# ADEQ OPERATING AIR PERMIT

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

Permit #: 287-AOP-R3

IS ISSUED TO:

Domtar Industries, Inc. - Ashdown Mill 285 Highway 71 South Ashdown, AR 71822 Little River County CSN: 41-0002

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:

June 1, 1999 and May 31, 2004

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:	
Keith A. Michaels	Date Modified

## **SECTION I: FACILITY INFORMATION**

PERMITTEE: Domtar Industries, Inc. - Ashdown Mill

CSN: 41-0002

PERMIT NUMBER: 287-AOP-R3

FACILITY ADDRESS: Highway 71 South

Ashdown, Arkansas 71822

COUNTY: Little River

CONTACT POSITION: Eric Reynolds

TELEPHONE NUMBER: 870-898-2711, Ext. 6136

REVIEWING ENGINEER: M. Lloyd Davis, P. E.

UTM North-South (X): 3722.6 km UTM East-West (Y): 399.7 km

Zone 15

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#### **SECTION II: INTRODUCTION**

Domtar Industries, Inc., operates a bleached kraft pulp and paper mill in Ashdown, Little River County, Arkansas. Hardwood and softwood are received in tree lengths, round wood billets, and chip forms for processing in two woodyards. Tree lengths and billets are debarked and chipped. Chips are screened for proper size and stored or conveyed to the digesters to begin the process. The basic kraft process consists of the papermaking process and the chemical recovery process.

In April of 2000, Sources 16 and 17 (1A and 1B Bleachplants) tested above the permitted limits for carbon monoxide. Biweekly testing of the bleach plant vents was begun on May 4, 2001, to determine actual emissions from the three Bleachplants (No. 1A, No. 1B, and No. 2). Final results show an increase of 478.8 tpy of CO for these sources over the permitted limits. VOC emissions have also been revised upwards.

This permit modification will also increase carbon monoxide emissions from the oxygen delignification system (SN-45) by 36.4 tpy. The proposed limit is based on stack testing outlined in the CAO issued for this source. There has been no physical change in the process.

This modification will also permit the substitution of a continuous monitoring system (CMS) for gas scrubber vent gas inlet flow rate with an equivalent continuous monitoring of amperage on the induced draft fans that determine the gas inlet flow rate. Approval of this change in continuous monitoring is based on a letter dated July 24, 2001, from Mr. John R. Hepola, Chief of Air/Toxic & Inspection Coordination Branch, EPA Region 6, and conditional on tests and inspections that verify that HAP emissions from source SN-18 do not exceed the limits of Specific Condition #256.

A mist eliminator will also be added to SN-44d, paper Machine 64, to reduce the number of breaks in the supported paper web. It is expected that a very slight increase in production will result from this process change, but the effect on total emissions from this source is considered negligible. A diesel-powered generator to operate the lift pumps that move mill effluent from the inlet canal to the wastewater treatment system will also be included under insignificant activities, as it is used only during power outages and biweekly tests of one hour duration.

Domtar Industries, Inc.- Ashdown Mill is considered a major stationary source under the Prevention of Significant Deterioration (PSD) Regulations. Increases in emissions (tpy) in this permit for CO are above the PSD significant emissions increase level of 100 tpy, so that a PSD review of CO impact levels is required. The emissions increases associated with this modification and the significance level are shown below. The combined emission rate for CO from all sources has increased by 4.3%.

#### Plantwide Permitted Emissions (ton/yr)

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Pollutant	Air Permit 287-AOP-R2	Air Permit 287-AOP-R3	Change	PSD Significance Level
СО	11958.1	12473.3	515.2	100

In addition to PSD regulations, Domtar Industries is also subject to to Regulations of the Arkansas Operating Air Permit Program (Title V, Regulation #26), Regulations of the Arkansas Plan of Implementation for Air Pollution Control (SIP, Regulation #19), and Arkansas Air Pollution Control Code (Code, Regulation #18).

Domtar Industries is also subject to 40 CFR Part 60, Subpart A - General Provisions, 40 CFR Part 60, Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971, 40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels, and 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills.

This permit will also include the requirements of 40 CFR Part 63, Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.

#### PREVENTION OF SIGNIFICANT DETERIORATION

For this modification, there was no netting procedure to offset the increases in CO emissions from SN-16, SN-17, SN-18, and SN-45. Chlorine dioxide bleaching is now the standard industry procedure for bleaching brownstock, and there is no commercial alternative. The scrubber associated with SN-16 to SN-18 can not be improved, since CO is essentially insoluble in water. There is no know information on any facility in the U. S. with a method to control CO emissions from the CLO<sub>2</sub> bleaching process more efficiently. Georgia-Pacific's mill at Palatka, Florida, obtained a limit of 46 lb/hr of CO, or 0.65 lb/ton of pulp. BACT was concluded to be "no controls." The Weyerhauser facility in Columbus, Mississippi, had a much higher limit of 1.4 lbs/ton of pulp for its bleach plant, with BACT determined to be "efficient operation." Total CO emissions from sources associated with the CLO<sub>2</sub> bleaching process (SN-16-18, 45 and 46) are estimated for this permit at 1093 tpy. Domtar has determined that its bleaching operation emits 1.89 lb of CO per ton of pulp.

To convert to elemental chlorine-free bleaching, an increase of 45 tons/day of chlorine dioxide to replace the chlorine levels previously used in the bleaching process. Instead of adding a new ClO<sub>2</sub> generator, other process modifications were implemented. A fourth stage was added to each hardwood mill to allow more retention time for the pulp to react with ClO<sub>2</sub>. The five-stage bleach plant on the softwood side was converted to a four-stage plant with a pre-bleaching washer. An oxygen delignification system was also installed in the softwood pulp mill. Elemental oxygen

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breaks down the lignin in the wood fibers, effectively reducing the required amount of bleaching chemicals. The total cost for chlorine-free (ECF) bleaching at the Ashdown Mill was approximately \$65,000,000.

#### **Class Area Impact Analysis**

PSD regulations require that written notification be provided to the Federal Land Manager in the event that a major source or modification is located within 100 kilometers of a Class 1Area. The Ashdown Mill is located within 75 kilometers of the Caney Creek Wilderness Area located in the Ouachita National Forest. Therefore, notification to the Federal Land Manager and a Class 1 Area Impact Analysis are required.

#### **NAAQS** Analysis

The NAAQS are the maximum concentrations, measured in terms of the total concentration of pollutant in the atmosphere. In the NAAQS analysis, the Ashdown Operations' emissions are combined with those from other nearby sources that have the potential to contribute significantly to the receptors within the radius of impact (ROI). This analysis was performed for CO only.

## **Full Impact Analysis Results**

Based on stack locations relative to the SE corner of the facility (y = 0, x = 0) supplied by Domtar, Breeze ISC modeling was performed for all CO emission points. The highest concentration with 1 hour averaging was 1,250  $\mu$ g/m³ (at x = 1800 m, y = 1800 m), and for 8 hour averaging was 416  $\mu$ g/m³ (at x = 1400 m, y = 1800 m).

Monitored concentrations for CO are not available for the impacted area. The figures for Little Rock are used here for the background concentration.

The highest result of the NAAQS Analysis for CO is contained in the following table.

NAAQS Analysis Results for CO						
Averaging Period       Concentration (μg/m³)       Background (μg/m³)       Total (μg/m³)       NAA (μg/m³)						
1 hour	1,250	5,613.50	6864	40,000*		
8 hours	416	2,479.40	2895	10,000*		

<sup>\*</sup> Primary values. There are no secondary values for CO.

#### **PSD Increment Analysis**

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PSD Increment is the maximum allowable increase in concentration that is allowed to occur above a set baseline concentration for a specific pollutant. The baseline concentration is defined for each pollutant and averaging time. It is the ambient concentration existing at the time that the first complete PSD permit application is submitted for a distinct area. The baseline concentration of CO has not been established for Little River county. Also, PSD Increments for CO in Class I and Class II areas have not been established. The impact of increasing CO emissions at the Ashdown Operations obtained from Screen3 modeling would be less than  $3.5~\mu g/m^3$  (8 hour average) at 50 km distance from Ashdown. Therefore, a Class I Area Analysis was not performed.

#### **Papermaking Process**

Cooking is carried out in ten batch and one continuous digesters. The chips are mixed with white liquor and black liquor, pressurized, and heated with steam. Cooked chips are blown from the digesters into blow tanks where they become brown stock (unbleached pulp) when exposed to lower pressure. Brown stock from the blow tanks is screened and washed to remove spent cooking chemicals. The brown stock may be washed in a diffusion washer, a belt washer (Chemiwasher), or a series of rotary vacuum drum washers. Liquid formed in the washing process is called weak black liquor and consists of sodium compounds, sulfur compounds, and organic material from the wood pulp. The weak black liquor is sent to the recovery process. Brownstock is thickened by deckers and sent to the high density brownstock storage tanks.

Brownstock enters one of three bleaching lines. Bleaching is accomplished using chlorine, chlorine dioxide, oxygen, hydrogen peroxide, and sodium hydroxide. Chlorine dioxide is manufactured on site. Bleached pulp is sent to high density storage towers.

Bleached pulp is diluted to a controlled water content and passed through a dryer which utilizes steam and hot air to dry the pulp to a desired moisture content. Dried pulp is cut to size and compressed in bales for shipment or future internal use or sent to the paper machines on an as needed basis.

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Pulp sent to the papermachines is diluted to a controlled water content and mixed with chemical additives. The pulp and water slurry is sent to the papermachine where water is removed by mechanical or thermal means. The paper web is sent to the sheet former where water is removed through shear forces and a vacuum applied to the sheet. A starch is added to the sheet before the drying is complete. Paper is cut to width and rolled.

## **Chemical Recovery Process**

Weak black liquor is sent to weak black liquor storage tanks where tall oil soap is removed from the liquor which is then sent to the evaporators. In the evaporators the water content is reduced in order to burn the black liquor in a recovery boiler.

The combustion of black liquor removes the organic material from the inorganic chemicals. The heat from the combustion process is recovered as steam and the chemicals are recovered as a molten sodium smelt.

Smelt is mixed in the smelt dissolving tanks with water to form green liquor. The green liquor is sent to the recaustisizing lines. In the recaustisizer, green liquor is reacted with calcium oxide to form white liquor and lime mud. The white liquor is recycled to the pulping process for use in the digesters. The lime mud is sent to the lime kiln for calcining and reuse in the reaction with green liquor.

The following table is a summary of emissions from the facility. Specific conditions and emissions for each source can be found starting on the page cross referenced in the table. This table, in itself, is not an enforceable condition of the permit.

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	EMISSION SUMMARY					
Source	Description	Pollutant	Emissio	n Rates	Cross	
No.			lb/hr	tpy	Reference Page	
Total All	owable Emissions	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ Pb^1 \\ TRS^1 \end{array}$	725.8 725.8 3090.5 754.4 3003.8 1893.6 0.03 25.40	3158.5 3158.5 8111.6 2863.0 12473.3 7995.6 0.10 118.5	N/A	
	HAPs*	Acetaldehyde* Benzene* Chloroform* Formaldehyde* Hydrogen Chloride¹ Methanol* Napthalene* Styrene*	2.47 1.38 23.30 3.19 111.45 116.46 1.00 0.27	451.24 6.06 101.89 13.99 488.20 536.82 4.38 1.20		
Air C	ontaminants **	Acetone <sup>1</sup> Ammonia <sup>1</sup> Barium Chlorine <sup>1</sup> Chlorine Dioxide <sup>1</sup> Phosphoric Acid Sulfuric Acid <sup>1</sup>	16.3 103.1 1.12 6.30 8.00 0.01 7.52	10.86 71.5 4.92 27.66 30.68 0.10 32.94		

<sup>\*</sup> HAPs included in the VOC totals are indicated by an \*. Other HAPs are not included in any other totals unless specifically stated.

<sup>\*\*</sup> Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not classified as VOCs or HAPs.

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	EMISSION SUMMARY						
Source	Description	Pollutant	Emissio	n Rates	Cross		
No.			lb/hr	tpy	Reference Page		
01	#3 Power Boiler	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> Acetaldehyde Barium Benzene Napthalene	19.8 19.8 62.0 21.3 276.5 237.0 0.21 0.35 0.21 0.50	86.5 86.5 271.6 93.3 1211.1 1038.1 0.92 1.54 0.92 2.19	22		
02	No. 3 Lime Kiln	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> TRS Benzene Methanol	8.6 8.6 13.3 14.6 55.0 66.5 1.34 0.24 1.31	37.7 37.7 58.3 63.9 240.9 291.3 5.9 1.06 5.74	30		
03	No. 1 Power Boiler	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> Acetaldehyde Barium Benzene	343.0 343.0 1285.0 43.0 164.0 247.5 0.84 0.77 0.49	1504.1 1504.1 214.0 214.6 718.3 1085.9 3.68 3.38 2.15	37		

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	EMISSION SUMMARY						
Source No.	Description	Pollutant	Emission Rates		Cross Reference		
110.			lb/hr	tpy	Page		
05	No. 2 Power Boiler	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> Pb Acetaldehyde Benzene Hydrogen Chloride	82.0 82.0 983.0 92.0 266.0 574.0 0.03 0.21 0.21 5.75	359.2 359.2 4305.5 206.5 630.0 2514.1 0.1 0.92 0.92 25.19	42		
06	No. 2 Recovery Boiler	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> TRS Formaldehyde Hydrogen Chloride Methanol Styrene Sulfuric Acid	0.50 84.4 84.4 286.0 46.7 980.0 309.2 7.4 0.72 51.20 1.18 0.06 3.22	2.19  369.7 369.7 1252.7 204.6 4292.4 1354.3 32.4 3.16 224.30 5.17 0.27 14.10	49		
08	No. 2 Smelt Tank Vents	PM PM <sub>10</sub> SO <sub>2</sub> VOC TRS Ammonia Formaldehyde Methanol	18.0 18.0 10.6 9.3 2.1 40.00 0.36 5.40	78.8 78.0 46.4 40.7 9.2 175.20 1.56 23.66	56		

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	EMISSION SUMMARY						
Source	Description	Pollutant	Emissio	n Rates	Cross		
No.			lb/hr	tpy	Reference Page		
09	No. 2 Lime Kiln	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \\ Benzene \\ Methanol \end{array}$	51.0 51.0 16.7 17.1 55.0 68.6 8.0 0.23 1.18	223.4 223.4 73.2 74.9 240.9 300.5 35.0 1.01 5.17	60		
11	No. 2 Package Boiler	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \end{array}$	0.6 0.6 0.2 0.3 25.4 27.4	2.6 2.6 0.9 1.3 111.3 120.0	68		
12	No. 3 Package Boiler	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \end{array}$	0.5 0.5 0.1 0.3 6.4 16.0	2.2 2.2 0.4 1.0 28.0 70.1	70		

