PM emissions limits determined in §63.865(a) for each affected kraft or soda recovery furnace, smelt dissolving tank, and lime kiln to the Administrator for approval. The emissions limits must be submitted as part of the notification of compliance status required under Subpart A of 40 CFR Part 63.
 - b. Any owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in §63.862(a)(1)(ii) and Interim Condition 1 must submit the calculations and supporting documentation used in §63.865(a)(1) and (2) to the Administrator as part of the notification of compliance status required under Subpart A of 40 CFR Part 63.
 - c. After the Administrator has approved the emissions limits for any process unit, the owner or operator of a process unit must notify the Administrator before any of the following actions are taken [40 CFR §63.867 (b)(3)]:
 - i. The air pollution control system for any process unit is modified or replaced;
 - ii. Any kraft or soda recovery furnace, smelt dissolving tank, or lime kiln in a chemical recovery system at a kraft or soda pulp mill complying with the PM emissions limits in §63.862(a)(1)(ii) is shut down for more than 60 consecutive days;
 - iii. A continuous monitoring parameter or the value or range of values of a continuous monitoring parameter for any process unit is changed; or
 - iv. The black liquor solids firing rate for any kraft or soda recovery furnace during any 24-hour averaging period is increased by more than 10 percent above the level measured during the most recent performance test.
 - d. An owner or operator of a group of process units in a chemical recovery system at a mill complying with the PM emissions limits in §63.862(a)(1)(ii) and seeking to perform the actions in paragraph c. i. or c. ii. of this condition [§63.867 (b)(3)(i) or (ii)] must recalculate the overall PM emissions limit for the group of process units and resubmit the documentation required in paragraph b of this condition [§63.867(b)(2)] to the Administrator. All modified PM emissions limits are subject to approval by the Administrator.

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166. The permittee must report quarterly, if measured parameters meet any of the conditions specified in Specific Conditions 156 and 157 [§63.864 (k)(1) or (2)]. This report must contain the information specified in 40 CFR §63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Specific Condition 156 [§63.864(k)(1)], and the number and duration of occurrences when the source met or exceeded the conditions in Specific Condition 157 [§63.864(k)(2)]. Reporting excess emissions below the violation thresholds of §63.864(k) does not constitute a violation of the applicable standard [40 CFR §63.867(c)].
- a. When no exceedances of parameters have occurred, the owner or operator must submit a semiannual report stating that no excess emissions occurred during the reporting period.
 - b. The owner or operator of an affected source or process unit subject to the requirements of Subpart MM and Subpart S of 40 CFR Part 63 may combine excess emissions and/or summary reports for the mill.

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Delta Natural Kraft and Mid-America Packaging, LLC will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
7. The permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation 19, §19.304 and 40 CFR 63.6(e)(3)]

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8. 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. [Regulation 18, §18.801]
9. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants from becoming airborne. [Regulation 18, §18.901]
10. All monitoring devices used for determining proper operation of control equipment shall: [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - 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.
11. 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. [Regulation 19, §19.304]
12. The permittee shall comply with all notification requirements including initial notifications, notification of performance tests, continuous monitoring system performance evaluations, and source compliance status. [40 CFR §63.9]
13. 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. [40 CFR Part §63.10]
 - a. Startup, Shutdown, Malfunction, and Maintenance records;
 - b. Continuous Monitoring System Records.
14. 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. [40 CFR Part §63.10]
 - a. Excess Emission Reports;
 - b. Monitoring System Performance Reports;
 - c. Startup, Shutdown, and Malfunction Reports.

Title VI Provisions

15. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]

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- 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 must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
 - 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.)
 - 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, destroys, 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 (or regulated substitute substance) 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 buses using HCFC 22 refrigerant.

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19. The permittee can switch from any ozone depleting substance to any alternative 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.

Permit Shield

21. 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 the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated January 15, 2003.

Applicable Regulations

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 Part 63 Subpart S	NESHAP for Pulp and Paper
01, 02, & 04	40 CFR Part 63 Subpart MM	NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-alone Semichemical Pulp Mills

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The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated January 15, 2003.