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	EMISSION SUMMARY						
Source	Description	Pollutant	Emissio	Cross			
No.			lb/hr	tpy	Reference Page		
14	No. 3 Recovery Boiler	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> TRS Formaldehyde Hydrogen Chloride Methanol Styrene Sulfuric Acid	93.5 93.5 425.0 137.0 856.0 270.0 6.6 0.87 54.50 0.46 0.07 4.20	409.5 409.5 1861.5 600.1 3749.3 1182.6 28.9 3.82 238.71 2.02 0.31 18.40	74		
15	No. 3 Smelt Dissolving Tank	PM PM <sub>10</sub> SO <sub>2</sub> VOC TRS Ammonia Formaldehyde Methanol	18.7 18.7 5.1 9.9 1.6 45.00 0.58 0.34	81.9 81.9 22.3 43.5 7.0 197.10 2.55 1.49	81		
16	No. 1A Bleachplant Vents	VOC CO Chlorine Chlorine Dioxide Chloroform	6.7 91.5 2.00 1.00 5.50	29.4 400.8 8.76 4.38 24.09	85		

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		EMISSION SUN	MARY		
Source	Description	Pollutant			Cross
No.			lb/hr	tpy	Reference Page
17 & 46	No. 1B Bleachplant Vents & No. 1B Pre-Bleach Washer	VOC CO Chlorine Chlorine Dioxide Chloroform	14.9 72.3 2.00 1.00 5.50	65.0 316.7 8.80 4.40 24.10	88
18	No. 2 Bleachplant Vents	VOC CO Chlorine Chlorine Dioxide Chloroform	10.8 76.6 2.00 2.00 5.50	47.3 335.5 8.80 8.80 24.10	91
20	ERCO CIO <sub>2</sub> Generator	Chlorine Chlorine Dioxide	0.3 3.0	1.30 13.10	96
21	Effluent Treatment Lagoons	VOC Chloroform Formaldehyde Methanol	12.8 6.80 0.46 5.50	55.7 29.6 2.02 24.0	97
22	No. 1A and 1B Brownstock Washer Vents	VOC Acetone Formaldehyde Methanol	59.2 8.80 0.20 59.0	259.1 38.60 0.88 258.2	103
23	Methanol Storage Tank	VOC Methanol	1.0 0.91	4.0 4.00	105
24	Ammonia Storage Tank	Ammonia	0.10	0.10	105
25	Nutrient Storage Tank	Phosphoric Acid	0.01	0.10	105

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	EMISSION SUMMARY						
Source No.	Description	Pollutant	Emissio	n Rates	Cross Reference		
1,0,			lb/hr	tpy	Page		
26	Sulfuric Acid Tanks	Sulfuric Acid	0.10	0.44	105		
28	Formic Acid Tanks	Formic Acid	0.20	0.90	105		
29	Recausticizer Vents	VOC Acetaldehyde Ammonia Methanol	3.0 0.51 18.00 2.40	12.8 2.24 78.84 10.52	109		
30	PCC Carbonator No. 1	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.8 0.4 2.1 9.1 10.9 0.06	N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup>	111		
31	PCC Carbonator No. 2	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> TRS	0.8 0.8 0.4 2.1 9.1 10.9 0.06	N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup>	111		
32	PCC Carbonator No. 3	$\begin{array}{c} \text{PM} \\ \text{PM}_{10} \\ \text{SO}_2 \\ \text{VOC} \\ \text{CO} \\ \text{NO}_X \\ \text{TRS} \end{array}$	0.8 0.8 0.4 2.1 9.1 10.9 0.06	N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup>	111		

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	EMISSION SUMMARY						
Source	Description	Pollutant Emission Rates	Cross				
No.			lb/hr	tpy	Reference Page		
33	PCC Carbonator No. 4	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.8 0.4 2.1 9.1 10.9 0.06	N/A <sup>2</sup>	111		
34	PCC Carbonator No. 5	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.8 0.4 2.1 9.1 10.9 0.06	N/A <sup>2</sup>	111		
35	PCC Carbonator No. 6	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.8 0.4 2.1 9.1 10.9 0.06	N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup> N/A <sup>2</sup>	111		
36	Weak Black Liquor Tanks	VOC TRS Methanol	7.3 0.1 6.30	32.0 0.5 27.60	114		
37	Pulp Dryer Hood and Vacuum Exhausts	VOC Acetaldehdye Methanol	4.7 0.70 2.60	20.5 3.10 11.40	116		
38	No. 2 and No. 3 Woodyards	VOC	123.0	540.0	118		
39	High Density Storage Tanks	VOC Methanol	1.2 0.80	5.3 3.50	119		

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	EMISSION SUMMARY					
Source	Description	Pollutant	Emissio	n Rates	Cross	
No.			lb/hr	tpy	Reference Page	
40	No. 1A and No. 1B Digester Chip Fill Exhausts	VOC TRS Methanol	$ \begin{array}{r} 241.0^{3} \\ 48.4^{3} \\ 138.00^{3} \end{array} $	44.0 8.8 25.1	121	
41	Sludge Landfill	VOC Methanol	11.6 0.28	51.0 1.23	123	
42	No. 2 Decker	VOC Acetone Methanol	5.6 7.50 3.30	24.5 32.90 10.10	125	
43	Tub Grinder	$\begin{array}{c} \text{PM} \\ \text{PM}_{10} \\ \text{SO}_2 \\ \text{VOC} \\ \text{CO} \\ \text{NO}_{\text{X}} \end{array}$	0.9 0.9 1.1 0.5 8.0 12.0	2.9 2.9 4.8 1.6 25.8 38.7	127	
44a	Paper Machine 61	VOC	2.4	10.6	129	
44b	Paper Machine 62	VOC Methanol	4.7 4.00	20.6 17.52	129	
44c	Paper Machine 63	VOC Methanol	5.60 5.60	24.6 24.60	129	
44d	Paper Machine 64	VOC Methanol	6.8 6.80	29.8 29.80	129	
45	Oxygen Delignification System	VOC CO Methanol	9.11 16.5 9.11	39.9 72.3 39.9	133	

<sup>1.</sup> These emissions are not included in any of the criteria pollutant emission rates.

## **SECTION III: PERMIT HISTORY**

<sup>2.</sup> No annual rates have been given for the PCC Carbonators because they are included in the annual emissions for SN-02.

<sup>3.</sup> These rates are in pounds per day and are not include in the facility wide VOC lb/hr emission rate.

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The facility was originally constructed from 1966 to 1968 and began operation in July 1968 as the Nekoosa-Edwards Paper Company. The facility was registered in 1968. Original equipment included the No. 1 Power Boiler (SN-03), the No.1 Recovery Boiler (no longer in service as a recovery boiler), and the No. 1 Smelt Dissolving Tank (no longer in service). The registration was amended in 1970 to include the No. 1 Package Boiler (no longer in service).

Permit 287-A was issued in 1975. This modification included the installation of the No. 2 Power Boiler (SN-05) and the No. 62 Paper Machine.

Permit 287-A was modified in 1978 to include the No. 2 Recovery Boiler, the No. 2 Smelt Tank Vents, the No. 2 Lime Kiln, the Kamyr digester, a diffusion washer, the No. 2 Evaporators, the No. 2 Bleach Plant, a new pulp dryer, the No. 2 woodyard and the No. 63 Paper Machine. The original pulp dryer and the No. 1 Lime Kiln were shut down and removed from service. This was a permitting action under the Prevention of Significant Deterioration (PSD) regulations. The PSD permitting action was reviewed by the Environmental Protection Agency (EPA).

Permit 287-A was modified a second time later in 1978 to amend the stack height on the recovery boiler from 336 feet to 295 feet.

Permit 287-AR-3 was issued in 1985. This was a PSD permitting action which included installation of the No. 1 Package Boiler (removed from service) and the No. 2 Package Boiler (SN-11). Additionally the capacity of the No. 2 Power Boiler (SN-05) was increased from 500,000 pounds per hour steam to 575,000, the capacity of the No. 2 Recovery Boiler (SN-06) was increased from 3.5 million pounds of black liquor solids (BLS) per day to 4.4 million, and the capacity of the No. 2 Smelt Dissolving Tanks (SN-08) was increased from 45,583 pounds per hour of salt cake to 57,292.

Permit 287-AR-4 was issued March 24, 1987. This permitting action replaced the No. 1 Package Boiler with the No. 3 Package Boiler (SN-12).

Permit 287-AR-5 was issued June 24, 1987. This was a PSD permitting action which included replacement of the No. 1 Recovery Boiler and No. 1 Smelt Dissolving Tanks with the No. 3 Recovery Boiler and the No. 3 Smelt Dissolving Tanks.

Permit 946-A was issued on July 14, 1989. This was a PSD permitting action which allowed conversion of the old No. 1 Recovery Boiler to the No. 3 Power Boiler (SN-01). Additionally, this permit allowed the installation of the No. 3 Lime Kiln (SN-02).

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The permit was transferred to Georgia-Pacific in 1991.

Permit 287-AR-6 was issued on December 31, 1991. This permitting action allowed an increase in the BLS firing rate in the No. 3 Recovery Boiler.

Permit 287-AR-7 was issued on May 24, 1993. This permitting action consolidated permit 287-AR-6 and permit 946-A and allowed the installation of a precipitated calcium carbonate (PCC) facility.

Permit #287-AOP-R0 was issued on June 1, 1999. The construction of the new bleaching stages for the 1A and the 1B Bleachplants was included in this permit as well as the construction of an oxygen delignification system for the No. 2 Pulpmill. These projects were necessary for the facility to convert to 100% chlorine dioxide bleaching. Several sources and/or pollutants which the permittee was not previously required to have permitted were listed in the permit. This resulted in an increase in the permitted emissions from this facility.

Permit #287-AOP-R1was the second operating permit issued to Georgia-Pacific Corporation - Ashdown Operations under Regulation 26. This modified permit issued on July 12, 2000, to add Tire Derived Fuel (TDF) to the permissible fuels list for the No. 2 Power Boiler and to allow for the installation of the following: a new causticizer to the recausticizer vent, spoiler bars in the dryers of the papermachine designated as source SN-44a which will increase the speed of the machine by approximately 10 feet per minute, and another hood exhaust fan on the papermachine designated as source SN-44b. Typographical errors were corrected in this permit.

Permit #287-AOP-R2 was issued on June 15, 2001. This modification allowed recycled sanitary products, consisting of cellulose and polypropylene, to be burned in the three Power Boilers. It also allowed a request to maintain flue gas temperatures above a specified minimum temperature only when bark feed rates exceed 10% of the boiler capacity, since natural gas burns with negligible VOC emission rates. A higher consumption rate for fuel oil was allowed for the #1 Power Boiler (SN-01) and the No. 2 Lime Kiln (SN-09) based on the reduced sulfur content of the fuel currently available; SO<sub>2</sub> emissions will be unchanged. The Engineering Department proposed to add a new air-paper separator to an existing cyclone in the converting area that will slow the trim stream and allow the trim to fall out. This was added to the list of insignificant items.

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On August 13, 2001, the Department was notified by the law firm of Mitchell, Williams, Selig, Gates & Woodyard of the final closing of Domtar A. W. Corporation's acquisition of the Georgia-Pacific Ashdown facility. Permit #287-AOP-R2 was transferred to Domtar A. W. Corp. effective August 7, 2001.

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SECTION IV: EMISSION UNIT INFORMATION

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## SN-01 No. 3 Power Boiler

#### **Source Description**

The No. 3 Power Boiler, which was installed in 1991, is rated at 790 million British Thermal Units per hour (MMBTU/hr). This boiler combusts bark, wood waste, pelletized paper fuel, and natural gas. Compliance with the  $NO_X$  limits and the CO limits will be verified through the outputs of the CEMS for these systems.

Continuous Emissions Monitoring Systems (CEMS) are in place at this unit for oxides of nitrogen, carbon monoxide, and opacity. The No. 3 Power Boiler emissions are controlled by an electrostatic precipitator (ESP). ESP operation is normally maintained at two chamber operation regardless of the fuel mixture being fired.

The No. 3 Power Boiler is subject to 40 CFR Part 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units due to its date of installation.

The permittee tested this source for napthalene as required under Permit #287-AOP-R0. The test results showed that the emissions were below detectable levels. Therefore, the permittee is not required to conduct further testing for napthalene from this source at this time.

#### **Specific Conditions**

1. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the particulate matter emission rates will be demonstrated through annual testing and the opacity monitor. Compliance with the volatile organic compound emission rates will be demonstrated through the required annual testing of this source as well as the required temperature monitoring. Compliance with the sulfur dioxide emission rates will be demonstrated through the types of fuel that may be used at this source. Compliance with the carbon monoxide and the oxides of nitrogen emission rates will be demonstrated through use of the CEMS for these pollutants located at this source.

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Pollutant	lb/hr	tpy
PM	19.8	86.5
$PM_{10}$	19.8	86.5
$SO_2$	62.0	271.6
VOC	21.3	93.3
CO	276.5	1211.1
$NO_x$	237.0	1038.1

2. Pursuant to §19.901 et seq of Regulation 19 and 40 Code of Federal Regulations (CFR), Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These rates apply only when the boiler is operating at a steaming rate equal to or greater than 250,000 pounds per hour (approximately 46% of its maximum). The permittee shall either use the records required by Specific Condition 26 or a steam production monitor to demonstrate times when these rates do not apply.

Pollutant	<b>Emission Limit</b>
PM/PM <sub>10</sub>	0.025 lb/MMbtu
$SO_2$	0.1 lb/MMbtu
VOC	0.027 lb/MMbtu
CO	0.35 lb/MMbtu
$NO_x$	0.30 lb/MMbtu

3. Pursuant to §18.801 of Regulation 18 and A.C.A. §8–4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at SN-01. Compliance with these emission rates, with the exception of napthalene, will be demonstrated through compliance with the required testing of this source. If the required testing of pollutants yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required. Compliance with the napthalene emission rates will be demonstrated through compliance with Plantwide Condition 4.

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Pollutant	lb/hr	tpy
Acetaldehyde	0.21	0.92
Barium	0.35	1.54
Benzene	0.21	0.92
Napthalene	0.50	2.19

- 4. Power Boiler No. 3 (SN-01) is subject to 40 CFR, Part 60, Subpart A, General Provisions and 40 CFR, Part 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units due to installation after June 19, 1984, and a heat input capacity greater than 100 MMbtu/hr. A copy of Subpart Db is included in Appendix A of this permit. Applicable provisions of Subpart Db are outlined in Specific Conditions 5 through 11.
- 5. Pursuant to 40 CFR §60.43b(c)(1) and §19.304 of Regulation 19, particulate matter emissions shall not exceed 0.1 lb/MMbtu while combusting woodwaste. (Note: The permittee is restricted to a lower rate of 0.025 lb/MMBTU due to a PSD permitting action.)
- 6. Pursuant to 40 CFR §60.43b(f), §19.304 and §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity (6-minute average), except for one 6 minute period per hour of not more than 27 percent opacity. Compliance with this limit will be verified through the use of the continuous opacity monitor.
- 7. Pursuant to 40 CFR §60.44b(d) and §19.304 of Regulation 19, the permittee shall not emit in excess of 0.3 lb/MMbtu NOx while combusting natural gas with wood.
- 8. Pursuant to 40 CFR §60.44b(h) and §19.304 of Regulation 19, the NOx emission standards apply at all times including periods of start up, shut down or malfunction.
- 9. Pursuant to 40 CFR  $\S60.44b(i)$  and  $\S19.304$  of Regulation 19, compliance with the  $NO_x$  emission standard is determined on a 30 day rolling average basis.
- 10. Pursuant to 40 CFR §60.48b(a), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. A copy of the CEMS standards is included in Appendix B of this permit.

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11. Pursuant to 40 CFR §60.48(b), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a CEMS for measuring the NO<sub>x</sub> emissions discharged to the atmosphere and record the output of the system. A copy of the CEMS standards is included in Appendix B of this permit.

- 12. Pursuant to 40 CFR §60.49b(d) and §19.304 of Regulation 19, the owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas and wood for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
- 13. Pursuant to 40 CFR §60.49b(f) and §19.304 of Regulation 19, for facilities subject to the opacity standard under §60.43b, the owner operator shall maintain records of opacity.
- 14. Pursuant to 40 CFR §60.49b(g) and §19.304 of Regulation 19, the owner or operator of an affected facility subject to the nitrogen oxides standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:
  - A. Calendar date.
  - B. The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/MMBTU heat input) measured or predicted.
  - C. The 30-day average nitrogen oxides emission rates (ng/J or lb/MMBTU heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
  - D. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emission standards under §60.44b, with the reason for such excess emissions as well as a description of corrective actions taken.
  - E. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of the corrective action taken.

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- F. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- G. Identification of "F" factor used for calculations, method of determinations, and type of fuel combusted.
- H. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- I. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- J. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.
- 15. Pursuant to 40 CFR §60.49b(h) and §19.304 of Regulation 19, the owner or operator or any affected facility that is subject to the nitrogen oxides standards of §60.44b and that combusts natural gas is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period.
- 16. Pursuant to 40 CFR §60.49b(i) and §19.304 of Regulation 19, the owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under §60.48b shall submit a quarterly report containing the information recorded under paragraph (g) of this section. All quarterly reports shall be postmarked by the 30<sup>th</sup> day following the end of each calendar quarter.
- 17. Pursuant to 40 CFR §60.49b(o) and §19.304 of Regulation 19, all records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.
- 18. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a CEMS for measuring the CO emissions discharged to the atmosphere and record the output of the system. A copy of the CEMS standards is included in Appendix B of this permit.

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- 19. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and 40 CFR Part 52, Subpart E, the permittee shall use only the following fuels to fire this source: bark, wood waste, pelletized paper fuel, recycled sanitary products composed of cellulose and polypropylene, small amounts of tire derived fuel (TDF), and natural gas. Compliance with this specific condition will demonstrate compliance with the sulfur dioxide emission rates.
- 20. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee may operate the boiler when one chamber of the ESP is isolated for repair purposes. Compliance with the emission rates will be demonstrated through use of the CEMS.
- 21. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, natural gas shall be the only fuel used to fire the No. 3 Power Boiler in the event that both chambers of the ESP must shut down for repair at the same time. Compliance with this specific condition will be demonstrated through use of the CEMS.
- 22. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall test source SN-01 annually for volatile organic compound emissions using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3.
- 23. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a minimum exit air temperature of 400EF on a three hour average at source SN-01.
- 24. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring device to measure and record the combustion air temperature at source SN-01. The temperature shall be recorded at least once every fifteen minutes and each hour's average shall be stored in a database. The permittee shall submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition 23 and the monthly average.

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25. Pursuant to §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the heat input to source SN-01 shall not exceed 790 MMBTU/hr. The following heating values of each fuel shall be used to determine the total heat input to the boiler:

Natural Gas 1.02 MMBTU per 1000 SCF

Bark and Wood Waste 8.50 MMBTU per ton Pelletized Fuel 16.0 MMBTU per ton

- 26. Pursuant to §19.705 and §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall demonstrate compliance with the heat input limit set forth in Specific Condition 25 by recording the amount of each fuel used each operating day, multiplying the amount of each fuel used by the appropriate heating value, totaling the BTU value, and dividing by 24. The value for each day shall be averaged with the other days in a calendar month and a twelve month rolling average calculated at the end of each month. These records shall be updated daily, kept on site, and made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 27. Pursuant to §19.702 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1002 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall annually test source SN-01 for particulate matter using EPA Reference Method 5. The permittee may conduct this test using EPA Reference Method 29 if performed at the same time as the annual barium test. All tests shall be conducted in accordance with Plantwide Condition 3. This test shall take place while bark or woodwaste with a minimal amount of natural gas is being fired in the boiler.
- 28. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual testing for the following pollutants using EPA Reference Method 18: acetaldehyde and benzene. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.
- 29. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual testing for barium using EPA Reference Method 29. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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30. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide and the oxides of nitrogen emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average.

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## SN-02 No. 3 Lime Kiln

## **Source Description**

Lime mud which is primarily calcium carbonate is sent to the lime kiln for calcining (removal of  $CO_2$ ) and reuse in the reaction with green liquor. The No. 3 Lime Kiln, which was last modified in 1991, is natural gas fired and has a heat input capacity of 153 MMBTU/hr. Non-condensible gases may not be incinerated in the No. 3 Lime Kiln.

Particulate matter emissions from this source are controlled through the use of an electrostatic precipitator. CEMS are in place to monitor the TRS and the CO emissions from the No. 3 Lime Kiln. A continuous opacity monitor is also located at this source.

Stack gas from this lime kiln is used to feed the Precipitated Calcium Carbonate (PCC) plant. Because emissions from this source will be lower when the PCC plant is in operation, the annual emissions from the PCC plant have been included in the annual emissions for the No. 3 Lime Kiln.

Due to its date of installation, this source is subject to 40 CFR Part 60, Subpart BB - *Standards of Performance for Kraft Pulp Mills*.

### **Specific Conditions**

31. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the particulate matter emission rates will be demonstrated through proper operation of the ESP. Compliance with the sulfur dioxide emission rates will be demonstrated by only firing natural gas at this source. Compliance with the volatile organic compounds emission rate will be demonstrated through requiring a minimum solids content of the lime mud. Compliance with the carbon monoxide rates will be demonstrated through use of the CEMS for these pollutants at this source. Compliance with the oxides of nitrogen emission rates will be demonstrated through parametric monitoring.

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Pollutant	lb/hr	tpy
PM	8.6	37.7
$PM_{10}$	8.6	37.7
$SO_2^{10}$	13.3	58.3
VOC	14.6	63.9
CO	55.0	240.9
$NO_x$	66.5	291.3

32. Pursuant to §19.501 et seq, §19.804, and §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-02. Compliance with these emission rates will be demonstrated through the use of the CEMS for TRS located at this source.

Pollutant	lb/hr	tpy
TRS	1.34	5.9

33. Pursuant to §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. The rates below, with the exception of the PM/PM<sub>10</sub> rate, apply only when the lime kiln is producing at a rate of at least 100 tons per day. The permittee is responsible for maintaining production records in order to demonstrate when the emission rates do not apply.

Pollutant	Emission Limit	
PM/PM <sub>10</sub>	0.034 gr/dscf	
$SO_2$	0.727 lb/ton of lime	
VOC	0.795 lb/ton of lime	
CO	3.0 lb/ton of lime	
$NO_x$	3.63 lb/ton of lime	

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34. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission rates will be demonstrated through compliance with the required testing of this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

Pollutant	lb/hr	tpy
Benzene	0.24	1.06
Methanol	1.31	5.74

- 35. The No. 3 Lime Kiln (SN-02) is subject to 40 CFR, Part 60, Subpart A, General Provisions and 40 CFR, Part 60, Subpart BB, Standards of Performance for Kraft Pulp Mills due to commencement of construction after September 24, 1976. A copy of Subpart BB is included in Appendix C of this permit. Applicable provisions of Subpart BB are outlined in Specific Conditions? through 43.
- 36. Pursuant to 40 CFR §60.282(a)(3)(i) and §19.304 of Regulation 19, particulate matter emissions shall not exceed 0.067 gr/dscf corrected to 10 percent oxygen when gaseous fossil fuel is burned. This limit is superseded by a more stringent limit which was set through a PSD permitting action.
- 37. Pursuant to 40 CFR §60.283(a)(5) and §19.304 and §19.804 of Regulation 19, total reduced sulfur emissions from source SN-02 shall not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen.
- 38. Pursuant to 40 CFR §60.284(a)(2), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of the TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged to the atmosphere from source SN-02. A copy of the CEMS standards may be found in Appendix B of this permit. These systems shall be located downstream of the control device and the spans of these continuous monitoring systems shall be set as stated below. The permittee has already demonstrated that these monitors meet the required spans and will be required to notify the Department prior to modifying either monitoring system.

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- A. At a TRS concentration of 30 ppm for the TRS continuous monitoring system.
- B. At 20 percent oxygen for the continuous oxygen monitoring system.
- 39. Pursuant to 40 CFR §60.284(c)(1) and §19.304 of Regulation 19, the permittee shall calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of the operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by the continuous monitoring system required under 40 CFR §60.284(a)(2).
- 40. Pursuant to 40 CFR §60.284(c)(2) and §19.304 of Regulation 19, the permittee shall calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-02. The 12-hour averages shall correspond to the 12-hour average TRS concentrations under 40 CFR §60.284(c)(1) and shall be determined as an arithmetic mean of the appropriate 12 continguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2).
- 41. Pursuant to 40 CFR §60.284(c)(3) and §19.304 of Regulation 19, the permittee shall correct all 12-hour average TRS concentrations to 10 volume percent oxygen using the following equation:

Ccorr=Cmeas\*(21-X/21-Y)

where:

Ccorr = the concentration corrected for oxygen Cmeas= the concentration uncorrected for oxygen

X = the volumetric oxygen concentration in percentage to be corrected to 10 percent

Y = the measured 12-hour average volumetric oxygen concentration

41. Pursuant to 40 CFR §60.284(d)(2) and §19.304 of Regulation 19, for the purposes of reports required under §60.7(c), the permittee shall report semiannually periods of excess emissions from source SN-02. Periods of excess emissions are 12-hour average TRS concentrations above 8 ppm by volume. This condition is superseded by the more stringent state requirement of quarterly reporting for CEMS.

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- 42. Pursuant to 40 CFR §60.284(e) and §19.304 of Regulation 19, the Administrator will not consider periods of excess emissions reported under 40 CFR §60.284(d) to be indicative of a violation of §60.11(d) provided that the Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.
- 43. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity from the No. 3 Lime Kiln (SN-02) as measured by EPA Reference Method 9. Compliance with this condition will be demonstrated through use of the opacity monitor for this source.
- 44. Pursuant to §19.705 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere from source SN-02.
- 45. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a CEMS for measuring CO emissions. A copy of the CEMS standards may be found in Appendix B of this permit.
- 46. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and 40 CFR Part 52, Subpart E, pipeline quality natural gas shall be the only fuel used to fire the No. 3 Lime Kiln. Compliance with this condition shall be considered compliance with the sulfur dioxide emission rates.
- 47. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall operate the No. 3 Lime Kiln at a maximum of 75% of its rated capacity when isolating one pre-coat filter for cleaning. Compliance with the emission rates will be demonstrated through use of the CEMS.
- 48. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall annually test source SN-02 for methanol using EPA Reference Method 308 and benzene using EPA Reference Method 18. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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- 49. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall maintain a minimum of 65% solids on a 30-day rolling average in the lime mud fed to source SN-02 in order to demonstrate compliance with the VOC emission rates.
- 50. Pursuant to §19.705 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall measure and record the solids content of the lime mud fed to source SN-02 at least once per eight hour shift while the kiln is in operation in order to demonstrate compliance with Specific Condition 49 and which may be used by the Department for enforcement purposes. These records shall be kept on site and shall be made available to Department personnel upon request.
- Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall demonstrate compliance with the NO<sub>x</sub> emissions through the use of the equations below. The permittee shall calculate the NO<sub>x</sub> emissions at least once every 15 minutes. The average hourly NO<sub>x</sub> emissions shall be calculated using four or more data points which have been equally spaced over an hour with the exception of the quality control checks as outlined in Specific Condition 52. The permittee shall provide Department personnel with any of the information used to calculate the NO<sub>x</sub> emissions for source SN-02 upon request. The minimum data availability shall be at least 95% of this kiln's operating hours. The equation below may be changed based on actual stack emissions testing after the test results and the new equation have been approved by the Department.

$$C_{NOX} = -74.5742 + (24.1788 * (HO)) + (0.985984 * N)$$

$$E_{NOX} = C_{NOX} * DSCF/hr * 1.194E-7$$

where:

 $C_{NOX} = NO_X$  concentration, 1-hr avg., ppm

 $E_{NOX} = NO_X$  emissions, 1-hr avg., lb/hr

N = total natural gas flow, 1000 standard cubic feet per hour

DSCF = stack flow rate, dry standard cubic feet per hour

 $1.194E-7 = conversion factor, ppm NO_X to lbs/dscf$ 

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## HO = kiln hood oxygen concentration, percent

- 52. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall perform quality checks of the  $R_{\rm g}$  (ratio of the natural gas flow rate and the natural gas pressure reading) and the  $R_{\rm o}$  (ratio of the stack oxygen content to the hood oxygen content).  $R_{\rm g}$  shall be between 2.228 and 3.206 while  $R_{\rm o}$  shall be between 0.5344 and 0.5648. If the ratios calculated are outside of the ranges listed in this specific condition, the permittee shall perform calibrations of the necessary equipment until the ratios are back in acceptable ranges. When the quality checks are being performed, only two data points will be required to determine the  $NO_X$  emission rate.
- 53. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide and the oxides of nitrogen emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average.
- 54. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide and the oxides of nitrogen emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average.