Inapplicable Regulations

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	The Pulp and Paper mill creates the emitted HAPs as an impurity in the 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

Delta Natural Kraft and Mid-America Packaging, LLC**Permit #: 385-AOP-R6****AFIN: 35-00017****SECTION VII: INSIGNIFICANT ACTIVITIES**

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table 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
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
---	Delta	Leachate Storage Tank	A. 13
I-01	MAP	Natural Gas Fired Boiler (1 MMBTU/hr)	A. 1
	MAP	Tubers & Bottomers	A. 13

SECTION VIII: GENERAL PROVISIONS

1. 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.[40 CFR 70.6(b)(2)]
2. 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. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will 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. [Regulation 26, §26.406]
4. 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, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and

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maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

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

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit. The permittee shall make an initial report to the Department by the next business day after the discovery of 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 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
 - i. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee 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 the report will serve as both the initial report and full report. [40 CFR 70.6(a)(3)(iii)(B), Regulation 26, §26.701(C)(3)(b), Regulation 19, §19.601 and §19.602]

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9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will 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. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. 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, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]
14. The permittee must 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 must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]

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17. If the permit allows 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 operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
 - 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 required 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 assuring compliance with this permit or applicable requirements.
21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]
 - 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;
 - e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

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22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)] The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance; the applicable requirements of the acid rain program, consistent with §408(a) of the Act or, the ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

APPENDIX A

(CEMS Conditions)

APPENDIX B
(Regulation 19, Chapter 8)

APPENDIX C
(40 CFR Part 63, Subpart S)

APPENDIX D
(40 CFR Part 63, Subpart KK)

APPENDIX E
(40 CFR Part 60, Subpart Kb)

APPENDIX F
(July 25, 2001 Approval Letter)

APPENDIX G
(40 CFR Part 63, Subpart MM)

APPENDIX H
(40 CFR Part 63, Subpart DDDDD)

APPENDIX I

(EPA Approval Letter for NESHAP Subpart MM Alternative Monitoring)

Request for PDS Invoice	
Invoice Number <i>(assigned when invoice printed)</i>	PDS-

AFIN *	35-00017			
Name <i>(for confirmation only)</i>	Delta Natural Kraft and Mid-America Packaging, LLC			
Invoice Type (pick one) *	Initial	Mod X	Variance	
	Annual	Renewal	Interim Authority	
Permit Number *	385-AOP-R6			
Media Code *	A			
Fee Code or Pmt Type*	T5			
Fee Description <i>(for confirmation only)</i>	Title V			
Amount Due * <i>(whole dollar amount only)</i>	\$1,000.00			
Printed Comment <i>(600 characters maximum)</i>				

<i>Note: The information below is for use by the requesting division if desired; it will not print on the invoice.</i>	
Engineer	Amanda Leamons
Paid? (yes/no)	
Check number	
Comments	

*** Required data** (See "g:\Misc\PDS_FeeCodes.wpd" for descriptions and discussions of fee codes)

Request submitted by:		Date:	
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Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 602, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

Delta Natural Kraft (Delta)/Mid-America Packaging (MAP) (AFIN: 35-00017) operates a kraft pulp and paper mill located at 1701 Jefferson Parkway in White Hall, Arkansas 71602. Mid-America Packaging manufactures multi-wall bags from the paper produced by Delta. This modification to Permit 385-AOP-R5 incorporates the requirements of 40 CFR Part 63, Subpart DDDDD- *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* (Boiler MACT) into the air permit. The hog fuel boiler (SN-05) is classified as an existing, large boiler that burns solid fuel and must comply with the emission standards of the Boiler MACT by September 13, 2007. With this modification the Boiler MACT conditions and emission standards have been incorporated into the specific conditions for SN-05. Delta will demonstrate compliance with the Boiler MACT through fuel analysis, Health Based Compliance Alternative (HBCA), and performance testing. Overall annual permitted emissions changes resulting from the modification decreased by 0.09 tons of beryllium, 0.02 tons of mercury, and 0.01 tons of selenium; and emissions increased by 0.107 tons of lead, 0.03 tons of cadmium, 0.18 tons of chromium, 4.23 tons of HCl, 1.84 tons of Mn, and 0.15 tons of nickel.

Combined with this permit revision are two modifications, a minor modification, and an administrative amendment to the current air permit. The modifications comprise of the following: the installation of a printing press equipped with two drying chambers; inclusion of the standards established in 40 CFR Part 63, Subpart MM; and the administrative amendment allows the addition of two new tubers and two new bottomers to MAP plant as an insignificant activity at the facility. Overall annual permitted emissions resulting from the combined modifications decreased by 49.7 tons of PM/PM₁₀ and 0.8 tons of CO.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Doug Szenher, Public Affairs Supervisor. Citizens desiring technical information concerning the application or permit should contact Amanda Leamons, Engineer. Both Doug Szenher and Amanda Leamons can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Watson Memorial Library located at UAPB, Pine Bluff, AR 71601. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Doug Szenher. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8) and Regulation #26.

Dated this

Marcus C. Devine
Director