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## SN-03 No. 1 Power Boiler

#### **Source Description**

The No. 1 Power Boiler is rated at 580 MMBTU/hr. This boiler combusts bark, wood waste, municipal yard waste, pelletized paper fuel, No. 6 fuel oil, used oil generated on site, and natural gas. Permitted emissions of particulate matter and carbon monoxide are increasing with the issuance of this permit. The previous limits are being raised based on test results. No modifications or changes in the method of operation are occurring at this boiler with the issuance of this permit.

Particulate matter emissions from this boiler are controlled through the use of multiclones. No other control equipment is associated with this boiler. No CEMS are associated with this boiler.

This boiler is not subject to any NSPS subpart due to its date of installation (1968).

The permittee tested this source for acetaldehyde and benzene emissions as required under Permit #287-AOP-R0. Because the emissions were below detectable levels during the testing, the permittee is not required to conduct any further testing for acetaldehyde and benzene from this source at this time.

# **Specific Conditions**

55. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-03. Compliance with the sulfur dioxide emission rates will be demonstrated through the limits on the sulfur content of the fuel and on the amount of fuel oil that may be used at this source. Compliance with the remaining emission rates will be demonstrated through the required semi-annual testing of this source and proper operation of the control equipment. (NOTE: The hourly rates are based on the worst case scenario.)

Pollutant	lb/hr	tpy
$PM_{10}$	343.0	1504.1
$SO_2^{10}$	1285.0	214.0
VOC	43.0	214.6
CO	164.0	718.3
$NO_x$	247.5	1085.9

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56. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-03. Compliance with the PM and the barium emission rates will be demonstrated through the required testing of this source. If the required testing of pollutants other than PM yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required. Compliance with the acetaldehyde and the benzene emission rates will be demonstrated through compliance with Plantwide Condition 4.

Pollutant	lb/hr	tpy
PM	343.0	1504.1
Acetaldehyde	0.84	3.68
Barium	0.77	3.38
Benzene	0.49	2.15

- 57. Pursuant to §18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed 5% opacity from source SN-03 as measured by EPA Reference Method 9 when firing only natural gas.
- 58. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 40% opacity from source SN-03 as measured by EPA Reference Method 9 when firing a fuel other than natural gas.
- 59. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct tests of the opacity from source SN-03 using EPA Reference Method 9. This test shall be conducted at the same time as the particulate matter test for this source. The permittee shall monitor the multiclone parameters during the test to obtain parameters which may be monitored to demonstrate compliance with the opacity limit for this source.
- 60. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the sulfur content of the fuel oil shall not exceed 3.0% by weight and total SO<sub>2</sub> emissions shall not exceed 214 tons per year in any consecutive twelve month period, as calculated monthly from total fuel usage and batch sulfur content:

# (Fuel oil gallons/batch)(7.88 lb/gal)(Weight % S in batch/100)(2.0 SO<sub>2</sub>/S) = SO<sub>2</sub> tons 2,000 lb/ton

61. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall either test each shipment of fuel oil received for sulfur content or receive a manufacturer's certification of the sulfur content of each shipment of fuel oil in order to demonstrate compliance with Specific Condition 60. These records shall be updated within 10 days of

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receipt of each shipment of fuel oil, shall be kept on site, and shall be made available to Department personnel upon request.

- 62. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall only use the following fuels to fire the No. 1 Power Boiler: bark, wood waste, municipal yard waste, recycled sanitary products composed of cellulose and polypropylene, pelletized paper fuel, No. 6 fuel oil, used oil generated on site, small amounts of tire derived fuel (TDF), and natural gas.
- 63. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and/or A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and §18.1003 of Regulation 18, the pressure drop across the multiclones shall not fall below 0.68 in. of H<sub>2</sub>O while burning fuels other than natural gas or when the steam load is greater than 110,000 lbs/hr. The steam load exemption is valid only until the testing outlined in Specific Condition 65 is performed.
- 64. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor and record once per eight hour shift the pressure drop across the multiclone in order to demonstrate compliance with Specific Condition 63 and which may be used by the Department for enforcement purposes. The permittee will be required to note in the records if the pressure drop cannot be recorded because natural gas is being burned or the steam load is less than 110,000 lbs/hr prior to the testing required by Specific Condition 65 taking place. If the steam load prevents the pressure drop from being taken prior to the testing required by Specific Condition 65, the records shall reflect what the steam load was. These records shall be kept on site and made available to Department personnel upon request.

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- 65. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall test source SN-03 for particulate matter within 180 days of permit issuance at a steam load less than 110,000 lbs/hr using EPA Reference Method 5. The permittee shall monitor the pressure drop across the multiclone in order to determine a pressure drop which will demonstrate compliance with the particulate matter emission rates for this source when the boiler is operating at a low steam load. All tests shall be conducted in accordance with Plantwide Condition 3.
- 66. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual tests of the volatile organic compound emissions from source SN-03 using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3.
- 67. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a minimum exit air temperature of 300EF on a three hour average at source SN-03 whenever wood bark is fed to No. 1 Power Boiler at over 5 tons/hour (10% of the boiler capacity).
- 68. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring device to measure and record the combustion air temperature at source SN-03. The temperature shall be recorded at least once every fifteen minutes and each hour's average shall be stored in a database. The permittee shall submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition 67 and the monthly average.
- 69. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the oxides of nitrogen and the carbon monoxide emissions from source SN-03. EPA Reference Method 7E shall be used to determine the oxides of nitrogen emissions while EPA Reference Method 10 shall be used to determine the carbon monoxide emissions. All tests shall be conducted in accordance with Plantwide Condition 3.
- 70. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use portable analyzers to test the carbon monoxide and the oxides of nitrogen emissions from source SN-03. One of these tests shall be conducted at the same time as the test required by Specific Condition 69. The permittee shall notify the Department at least fifteen days prior to these tests taking place.

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71. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall annually test source SN-03 for barium using EPA Reference Method 29. All tests shall be conducted in accordance with Plantwide Condition 3.

- 72. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not use in excess of 2,700,000 gallons of fuel oil at source SN-03 in any consecutive twelve month period.
- 73. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of fuel oil fired at source SN-03 in order to demonstrate compliance with Specific Condition 72 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the fifteenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.

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#### SN-05 No. 2 Power Boiler

#### **Source Description**

The No. 2 Power Boiler, last modified in 1975, is rated at 820 MMBTU/hr. This boiler combusts bark, wood waste, municipal yard waste, pelletized paper fuel, natural gas, coal, used oil generated on site, Tire Derived Fuel (TDF), and No. 6 fuel oil. Emissions from the No. 2 Power Boiler are controlled through the use of a scrubber. The scrubbing media are composed of sodium hydroxide, water, and pulpmill extraction stage filtrate.

The No. 2 Power Boiler also incinerates non-condensible gases (NCGs) from other operations at this facility. Because this source incinerates NCGs produced at sources which are subject to 40 CFR Part 60, Subpart BB, the No. 2 Power Boiler is also subject to the provisions of this subpart. This source is also subject to 40 CFR Part 60, Subpart D due to its rated heat capacity and its date of installation.

Continuous emissions monitoring systems for oxides of nitrogen, sulfur dioxide, and carbon monoxide are associated with this boiler.

## **Specific Conditions**

74. Pursuant to §19.501 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-05. Compliance with the particulate matter and the lead emission rates will be demonstrated through the required monitoring of the scrubber parameters for this source. Compliance with the sulfur dioxide, the carbon monoxide, and the oxides of nitrogen emission rates will be demonstrated through use of the CEMS located at this source for these pollutants. Compliance with the volatile organic compounds emission rates will be demonstrated through the required semi-annual testing.

Pollutant	lb/hr	tpy
PM	82.0	359.2
$PM_{10}$	82.0	359.2
$SO_2$	983.0	4305.5
VOC	92.0	206.5
СО	266.0	630.0
$NO_X$	574.0	2514.1
Pb	0.03	0.1

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75. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-05. Compliance with these emission rates, other than PM, will be demonstrated through the required testing. If the required testing of pollutants other than PM yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

Pollutant	lb/hr	tpy
Acetaldehyde	0.21	0.92
Benzene	0.21	0.92
Hydrogen Chloride	5.75	25.19
Napthalene	0.50	2.19

- 76. Source SN-05 is subject to the provisions of 40 CFR Part 60, Subpart A, and 40 CFR Part 60, Subpart D Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971 due to a heat input rate in excess of 250 MMBTU/hr and an installation date of 1975. A copy of Subpart D has been included in Appendix D of this permit. The requirements of this subpart have been outlined in Specific Conditions 77 through 85.
- 77. Pursuant to 40 CFR §60.42(a)(1) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 0.10 lb/MMBTU derived from fossil fuel or fossil fuel and wood residue.
- 78. Pursuant to §19.304 and §19.503 of Regulation 19, 40 CFR Part 52, Subpart E, and 40 CFR §60.42(a)(1), no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity. Compliance with this opacity limit will be demonstrated through use of the scrubber parameters.
- 79. Pursuant to 40 CFR §60.43(a)(1) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of 0.80 lb/MMBTU derived from liquid fossil fuel or liquid fossil fuel and wood residue.
- 80. Pursuant to 40 CFR §60.43(a)(1) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of 1.20 lb/MMBTU derived from solid fossil fuel or solid fossil fuel and wood residue.

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81. Pursuant to 40 CFR §60.43(b) and §19.304 of Regulation 19, when different fossil fuels are burned simultaneously in combination, the applicable SO<sub>2</sub> standard (in ng/J) shall be determined by proration using the following formula:

$$PSSO2 = [y(340)+z(520)]/(y+z)$$

where: PSSO2 is the prorated standard for sulfur dioxide when burning different

fuels simultaneously, in nanograms per joule heat input derived from all

fossil fuels fired or from all fossil fuels and wood residue fired

Y is the percentage of total heat input derived from liquid fossil fuel, and

Z is the percentage of total heat input derived from solid fossil fuel.

- 82. Pursuant to 40 CFR §60.43(c) and §19.304 of Regulation 19, compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.
- 83. Pursuant to 40 CFR §60.44(a)(1) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub>, in excess of 0.20 lb/MMBTU derived from gaseous fossil fuel.
- 84. Pursuant to 40 CFR §60.44(a)(2) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub>, in excess of 0.30 lb/MMBTU derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.
- 85. Pursuant to 40 CFR §60.44(a)(3) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub>, in excess of 0.70 lb/MMBTU derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25%, by weight, or more of coal refuse).

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86. Pursuant to 40 CFR §60.44(b) and §19.304 of Regulation 19, except as provided under paragraph (c) of this section, when different fossil fuels are burned simultaneously in any combination, the applicable NO<sub>x</sub> standard (in ng/J) is determined by proration using the following formula:

$$PSNO_X = \frac{x(86) + y(130) + z(300)}{x+y+z}$$

where:

 $PSNO_X$  = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

x = the percentage of total heat input derived from gaseous fossil fuel;

y = the percentage of total heat input derived from liquid fossil fuel; and

z = the percentage of total heat input derived from solid fossil fuel (except lignite).

- 87. Pursuant to 40 CFR §60.44(c) and §19.304 of Regulation 19, when a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, the standard for nitrogen oxides does not apply.
- 88. Pursuant to 40 CFR §60.45(a), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate continuous monitoring systems for measuring sulfur dioxide emissions, oxides of nitrogen emissions, and either oxygen or carbon dioxide. The permittee currently has an oxygen monitor at source SN-05 to fulfill this requirement. A copy of the CEMS standards may be found in Appendix B of this permit. The CEMS shall give readouts which will demonstrate compliance with any of the applicable limits for the pollutant in question.
- 89. Source SN-05 is subject to the provisions of 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills because it incinerates non-condensible gases produced at other sources which are subject to this subpart. A copy of Subpart BB has been included in Appendix C of this permit. The requirements of this subpart are outlined in Specific Conditions #90 through #91.

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90. Pursuant to 40 CFR §60.283(a)(1)(iii) and §19.304 and §19.804 of Regulation 19, the non-condensible gases incinerated at source SN-05 shall be subjected to a minimum temperature of 1200EF for at least 0.5 seconds. Previous tests have indicated that the permittee is meeting the required retention time.

- 91. Pursuant to 40 CFR §60.284(b)(1) and §19.304 of Regulation 19, the permittee shall install, calibrate, maintain, and operate a monitoring device which measures and records the combustion temperature at the point of incineration of effluent gases which are emitted from any digester system, brown stock washer system, black liquor oxidation system, or condensate stripper system where the provisions of §60.283(a)(1)(iii) apply. The monitoring device is to be certified to be accurate within + 1 percent of the temperature being measured.
- 92. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for measuring carbon monoxide. A copy of the CEMS standards may be found in Appendix B of this permit. The CEMS shall give readouts which will demonstrate compliance with any of the applicable limits for the pollutant in question.
- 93. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall annually test source SN-05 for acetaldehyde, benzene, and napthalene using EPA Reference Method 18. The permittee shall also annually test for hydrogen chloride using EPA Reference Method 26A. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.
- 94. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall annually test source SN-05 for VOC emissions using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3.
- 95. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a minimum exit air temperature of 400EF on a three hour average at source SN-05.
- 96. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring device to measure and record the combustion air temperature at source SN-05. The temperature shall be recorded at least once every fifteen minutes and each hour's average shall be stored in a database. The permittee shall submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition 95 and the monthly average.

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97. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall fire only the following items in the #2 Power Boiler: non-condensible gases, bark, wood waste, municipal yard waste, pelletized paper fuel, natural gas, coal, used oil generated on site, TDF, recycled sanitary products based on cellulose and polypropylene, and No. 6 fuel oil. The permittee may not fire lignite at the #2 Power Boiler.

- 98. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of what fuels are used to fire source SN-05, when they are used, and applicable SO<sub>2</sub> and NO<sub>X</sub> limits in order to demonstrate compliance with the fuel-specific NSPS limits.
- 99. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average.

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- 100. Pursuant to §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR §60.13(i), and/or A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and §18.1004 of Regulation 18, in lieu of the continuous opacity monitor required by 40 CFR §60.45, the permittee shall comply with the following EPA approved monitoring plan (see letter from Donna Ascenzi Chief, Air Enforcement Section, EPA Region VI to Keith Michaels Chief, Air Division, ADEQ, dated December 16, 1999). The Department has determined and the permittee has agreed that compliance with the following requirements will also demonstrate compliance with the particulate matter and the lead emission rates.
  - A. The scrubbing liquid flow rate shall not fall below 1,500 gallons per minute.
  - B. The pressure drop of the gas stream across the scrubber shall be maintained between 10 in. H<sub>2</sub>O and 16 in. H<sub>2</sub>O.
  - C. The scrubbing liquid flow rate and the pressure drop of the gas stream across the scrubber shall be continuously monitored and recorded.
  - D. Records of the scrubbing liquid flow rate and the pressure drop of the gas stream across the scrubber shall be maintained for a period of at least two years following the date of the records
  - E. The permittee shall submit reports of excess emissions to the Department on a semiannual basis. All reports shall be postmarked by the 30<sup>th</sup> day of the month following the end of each calendar half. Excess emissions are defined as follows:
    - i. Any period when the 1-hour average scrubbing liquid flow rate is less than 1,500 gallons per minute.
    - ii. Any period when the 1-hour average pressure drop of the gas stream across the scrubber is less than 10 in. H<sub>2</sub>O or greater than 16 in. H<sub>2</sub>O.

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## SN-06 No. 2 Recovery Boiler

#### **Source Description**

The No. 2 Recovery Boiler, last modified in 1989, has a heat input capacity of 1,160 MMBTU/hr. Black liquor solids are combusted in this boiler to recover inorganic chemicals. Fuel oil and natural gas are also combusted in this boiler.

Emissions are controlled through the use of an electrostatic precipitator. Continuous emission monitoring systems are in place for opacity, total reduced sulfur, sulfur dioxide, carbon monoxide, and oxides of nitrogen.

This source is subject to the provisions of 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills.

### **Specific Conditions**

101. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-06. Compliance with the particulate matter emission limit will be demonstrated through proper operation of the ESP. Compliance with the volatile organic compound emission rates will be demonstrated through the required semi-annual testing. Compliance with the sulfur dioxide, the carbon monoxide, and the oxides of nitrogen emission rates will be demonstrated through use of the CEMS for these pollutants located at this source.

Pollutant	lb/hr	tpy
PM	84.4	369.7
$PM_{10}$	84.4	369.7
$SO_2$	286.0	1252.7
VOC	46.7	204.6
CO	980.0	4292.4
$NO_X$	309.2	1354.3

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102. Pursuant to §19.501 et seq, §19.804, and §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the following emission rates at source SN-06. Compliance with these emission rates will be demonstrated through use of the CEMS for TRS located at this source.

Pollutant	lb/hr	tpy
TRS	7.4	32.4

103. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-06. Compliance with the hydrogen chloride and the sulfuric acid emission rates will be demonstrated through the parametric monitoring requirements for this source. Compliance with the formaldehyde, the methanol, and the styrene emission rates will be demonstrated through the required testing for these pollutants at this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

Pollutant	lb/hr	tpy
Formaldehyde	0.72	3.16
Hydrogen Chloride	51.20	224.30
Methanol	1.18	5.17
Styrene	0.06	0.27
Sulfuric Acid	3.22	14.10

- 104. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity from source SN-06 as measured by EPA Reference Method 9. Compliance with this limit will be demonstrated through use of the opacity monitor located at this source.
- 105. Source SN-06 is subject to the provisions of 40 CFR Part 60, Subpart A General Provisions and 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills due to an installation date in 1989. A copy of Subpart BB has been included in Appendix C of this permit. The requirements of this subpart are outlined in Specific Conditions 106 through 115.

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- 106. Pursuant to 40 CFR §60.282(a)(1)(i) and §19.304 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere from source SN-06 any gases which contain particulate matter in excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen.
- 107. Pursuant to 40 CFR §60.282(a)(1)(ii) and §19.304 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere from source SN-06 any gases which exhibit 35% opacity or greater. This limit is superseded by Specific Condition 104 which only allows for 20% opacity.
- 108. Pursuant to 40 CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere from source SN-06 any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 8 percent oxygen.
- 109. Pursuant to 40 CFR §60.284(a)(1) and §19.304 of Regulation 19, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from source SN-06. The span of this system shall be set at 70 percent opacity.
- 110. Pursuant to 40 CFR §60.284(a)(2) and §19.304 of Regulation 19, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged into the atmosphere from source SN-06. These systems shall be located downstream of the control device and the span of these continuous monitoring system shall be set as stated below. The permittee has already demonstrated that these monitors meet the required spans and will be required to notify the Department prior to modifying either monitoring system.
  - (i). At a TRS concentration of 30 ppm for the TRS continuous monitoring system; and
  - (ii). At 20 percent oxygen for the continuous oxygen monitoring system.
- 111. Pursuant to 40 CFR §60.284(c)(1) and §19.304 of Regulation 19, the permittee shall calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 continguous1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2).

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112. Pursuant to 40 CFR §60.284(c)(2) and §19.304 of Regulation 19, the permittee shall calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-06. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under 40 CFR §60.284(c)(1) and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2).

113. Pursuant to 40 CFR §60.284(c)(3) and §19.304 of Regulation 19, the permittee shall correct the 12-hour average TRS concentration from source SN-06 to 8 volume percent using the following equation:

Ccorr = Cmeas\*(21-X/21-Y)

where:

Ccorr = the concentration corrected for oxygen

Cmeas = the concentration uncorrected for oxygen

X = the volumetric oxygen concentration in percentage to be corrected to 8 percent

Y = the measured 12-hour average volumetric oxygen concentration

114. Pursuant to 40 CFR §60.284(d)(1) and §19.304 of Regulation 19, for the purpose or reports required under §60.7(c), any owner or operator subject to the provisions of this subpart shall report semiannually periods of excess emissions as follows:

- (i). All 12 -hour averages or TRS concentrations above 5 ppm by volume; and
- (ii). All 6-minute average opacities that exceed 35 percent. The permittee will be required to report as excess emissions all 6-minute average opacities that exceed 20% (the opacity limit allowed under Regulation 19). However, only those emissions which exceed 35% opacity would be considered possible violations of 40 CFR Part 60, Subpart BB.
- 115. Pursuant to 40 CFR §60.284(e) and §19.304 of Regulation 19, the Administrator will not consider periods of excess emissions reported under paragraph (d) of this section to be indicative of a violation of §60.11(d) provided that:

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- (i). The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions do not exceed:
  - A. One percent for TRS emissions from recovery furnaces
  - B. Six percent average opacities from recovery furnaces
- (ii). The Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.
- 116. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the carbon monoxide emissions in pounds per hour from source SN-06.
- 117. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the sulfur dioxide emissions in pounds per hour from source SN-06.
- 118. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the oxide of nitrogen emissions in pounds per hour from source SN-06.
- 119. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall demonstrate compliance with the hydrogen chloride emission rates through the use of the CEMS for sulfur dioxide and the following equations:

PPM HCl = 
$$\frac{1.28 * PPM SO_2}{1 + (PPM SO_2 * 0.017)}$$

 $lbs/hr HCl = PPM HC1 * 0.0947 * 10^{-7} * DSCFH$ 

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120. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall calculate the hourly HCl emissions using the one hour average PPM SO<sub>2</sub> values obtained from the CEMS. These calculations shall be kept on site and made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.

- Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, a sulfur dioxide emission rate in excess of 250 ppm based on a three-hour average as read by the CEMS for this pollutant shall be considered a violation of the sulfuric acid emission rate.
- 122. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the volatile organic compound emissions from source SN-06 using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3.
- Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a minimum floor tube temperature of 400EF on a three hour average at source SN-06. This limit applies only when the boiler is firing in excess of 1.5 millions pounds per day.
- Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring device to measure and record the floor tube temperature at source SN-06. The temperature shall be recorded at least once every fifteen minutes and each hour's average shall be stored in a database. The permittee shall submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition 123 and the monthly average.
- Pursuant to §19.703 and §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the black liquor solids fired at source SN-06 when not complying with the minimum floor tube temperature set forth in Specific Conditon 123 in order to demonstrate whether or not the minimum temperature requirement is in effect. These records shall be updated whenever the minimum temperature is not being met, shall be kept on site, and shall be made available to Department personnel upon request.

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126. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall annually test for formaldehyde, methanol, and styrene using the acetylacetone method, EPA Reference Method 308, and EPA Reference Method 18, respectively. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

127. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide emission limits for this source are based on 30-day rolling averages while the oxides of nitrogen emission limits for this source are based on a 3-hour average. Days when the unit is not operating are not included in the 30-day rolling average.

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## SN-08 No. 2 Smelt Tank Vents

#### **Source Description**

The No. 2 Smelt Tank, last modified in 1989, processes the molten sodium smelt from the No. 2 Recovery Boiler. Emissions of particulate matter and total reduced sulfur are controlled through the use of a scrubber. The pressure drop and the scrubbing medium flow rate are continuously monitored at this source.

This source is subject to the provisions of 40 CFR Part 60, Subpart BB - *Standards of Performance for Kraft Pulp Mills* due to its date of installation.

The permittee tested source SN-08 for formaldehyde as required under Permit #287-AOP-R0. The formaldehyde emissions were found to be below detectable levels. Therefore, the permittee is not required to perform further testing for formaldehyde at source SN-08 at this time.

#### **Specific Conditions**

128. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-08. Compliance with these emission rates will be demonstrated through the scrubber parameters and required testing for this source.

Pollutant	lb/hr	tpy
PM	18.0	78.8
PM <sub>10</sub>	18.0	78.8
SO <sub>2</sub>	10.6	46.4
VOC	9.3	40.7

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Pursuant to §19.501 et seq, §19.804, and §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-08. Compliance with these emission rates will be demonstrated through the scrubber parameters and required testing for this source.

Pollutant	lb/hr	tpy
TRS	2.1	9.2

130. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-08. Compliance with the ammonia emission rates will be demonstrated through the required testing of these pollutants at this source. Compliance with the methanol emission rates will be demonstrated through the scrubber parameters and the required testing for methanol at this source. Compliance with the formaldehyde emission rates will be demonstrated through compliance with Plantwide Condition 4.

Pollutant	lb/hr	tpy
Ammonia	40.00	175.20
Formaldehyde Methanol	0.36 5.40	1.56 23.66

- Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity from source SN-08 as measured by EPA Reference Method 9. Compliance with this limit will be demonstrated through the required scrubber monitoring at this source.
- 132. Source SN-08 is subject to the provisions of 40 CFR Part 60, Subpart A *General Provisions* and 40 CFR Part 60, Subpart BB *Standards of Performance for Kraft Pulp Mills* due to an installation date of 1989. A copy of Subpart BB is included in Appendix of this permit. The requirements of Subpart BB are outlined in Specific Conditions 133 through 136.
- 133. Pursuant to 40 CFR §60.282(a)(2) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any smelt dissolving tank any gases which contain particulate matter in excess of 0.1 g/kg black liquor solids (dry weight) [0.2 lb/ton black liquor solids (dry weight)]. Compliance with this limit will be demonstrated through compliance with the required scrubber monitoring at this source.
- 134. Pursuant to 40 CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19, TRS emissions from source SN-08 shall not exceed 0.0168 g/kg measured as grams H<sub>2</sub>S kg black

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liquor solids on a 12 hour average. Compliance with this limit will be demonstrated through the required scrubber monitoring and the required testing at this source.

- 135. Pursuant to 40 CFR §60.284(b)(2)(i), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a monitoring device at source SN-08 for the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device is to be certified by the manufacturer to be accurate to within a gage pressure of ± 500 pascals (ca. ± 2 inches water gage pressure).
- 136. Pursuant to 40 CFR §60.284(b)(2)(ii), §19.304 and §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a monitoring device at source SN-08 for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±15% of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The Administrator may be consulted for approval of alternate locations. This requirement is superseded by the more stringent requirement of scrubber flow monitoring in Specific Conditions 138 and 139.
- 137. Pursuant to §19.804 of Regulation 19, the permittee shall conduct annual testing for TRS from source SN-08 using EPA Reference Method 16. These tests shall be conducted in accordance with Plantwide Condition 3.
- 138. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and §18.1004 of Regulation 18, the scrubbing liquor flow rate at source SN-08 shall not fall below 45 gal/min.
- 139. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall record the scrubbing liquor flow to the scrubber hourly to demonstrate compliance with Specific Condition 138. Average daily flow rates shall be calculated using the hourly readings. These records shall be kept on site and made available to Department personnel upon request. The daily averages shall be submitted to the Department in accordance with General Provision 7.

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140. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-311, the permittee shall conduct an annual test for ammonia. The ammonia test shall be conducted using Method 206. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

- 141. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall test source SN-08 for VOC emissions using EPA Reference Method 25A within 90 days of permit issuance. The permittee will also be required to monitor the scrubber flow rate during the testing in order to demonstrate that the VOC emissions will be below the permitted levels when the flow rate is at or near the minimum required by Specific Condition 138.
- 142. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test source SN-08 for methanol emissions using EPA Reference Method 308 within 90 days of permit issuance. The permittee will also be required to monitor the scrubber flow rate during the testing in order to demonstrate that the methanol emissions will be below the permitted levels when the flow rate is at or near the minimum required by Specific Condition 138.

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#### SN-09 No. 2 Lime Kiln

#### **Source Description**

The primary fuels for the No. 2 Lime Kiln, last modified in 1979, are natural gas and #6 fuel oil. Non-condensible gases are also incinerated in this lime kiln. CEMS are in place at this source to monitor the carbon monoxide and the TRS emissions. A scrubber is used to control emissions from this source.

Due to its date of installation, this source is subject to 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills.

#### **Specific Conditions**

143. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-09. Compliance with the particulate matter emission rates will be demonstrated through the required monitoring of the scrubber parameters. Compliance with the carbon monoxide and the total reduced sulfur emission rates will be demonstrated through use of the CEMS located at this source for these pollutants. Compliance with the sulfur dioxide emission rates will be demonstrated through the limit on the sulfur content of the fuel and the fuel oil usage limit. Compliance with the volatile organic compound emission rates will be demonstrated through the minimum solids content of the lime mud. Compliance with the oxides of nitrogen emission rates will be demonstrated through the required parametric monitoring.

Pollutant	lb/hr	tpy
PM	51.0	223.4
$PM_{10}$	51.0	223.4
$SO_2$	16.7	73.2
VOC	17.1	74.9
СО	55.0	240.9
$NO_X$	68.6	300.5

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144. Pursuant to §19.501 et seq and §19.804 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-09. Compliance with these emission rates will be demonstrated the CEMS for TRS located at this source.

Pollutant	lb/hr	tpy
TRS	8.0	35.0

145. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-09. Compliance with these emission rates will be demonstrated through the required testing for these pollutants at this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required. Compliance with the particulate matter emission rates will be demonstrated through the required monitoring of the scrubber parameters of this source.

Pollutant	lb/hr	tpy
Benzene	0.23	1.01
Methanol	1.18	5.17

- 146. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity from source SN-09 as measured by EPA Reference Method 9. Compliance with this opacity limit will be demonstrated through the required monitoring of the scrubber parameters at this source.
- 147. Source SN-09 is subject to the provisions of 40 CFR Part 60, Subpart A General Provisions and 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills due to commencement of construction after September 24, 1976. A copy of Subpart BB has been included in Appendix of this permit. The requirements of this subpart have been outlined in Specific Conditions 148 through 159.
- 148. Pursuant to 40 CFR §60.282(a)(3)(i) and §19.304 of Regulation 19, particulate matter emissions shall not exceed 0.067 gr/dscf corrected to 10 percent oxygen when gaseous fossil fuel is burned. Compliance with this limit will be demonstrated through the required monitoring of the scrubber at this source.

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149. Pursuant to 40 CFR §60.282(a)(3)(ii) and §19.304 of Regulation 19, particulate matter emissions shall not exceed 0.13 gr/dscf corrected to 10 percent oxygen when liquid fossil fuel is burned. Compliance with this limit will be demonstrated through the required monitoring of the scrubber at this source.

- 150. Pursuant to 40 CFR §60.283(a)(5) and §19.304 and §19.804 of Regulation 19, total reduced sulfur emissions from source SN-09 shall not exceed 8 ppm by volume on a dry basis, corrected to 10 percent oxygen.
- 151. Pursuant to 40 CFR §60.284(a)(2), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of the TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged to the atmosphere from source SN-09. These systems shall be located downstream of the control device and the spans of these continuous monitoring systems shall be set:
  - A. At a TRS concentration of 30 ppm for the TRS continuous monitoring system
  - B. At 20 percent oxygen for the continuous oxygen monitoring system.
- 152. Pursuant to 40 CFR §60.284(b)(2)(i), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within a gage pressure of ±500 pascals (ca. ±2 inches water gage pressure).
- Pursuant to 40 CFR §60.284(b)(2)(ii), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified to be accurate within ± 15 percent of design liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The Administrator may be consulted for approval of alternative locations. This requirement is superseded by the more stringent requirement of scrubber flow monitoring in Specific Conditions 167 through 168.

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- 154. Pursuant to 40 CFR §60.284(c)(1), §19.304 and §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of the operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average total reduced sulfur concentrations provided by the continuous monitoring system required under paragraph (a)(2) of this section.
- 155. Pursuant to 40 CFR §60.284(c)(2), §19.304 and §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-09. The 12-hour averages shall correspond to the 12-hour average TRS concentrations under paragraph (c)(1) of this section and shall be determined as an arithmetic mean of the appropriate 12 continguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.
- 156. Pursuant to 40 CFR §60.284(c)(3) and §19.304 of Regulation 19, the permittee shall correct all 12-hour average TRS concentrations to 10 volume percent oxygen using the following equation:

Ccorr=Cmeas\*(21-X/21-Y)

where:

Ccorr = the concentration corrected for oxygen

Cmeas= the concentration uncorrected for oxygen

X = the volumetric oxygen concentration in percentage to be corrected to 10 percent

Y = the measured 12-hour average volumetric oxygen concentration

- 157. Pursuant to 40 CFR §60.284(c)(4), §19.304 and §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall record once per eight hour shift measurements obtained from the continuous monitoring devices installed under Specific Conditions 152, 153, 167, and ?.
- 158. Pursuant to 40 CFR §60.284(d)(2) and §19.304 of Regulation 19, for the purposes of reports required under §60.7(c), the permittee shall report semiannually periods of excess emissions from source SN-09. Periods of excess emissions are 12-hour average TRS concentrations above 8 ppm by volume.

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- 159. Pursuant to 40 CFR §60.284(e) and §19.304 of Regulation 19, the Administrator will not consider periods of excess emissions reported under paragraph (d) of this section to be indicative of a violation of §60.11(d) provided that the Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.
- 160. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a CEMS for measuring CO emissions which gives a readout in pounds per hour.
- Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, only pipeline quality natural gas and #6 fuel oil may be used as fuels in the lime kiln. Non-condensible gases may also be incinerated in this kiln as allowed by 40 CFR Part 60, Subpart BB.
- Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the sulfur content of the fuel oil shall not exceed 3.0% by weight and total SO<sub>2</sub> emissions shall not exceed 73.2 tons per year in any consecutive twelve month period, as calculated monthly from total fuel usage and batch sulfur content:

# (Fuel oil gallons/batch)(7.88 lb/gal)(Weight % S in batch/100)(2.0 SO<sub>2</sub>/S) = SO<sub>2</sub> tons 2,000 lb/ton

- 163. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall either test each shipment of fuel oil or obtain manufacturer's certification of the sulfur content in order to demonstrate compliance with Specific Condition 162 and which may be used by the Department for enforcement purposes. These records shall be kept on site and made available to Department personnel upon request.
- 164. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not use in excess of 1,200,000 gallons per year of fuel oil at the No. 2 Lime Kiln (SN-09).

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- 165. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of fuel oil fired at the No. 2 Lime Kiln in order to demonstrate compliance with Specific Condition 164 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 166. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the pressure loss of the gas stream across the scrubber shall not exceed 30 in.  $H_2O$  and shall not fall below 10 in.  $H_2O$ .
- 167. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and §18.1004 of Regulation 18, the scrubbing liquid flow rate shall not fall below 1,500 gallons per minute.
- 168. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a monitoring device which measures and records the scrubbing liquid flow rate at source SN-09 in order to demonstrate compliance with Specific Condition 167. The records of the scrubbing liquor flow rate shall be kept on site and made available to Department personnel upon request.
- 169. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall annually test source SN-09 for benzene using EPA Reference Method 18 and methanol using EPA Reference Method 308. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.
- 170. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall maintain a minimum of 65% solids on a 30-day rolling average in the lime mud fed to source SN-09 in order to demonstrate compliance with the VOC emission rates.

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171. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall measure and record the solids content of the lime mud fed to source SN-09 at least once per eight hour shift while the kiln is in operation in order to demonstrate compliance with Specific Condition 170 and which may be used by the Department for enforcement purposes. These records shall be kept on site and shall be made available to Department personnel upon request.

172. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall demonstrate compliance with the NO<sub>x</sub> emissions through the use of the equations below. The permittee shall calculate the NO<sub>x</sub> emissions at least once every 15 minutes. The average hourly NO<sub>x</sub> emissions shall be calculated using four or more data points which have been equally spaced over an hour with the exception of the quality control checks as outlined in Specific Condition. The permittee shall provide Department personnel with any of the information used to calculate the NO<sub>x</sub> emissions for source SN-09 upon request. The minimum data availability shall be at least 95% of this kiln's operating hours. These equations and parameters may be changed based upon actual stack emissions testing results after review and approval by the Department.

$$C_{NOX} = |1121.8415 + (1.71886 * (SO)) + (5.25843 * N) - (4.12796 * T)|$$

$$E_{NOX} = C_{NOX} * DSCF/hr * 1.194E-7$$

where:  $C_{NOX} = NO_X$  concentration, 1-hr avg., ppm

 $E_{NOX} = NO_X$  emissions, 1-hr avg., lb/hr

N = total natural gas flow, 1000 standard cubic feet per hour

DSCF = stack flow rate, dry standard cubic feet per hour

 $1.194E-7 = conversion factor, ppm NO_X to lbs/dscf$ 

SO = kiln hood oxygen concentration, percent

T = Kiln exit gas temperature before wet scrubber, EF

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173. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the ratio of the natural gas flow rate to the stack oxygen content (R<sub>n</sub>) shall not fall below 5.953 and shall not exceed 21.706.

- Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall perform daily quality checks of the ratio of the natural gas flow rate to the stack oxygen content (R<sub>n</sub>) in order to demonstrate compliance with Specific Condition 173 and which may be used by the Department for enforcement purposes. If the ratio calculated is outside of the range set forth in Specific Condition 173, the permittee shall perform calibrations of the necessary equipment until the ratios are back in acceptable ranges. When the quality checks are being performed, only two data points will be required to determine the NO<sub>X</sub> emission rate. The permittee shall maintain records of all quality checks and calculations on site and shall be made available to Department personnel upon request.
- 175. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide emission limits for this source are based on 30-day rolling averages. Days when the unit is not operating are not included in the 30-day rolling average.

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# SN-11 No. 2 Package Boiler

#### **Source Description**

Source SN-11 is a natural gas fired package boiler with a heat input capacity of 210 MMBTU/hr. Compliance with the particulate matter, the sulfur dioxide, and the volatile organic compound emission rates will be demonstrated through only using pipeline quality natural gas to fire the boiler. Compliance with the oxides of nitrogen and the carbon monoxide emission rates will be demonstrated through annual testing and the use of portable analyzers.

This source is not subject to any NSPS subpart based on its size and/or date of installation.

#### **Specific Conditions**

176. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-11. Compliance with these emission rates will be demonstrated by only using pipeline quality natural gas to fire this source. Compliance with the carbon monoxide and oxides of nitrogen emission rates will also be demonstrated through the required semi-annual testing.

Pollutant	lb/hr	tpy
$PM_{10}$	0.6	2.6
$SO_2^{10}$	0.2	0.9
VOC	0.3	1.3
CO	25.4	111.3
$NO_X$	27.4	120.0

177. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-11. Compliance with these emission rates will be demonstrated by using only natural gas to fire this source.

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Pollutant	lb/hr	tpy
PM	0.6	2.6

- Pursuant to §18.503 of Regulation 18 and A.C.A.§8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed 5% opacity from source SN-11 as measured by EPA Reference Method 9. Compliance with this condition will be demonstrated through compliance with Specific Condition 179.
- 179. Pursuant to §19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and §18.1004 of Regulation 18, only pipeline quality natural gas shall be used to fire the No. 2 Package Boiler.
- 180. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the oxides of nitrogen and the carbon monoxide emissions from source SN-11. EPA Reference Method 7E shall be used to determine the oxides of nitrogen emissions while EPA Reference Method 10 shall be used to determine the carbon monoxide emissions. All tests shall be conducted in accordance with Plantwide Condition 3.
- 181. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use portable analyzers to test the carbon monoxide and the oxides of nitrogen emissions from source SN-11. One of these tests shall be conducted at the same time as the test required by Specific Condition 180. The permittee shall notify the Department at least fifteen days prior to these tests taking place.

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# SN-12 No. 3 Package Boiler

#### **Source Description**

Source SN-12, installed in 1987, is a natural gas fired package boiler with a heat input capacity of 163 MMBTU/hr. Source SN-12 is subject to the provisions of 40 CFR Part 60, Subpart Db due to its size and its date of installation. No control equipment is associated with this boiler.

#### **Specific Conditions**

182. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-12. Compliance with these emission rates will be demonstrated by only using pipeline quality natural gas to fire this source. Compliance with the carbon monoxide and oxides of nitrogen emission rates will also be demonstrated through the required semi-annual testing.

Pollutant	lb/hr	tpy
PM	0.5	2.2
$PM_{10}$	0.5	2.2
$SO_2^{10}$	0.1	0.4
VOC	0.3	1.0
CO	6.4	28.0
$NO_X$	16.0	70.1

- 183. Pursuant to §18.503 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed 5% opacity from source SN-12 as measured by EPA Reference Method 9.
- 184. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 40 CFR 70.6, and §18.1004 of Regulation 18, only pipeline quality natural gas shall be used to fire the No. 3 Package Boiler.

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185. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the oxides of nitrogen and the carbon monoxide emissions from source SN-12. EPA Reference Method 7E shall be used to determine the oxides of nitrogen emissions while EPA Reference Method 10 shall be used to determine the carbon monoxide emissions. All tests shall be conducted in accordance with Plantwide Condition 3.

- 186. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use portable analyzers to test the carbon monoxide and the oxides of nitrogen emissions from source SN-12. One of these tests shall be conducted at the same time as the test required by Specific Condition 185. The permittee shall notify the Department at least fifteen days prior to these tests taking place.
- 187. Source SN-12 is subject to the provisions of 40 CFR Part 60, Subpart 60 General Provisions and 40 CFR Part 60, Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units due to a heat input capacity of over 100 MMBTU/hr and an installation date of 1987. A copy of subpart Db may be found in Appendix A of this permit. The requirements of this subpart are outlined in Specific Conditions 188 through 193.
- 188. Pursuant to 40 CFR §60.44b(a) and §19.304 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere any gases that contain nitrogen oxides (expressed as NO<sub>2</sub>) in excess of 0.10 lb/MMBTU at a low heat release rate.
- 189. Pursuant to 40 CFR §60.44b(j)(1) and §19.304 of Regulation 19, compliance with the NO<sub>X</sub> emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average for any subsequent performance tests for any facilities that combust natural gas.
- 190. Pursuant to 40 CFR §60.46b(a) and §19.304 of Regulation 19, the nitrogen oxides standards under §60.44b apply at all times.
- 191. Pursuant to 40 CFR §60.48b(g)(2) and §19.304 of Regulation 19, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBTU/hr) or less, and which has an annual capacity for natural gas greater than 10% shall monitor steam generating unit operating conditions and predict nitrogen oxides emission rates as specified in a plan submitted pursuant to §60.49b(c).

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- 192. Pursuant to 40 CFR §60.49b(c) and §19.304 of Regulation 19, the owner or operator of each affected facility subject to the nitrogen oxides standard of §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions under the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored under §60.48b(g)(2) and the records to be maintained under §60.49b(j). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. The plan shall:
  - A. Identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates. Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion and the level of excess air;
  - B. Include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rate and these operating conditions;
  - C. Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(j).

If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including the steam generating unit load, identified in the plan.

193. Pursuant to 40 CFR §60.49b(d) and §19.304 of Regulation 19, the owner or operator of an affected facility shall record and maintain records of each fuel combusted during each day and calculate the annual capacity factor for natural gas for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

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- 194. Pursuant to 40 CFR §60.49b(p) and §19.304 of Regulation 19, the owner or operator of an affected facility described in §60.44b(j) shall maintain records of the following information for each steam generating unit operating day:
  - A. Calendar date
  - B. The number of hours of operation
  - C. A record of the hourly steam load
- 195. Pursuant to 40 CFR §60.49b(q) and §19.304 of Regulation 19, the owner or operator of an affected facility described in §60.44b(j) shall submit to the Administrator on a quarterly basis:
  - A. The annual capacity factor over the previous 12 months
  - B. If the affected facility meets the criteria described in §60.44b(j), the results of any nitrogen oxides emission tests required during the quarter, the hours of operation during the quarter, and the hours of operation since the last nitrogen oxides emission test.

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# SN-14 No. 3 Recovery Boiler

#### **Source Description**

The No. 3 Recovery Boiler, last modified in 1989, has a heat input capacity of 1,088 MMBTU/hr. Black liquor solids are combusted in this boiler to recover inorganic chemicals. Fuel oil and natural gas are also combusted in this boiler.

Emissions are controlled through the use of an electrostatic precipitator. Continuous emission monitoring systems are in place for opacity, sulfur dioxide, total reduced sulfur, carbon monoxide, and oxides of nitrogen.

Due to its date of installation, this source is subject to 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills.

The permittee tested source SN-14 for formaldehyde emissions as required under Permit #287-AOP-R0. The formaldehyde emissions were determined to be below detectable levels. Therefore, the permittee is not required to perform further testing for formaldehyde from source SN-14 at this time.

# **Specific Conditions**

196. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-14. Compliance with the volatile organic compound emission rates will be demonstrated through the required semi-annual testing. Compliance with the carbon monoxide emission rates will be demonstrated through use of the CEMS for this pollutant located at source SN-14.

Pollutant	lb/hr	tpy
VOC	137.0	600.1
CO	856.0	3749.3

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197. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-14. Compliance with the sulfur dioxide and the oxides of nitrogen emissions for this source will be demonstrated through use of the CEMS for these pollutants located at this source. Compliance with the particulate matter emission rate will be demonstrated through the opacity limit for this source.

Pollutant	lb/hr	tpy
PM	93.5	409.5
PM <sub>10</sub>	93.5	409.5
SO <sub>2</sub>	425.0	1861.5
NO <sub>X</sub>	270.0	1182.6

198. Pursuant to §19.501 et seq, §19.804, and §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-14. Compliance with these emission rates will be demonstrated through use of the CEMS for TRS located at this source.

Pollutant	lb/hr	tpy
TRS	6.6	28.9

199. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-14. Compliance with the hydrogen chloride and the sulfuric acid emission rates will be demonstrated through parametric monitoring. Compliance with the methanol and the styrene emissions will be demonstrated through compliance with the required testing of these pollutants at this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required. Compliance with the formaldehyde emissions will be demonstrated through compliance with Plantwide Condition 4.

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Pollutant	lb/hr	tpy
Formaldehyde	0.87	3.82
Hydrogen Chloride	54.50	238.71
Methanol	0.46	2.02
Styrene	0.07	0.31
Sulfuric Acid	4.20	18.40

- 200. Pursuant to §19.503 of Regulation 18 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity from source SN-14 as measured by EPA Reference Method 9. Compliance with this opacity limit will be demonstrated through use of the opacity monitor located at this source.
- 201. Source SN-14 is subject to the provisions of 40 CFR Part 60, Subpart A General Provisions and 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills due to an installation date in 1989. A copy of Subpart BB has been included in Appendix of this permit. The requirements of this subpart are outlined in Specific Conditions 202 through 211.
- 202. Pursuant to 40 CFR §60.282(a)(1)(i) and §19.304 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere from source SN-14 any gases which contain particulate matter in excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen.
- 203. Pursuant to 40 CFR §60.282(a)(1)(ii) and §19.304 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere from source SN-14 any gases which exhibit 35% opacity or greater. This limit is superseded by Specific Condition 193 which limits the opacity to 20%.
- 204. Pursuant to 40 CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19, the permittee shall not cause to be discharged into the atmosphere from source SN-14 any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 8 percent oxygen.
- 205. Pursuant to 40 CFR §60.284(a)(1) and §19.304 of Regulation 19, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from source SN-14. The span of this system shall be set at 70 percent opacity.

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- 206. Pursuant to 40 CFR §60.284(a)(2), §19.304, §19.703, and §19.804 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the concentration of TRS emissions on a dry basis and the percent oxygen by volume on a dry basis in the gases discharged into the atmosphere from source SN-14. These systems shall be located downstream of the control device and the span of these continuous monitoring system shall be set as stated below. The permittee has already demonstrated that these monitors meet the required spans and will be required to notify the Department prior to modifying either monitoring system.
  - (i). At a TRS concentration of 30 ppm for the TRS continuous monitoring system; and
  - (ii). At 20 percent oxygen for the continuous oxygen monitoring system.
- 207. Pursuant to 40 CFR §60.284(c)(1) and §19.304 of Regulation 19, the permittee shall calculate and record on a daily basis 12-hour average TRS concentrations for the two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 continguous1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2).
- 208. Pursuant to 40 CFR §60.284(c)(2) and §19.304 of Regulation 19, the permittee shall calculate and record on a daily basis 12-hour average oxygen concentrations for the two consecutive periods of each operating day for source SN-14. These 12-hour averages shall correspond to the 12-hour average TRS concentrations under 40 CFR §60.284(c)(1) and shall be determined as an arithmetic mean of the appropriate 12 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under 40 CFR §60.284(a)(2).
- 209. Pursuant to 40 CFR §60.284(c)(3) and §19.304 of Regulation 19, the permittee shall correct the 12-hour average TRS concentration from source SN-14 to 8 volume percent using the following equation:

$$Ccorr = Cmeas*(21-X/21-Y)$$

where: Ccorr = the concentration corrected for oxygen

Cmeas = the concentration uncorrected for oxygen

X = the volumetric oxygen concentration in percentage to be corrected to 8 percent

Y = the measured 12-hour average volumetric oxygen concentration

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- 210. Pursuant to 40 CFR §60.284(d)(1) and §19.304 of Regulation 19, for the purpose or reports required under §60.7(c), any owner or operator subject to the provisions of this subpart shall report semiannually periods of excess emissions as follows. This condition is superseded by the requirement for quarterly Excess Emissions Reports required under the Department's CEMS standards.
  - (i). All 12 -hour averages or TRS concentrations above 5 ppm by volume; and
  - (ii). All 6-minute average opacities that exceed 35 percent. The permittee will be required to report as excess emissions all 6-minute average opacities that exceed 20% (the opacity limit allowed under Regulation 19). However, only those emissions which exceed 35% opacity would be considered possible violations of 40 CFR Part 60, Subpart BB.
- 211. Pursuant to 40 CFR §60.284(e) and §19.304 of Regulation 19, the Administrator will not consider periods of excess emissions reported under paragraph (d) of this section to be indicative of a violation of §60.11(d) provided that:
  - (i). The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions do not exceed:
    - A. One percent for TRS emissions from recovery furnaces
    - B. Six percent average opacities from recovery furnaces
  - (ii). The Administrator determines that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.
- 212. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the carbon monoxide emissions from source SN-14.

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- 213. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the oxide of nitrogen emissions from source SN-14.
- 214. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the sulfur dioxide emissions from source SN-14.
- 215. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual tests of the VOC emissions from source SN-14 using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3.
- 216. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a minimum floor tube temperature of 400EF on a three hour average at source SN-14. This limit applies only when the boiler is firing in excess of 1.5 millions pounds per day.
- 217. Pursuant to §19.703 and §19.705 of Regulation 19, 40 CFR §70.6, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring device to measure and record the floor tube temperature at source SN-14. The temperature shall be recorded at least once every fifteen minutes and each hour's average shall be stored in a database. The permittee shall submit semi-annual reports showing all 3-hour average temperatures below the minimum established in Specific Condition 216 and the monthly average.
- 218. Pursuant to §19.703 and §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the black liquor solids fired at source SN-14 when not complying with the minimum floor tube temperature set forth in Specific Condition 216 in order to demonstrate whether or not the minimum temperature requirement is in effect. These records shall be updated whenever the minimum temperature is not being met, shall be kept on site, and shall be made available to Department personnel upon request.

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- 219. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual tests for styrene using EPA Reference Method 18. All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.
- 220. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall demonstrate compliance with the hydrogen chloride emission rates through the use of the CEMS for sulfur dioxide and the following equations:

PPM HCl = 
$$\frac{1.28 * PPM SO_2}{1 + (PPM SO_2 * 0.017)}$$

- lbs/hr HCl = PPM HCl \*  $0.0947 * 10^{-7} * DSCFH$
- 221. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall calculate the hourly HCl emissions using the one hour average PPM SO<sub>2</sub> values obtained from the CEMS. These calculations shall be kept on site and made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 222. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, a sulfur dioxide emission rate in excess of 250 ppm on a three-hour average as read by the CEMS for this pollutant shall be considered a violation of the sulfuric acid emission rate.
- 223. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the carbon monoxide emission limits for this source are based on 30-day rolling averages while the sulfur dioxide and the oxides of nitrogen emission limits for this source are based on 3-hour averages. Days when the unit is not operating are not included in the 30-day rolling average.

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# SN-15 No. 3 Smelt Dissolving Tank

### **Source Description**

Compliance with the scrubber parameters will demonstrate compliance with the emission rates for particulate matter, sulfur dioxide, and TRS. Compliance with the scrubber parameters will also demonstrate compliance with the opacity limit for this source.

This source is subject to 40 CFR Part 60, Subpart BB - Standards of Performance for Kraft Pulp Mills due an installation date of 1989.

The permittee has tested source SN-15 for formaldehyde emissions. The results of this test showed that any formaldehyde emissions are below detectable levels. Therefore, the permittee is not required to perform further testing for formaldehyde at source SN-15 at this time.

# **Specific Conditions**

224. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-15. Compliance with these emission rates will be demonstrated through the monitoring of the scrubber parameters of this source.

Pollutant	lb/hr	tpy
VOC	9.9	43.5

225. Pursuant to §19.501 et seq and §19.901 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-15. Compliance with these emission rates will be demonstrated through the monitoring of the scrubber parameters of this source. Compliance with the TRS and the particulate matter emission rates will also be demonstrated through compliance with 40 CFR Part 60, Subpart BB.

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Pollutant	lb/hr	tpy
PM	18.7	81.9
$PM_{10}$	18.7	81.9
$SO_2$	5.1	22.3

Pursuant to §19.501 et seq, §19.804, and §19.901 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-15. Compliance with these emission rates will be demonstrated through the scrubber parameters and required testing of this source.

Pollutant	lb/hr	tpy
TRS	1.6	7.0

227. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-15. Compliance with the methanol emission rates will be demonstrated through compliance with the monitoring of the scrubber parameters at this source. Compliance with the ammonia emission rates will be demonstrated through compliance with the required testing of these pollutants at this source. Compliance with the formaldehyde emission rates will be demonstrated through compliance with Plantwide Condition 4.

Pollutant	lb/hr	tpy
Ammonia	45.00	197.10
Formaldehyde	0.58	2.55
Methanol	0.34	1.49

228. Pursuant to §19.503 of Regulation 18 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity from source SN-15 as measured by EPA Reference Method 9. Compliance with this opacity limit will be demonstrated through compliance with the scrubber parameters for this source.

229. Source SN-15 is subject to the provisions of 40 CFR Part 60, Subpart A - General Provisions and 40 CFR Part 60, Subpart BB Standards of Performance for Kraft Pulp Mills due to an

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installation date of 1989. A copy of Subpart BB is included in Appendix of this permit. The requirements of Subpart BB are outlined in Specific Conditions 230 through 233.

- 230. Pursuant to 40 CFR §60.282(a)(2) and §19.304 of Regulation 19, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any smelt dissolving tank any gases which contain particulate matter in excess of 0.1 g/kg black liquor solids (dry weight) [0.2 lb/ton black liquor solids (dry weight)]. Compliance with this limit will be demonstrated through the required monitoring of this source.
- 231. Pursuant to 40 CFR §60.283(a)(4) and §19.304 and §19.804 of Regulation 19, TRS emissions from source SN-15 shall not exceed 0.0168 g/kg measured as grams H<sub>2</sub>S kg black liquor solids on a 12 hour average. Compliance with this limit will be demonstrated through the required testing and monitoring of the scrubber parameters of this source.
- 232. Pursuant to 40 CFR §60.284(b)(2)(i) and §19.304 of Regulation 19, the permittee shall install, calibrate, maintain, and operate a monitoring device at source SN-15 for the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device is to be certified by the manufacturer to be accurate to within a gage pressure of + 500 pascals (ca. + 2 inches water gage pressure).
- 233. Pursuant to 40 CFR §60.284(b)(2)(ii) and §19.304 of Regulation 19, the permittee shall install, calibrate, maintain, and operate a monitoring device at source SN-15 for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±15% of design scrubbing liquid supply pressure. The pressure sensor or tap is to be located close to the scrubber liquid discharge point. The Administrator may be consulted for approval of alternate locations. This requirement is superseded by the more stringent requirement of scrubber flow monitoring in Specific Conditions 235 and 236.
- 234. Pursuant to §19.804 of Regulation 19, the permittee shall conduct annual testing for TRS from source SN-15 using EPA Reference Method 16. These tests shall be conducted in accordance with Plantwide Condition 3.
- 235. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the scrubbing liquor flow rate at source SN-15 shall not fall below 175 gal/min.

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236. Pursuant to §19.703 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall record the scrubbing liquor flow to the scrubber once per 8-hour shift to demonstrate compliance with Specific Condition 235. Average daily flow rates shall be calculated using the once per 8-hour shift readings. These records shall be kept on site and made available to Department personnel upon request. The daily averages shall be submitted to the Department in accordance with General Provision 7.

- 237. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test source SN-15 for methanol emissions using EPA Reference Method 308 within 90 days of permit issuance. The permittee will also be required to monitor the scrubber flow rate during the testing in order to demonstrate that the methanol emissions will be below the permitted levels when the flow rate is at or near the minimum required by Specific Condition 235.
- 238. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual tests of the ammonia emissions from source SN-15 using Method 206. All tests shall take place in accordance with Plantwide Condition 3.

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# SN-16 No. 1A Bleachplant Vents

### **Source Description**

This source primarily uses chlorine, chlorine dioxide, oxygen, hydrogen peroxide, and sodium hydroxide for bleaching the brownstock. Chlorine will also be used to bleach the brownstock until April, 2001.

An additional bleaching stage will be added to facilitate the conversion from chlorine bleaching to 100% chlorine dioxide substitution. Emissions from the bleach washer hoods, tower vents,  ${\rm ClO_2}$  storage tank vents, and seal tank vents are routed to a scrubber. White liquor or other chlorine neutralizing chemicals are used as the scrubbing liquid.

# **Specific Conditions**

239. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-16. Compliance with the carbon monoxide emission rates will be demonstrated through the required semi-annual testing. Compliance with the volatile organic compound emission rates will be demonstrated through the required testing and the scrubber parameters which will be established during the testing.

Pollutant	lb/hr	tpy
VOC	6.7	29.4
CO	91.5	400.8

240. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-16. Compliance with the emission rates for chlorine, chlorine dioxide, and methanol will be demonstrated through the required testing and the scrubber parameters which will be established during the testing. Compliance with the emission rates for chloroform and styrene will be demonstrated through the required testing of these pollutants at this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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Pollutant	lb/hr	tpy
Chlorine	2.00	8.76
Chlorine Dioxide	1.00	4.38
Chloroform	5.50	24.09

- 241. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test source SN-16 for chlorine and chlorine dioxide using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." The permittee shall also test source SN-16 for methanol emissions using EPA Reference Method 308. All tests shall be conducted in accordance with Plantwide Condition 3. The permittee shall also measure the scrubber liquid flow rate during the tests in order to determine parameters which will demonstrate compliance with the permitted emission rates.
- 242. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall comply with and monitor the scrubber liquid flow at source SN-16 which will be established through the testing required by Specific Conditions 241 and 245. The permittee shall record the flow rate once per eight hour shift and average the three daily readings. All readings and averages shall be kept on site and made available to Department personnel upon request. The daily averages shall be submitted to the Department in accordance with General Provision 7.
- 243. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the CO emissions from source SN-16 using EPA Reference Method 10. All tests shall be conducted in accordance with Plantwide Condition 3.
- 244. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use portable analyzers to determine the carbon monoxide emissions from source SN-16. One of these tests shall be conducted at the same time as the test required by Specific Condition 243. The permittee shall notify the Department at least fifteen days prior to these tests taking place.

245. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall test the VOC emissions at source SN-16 using EPA Reference Method 25A. All tests shall take place in accordance with Plantwide Condition #3. The permittee shall also measure the

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scrubber liquid flow rate during the tests in order to determine parameters which will demonstrate compliance with the permitted emission rates.

246. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual testing of the styrene emissions from source SN-16 using EPA Reference Method. The permittee shall also conduct annual testing of the chloroform emissions from source SN-16 using the test method found in NCASI Special Report Number 91-07 "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Release from Pulp Bleach Plants." All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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# SN-17 & SN-46 No. 1B Bleachplant Vents & No. 1B Pre-Bleach Washer

### **Source Description**

This source primarily uses chlorine, chlorine dioxide, oxygen, hydrogen peroxide, and sodium hydroxide for bleaching the brownstock. Chlorine will also be used to bleach the brownstock until April 2001.

An additional bleaching stage will be added to facilitate the conversion from chlorine bleaching to 100% chlorine dioxide substitution. Emissions from the pre-bleach washer, bleach washer hoods, tower vents, ClO<sub>2</sub> storage tank vents, and seal tank vents are routed to a scrubber. White liquor or other chlorine neutralizing chemicals are used as the scrubbing liquid.

### **Specific Conditions**

247. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-17. Compliance with the carbon monoxide emission rates will be demonstrated through the required semi-annual testing. Compliance with the volatile organic compound emission rates will be demonstrated through the required testing and the scrubber parameters which will be established during the testing.

Pollutant	lb/hr	tpy
VOC	14.9	65.0
CO	72.3	316.7

248. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-17. Compliance with the emission rates for chlorine, chlorine dioxide, and methanol will be demonstrated through the required testing and the scrubber parameters which will be established during the testing. Compliance with the emission rates for chloroform and styrene will be demonstrated through the required testing of these pollutants at this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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Pollutant	lb/hr	tpy
Chlorine	2.00	8.80
Chlorine Dioxide	1.00	4.40
Chloroform	5.50	24.10

- 249. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test source SN-17 for chlorine and chlorine dioxide using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." The permittee shall also test source SN-17 for methanol using EPA Reference Method 308. All tests shall be conducted in accordance with Plantwide Condition 3. The permittee shall also measure the scrubber liquid flow rate during the tests in order to determine parameters which will demonstrate compliance with the permitted emission rates.
- 250. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall comply with and monitor the scrubber liquid flow at source SN-17 which will be established through the testing required by Specific Conditions 249 and 253. The permittee shall record the flow rate once per eight hour shift and average the three daily readings. All readings and averages shall be kept on site and made available to Department personnel upon request. The daily averages shall be submitted to the Department in accordance with General Provision 7.
- 251. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the CO emissions from source SN-17 using EPA Reference Method 10. All tests shall be conducted in accordance with Plantwide Condition 3.
- 252. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use portable analyzers to determine the carbon monoxide emissions from source SN-17. One of these tests shall be conducted at the same time as the test required by Specific Condition 251. The permittee shall notify the Department at least fifteen days prior to these tests taking place.

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253. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall test the VOC emissions at source SN-17 using EPA Reference Method 25A. All tests shall take place in accordance with Plantwide Condition #3. The permittee shall also measure the scrubber liquid flow rate during the tests in order to determine parameters which will demonstrate compliance with the permitted emission rates.

254. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual testing of the styrene emissions from source SN-17 using EPA Reference Method 18. The permittee shall also conduct annual testing of the chloroform emissions from source SN-17 using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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# SN-18 No. 2 Bleachplant Vents

### **Source Description**

This source primarily uses chlorine, chlorine dioxide, oxygen, hydrogen peroxide, and sodium hydroxide for bleaching the brownstock. Chlorine will also be used to bleach the brownstock until April 2001.

Emissions from the bleach washer hoods, tower vents, ClO<sub>2</sub> storage tank vents, and seal tank vents are routed to a scrubber. Emissions from one of the two chlorine dioxide generators located on site are also routed to the scrubber at source SN-18. White liquor or other chlorine neutralizing chemicals are used as the scrubbing liquid.

# **Specific Conditions**

255. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-18. Compliance with the carbon monoxide emission rates will be demonstrated through the required semi-annual testing. Compliance with the volatile organic compound emission rates will be demonstrated through the required testing and the scrubber parameters which will be established during the testing.

Pollutant	lb/hr	tpy
VOC	10.8	47.3
CO	76.6	335.5

256. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-18. Compliance with the emission rates for chlorine, chlorine dioxide, and methanol will be demonstrated through compliance with the required testing and the scrubber parameters which will be established during the testing. Compliance with the emission rates for chloroform and styrene will be demonstrated through the required testing of these pollutants at this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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Pollutant	lb/hr	tpy
Chlorine	2.00	8.80
Chlorine Dioxide Chloroform	2.00 5.50	8.80 24.10

- 257. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test source SN-18 for chlorine and chlorine dioxide using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." The permittee shall also test source SN-18 for methanol emissions using EPA Reference Method 308. All tests shall be conducted in accordance with Plantwide Condition 3. The permittee shall also measure the scrubber liquid flow rate during the tests in order to determine parameters which will demonstrate compliance with the permitted emission rates.
- 258. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall comply with and monitor the scrubber liquid flow at source SN-18 which will be established through the testing required by Specific Conditions 257 and 261. The permittee shall record the flow rate once per eight hour shift and average the three daily readings. All readings and averages shall be kept on site and made available to Department personnel upon request. The daily averages shall be submitted to the Department in accordance with General Provision 7.
- 259. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the CO emissions from source SN-18 using EPA Reference Method 10. All tests shall be conducted in accordance with Plantwide Condition 3.
- 260. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use portable analyzers to determine the carbon monoxide emissions from source SN-18. One of these tests shall be conducted at the same time as the test required by Specific Condition 259. The permittee shall notify the Department at least fifteen days prior to these tests taking place.
- 261. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall test the VOC emissions at source SN-18 using EPA Reference Method 25A. All tests shall take place in accordance with Plantwide Condition #3. The permittee shall also measure the

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scrubber liquid flow rate during the tests in order to determine parameters which will demonstrate compliance with the permitted emission rates.

Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct annual testing of the styrene emissions from source SN-18 using EPA Reference Method 18. The permittee shall also conduct annual testing of the chloroform emissions from source SN-18 using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." All tests shall be conducted in accordance with Plantwide Condition 3. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

## Standards for the Bleaching System

- 263. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.445(a)(2), owners or operators of bleaching systems bleaching pulp from kraft pulping processes that uses any chlorinated compounds shall meet all the provisions of this section.
- 264. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.445(b), the equipment at each bleaching stage, of the bleaching systems listed in paragraph (a) of this section, where chlorinated compounds are introduced shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (c) of this section. The enclosures and closed-vent system shall meet the requirements specified in §63.450.
- 265. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.445(c), the control device used to reduce chlorinated HAP emissions (not including chloroform) from the equipment specified in paragraph (b) of this section shall:
  - A. Reduce the total chlorinated HAP mass in the vent stream entering the control device by 99 percent or more by weight;
  - B. Achieve a treatment device outlet concentration of 10 ppm or less by volume of total chlorinated HAP; or

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- C. Achieve a treatment device outlet mass emission rate of 0.001 kg of total chlorinated HAP mass per megagram (0.002 pounds per ton) of ODP.
- 266. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.445(d)(2), the owner or operator of each bleaching system subject to paragraph (a)(2) of this section shall use no hypochlorite or chlorine for bleaching in the bleaching system or line.
- 267. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(a), each owner or operator subject to the standards specified in §63.445(b) and (c), shall install, calibrate, certify, operate, and maintain according to manufacturer's specifications, a continuous monitoring system (CMS, as defined in §63.2 of this part) as specified in paragraphs (c) and (d) of this section, except as allowed in paragraph (m) of this section. The CMS shall include a continuous recorder.
- 268. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(c), a CMS shall be operated to measure the following parameters for each gas scrubber used to comply with the bleaching system requirements of §63.445(c).
  - A. The pH or the oxidation/reduction potential of the gas scrubber effluent;
  - B. The amperage measured on the induced draft fans that blow pollutants to the Bleach Plant Scrubber (SN-18). To ensure compliance with Subpart S, the substituted parameter will be monitored for effectiveness with the following tests and inspections:
    - 1. An annual pressure differential test shall be performed to ensure that the Bleach Plant Scrubber fans maintain the required negative pressure across the system;
    - 2. monthly visual inspections under the Leak Detection and Repair plan for the Scrubber fans and associated process;
    - 3. periodic preventive maintenance of the Bleach Plant Scrubber fan to ensure proper operation;
    - 4. an initial performance test to determine the acceptable range of electrical current to the fans the provides an acceptable pressure differential across the Scrubber system and demonstrates compliance with the provisions of Specific Condition #265; and
  - C. The gas scrubber liquid influent flow rate
- 269. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(d), as an option to the requirements specified in paragraph (c) of this section, a CMS shall be operated to measure

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the chlorine outlet concentration of each gas scrubber used to comply with the bleaching system outlet concentration requirement specified in §63.445(c)(2).

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# SN-20 ERCO ClO<sub>2</sub> Generator

### Source Description

Domtar is permitted to operate the chlorine dioxide generator at capacity for 8,760 hours per year. Therefore, no annual records are required to be kept for this source. Compliance will instead be demonstrated through the required testing and monitoring for this source. Testing for volatile organic compounds from this source have been performed in the past. Any VOCs were below the detection level.

# **Specific Conditions**

270. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-20. Compliance with these emission rates will be demonstrated through the required testing of this source.

Pollutant	lb/hr	tpy
Chlorine	0.3	1.30
Chlorine Dioxide	3.0	13.10

- 271. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall conduct testing for chlorine and chlorine dioxide emissions from source SN-20 using the testing method found in NCASI Special Report Number 91-07, "Measurement and Quality Assurance Procedures for Determining Chloroform, Chlorine, and Chlorine Dioxide Releases from Pulp Bleach Plants." All tests shall be conducted in accordance with Plantwide Condition 3. While the tests are being performed, the permittee shall monitor the temperature of the absorption water in order to determine a maximum temperature which will demonstrate compliance with the emission rates found in Specific Condition 2. This test shall be repeated once every five years.
- Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall record the temperature of the absorption water once per eight hour shift in order to demonstrate compliance with Specific Condition 2. These records shall be kept on site and shall be made available to Department personnel upon request.

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# SN-21 Effluent Treatment Lagoons

# **Source Description**

The emissions from the effluent treatment lagoons are fugitive in nature. Although many of the specific conditions which outline compliance demonstration reference 40 CFR Part 63, Subpart S, the permittee is not yet required to comply with this subpart. However, the permittee has chosen to use the methods outlined in this subpart to demonstrate compliance with the emission rates. Therefore, failure to comply with any of these conditions would only be failure to comply with Regulations 18 and 19 as well as A.C.A. and should not be considered failure to comply with the MACT at this time.

### **Specific Conditions**

273. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-21. Compliance with these emission rates will be demonstrated through compliance with Specific Condition until April 15, 2001. After that day, compliance with these emission rates will be demonstrated through the required monitoring of this source.

Pollutant	lb/hr	tpy
VOC	12.8	55.7

274. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-21. Compliance with these emission rates will be demonstrated through compliance with Specific Condition until April 15, 2001. After that date, compliance with these emission rates will be demonstrated through the required monitoring of this source. If the required testing yields results which are below one part per million (1 ppm) or are not detected by approved test methods, further testing for the pollutant in question will not be required.

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Pollutant	lb/hr	tpy
Chloroform	6.80	29.6
Formaldehyde	0.46	2.02
Methanol	5.50	24.0

- 275. Pursuant to §19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and/or §18.1004 of Regulation 18, until April 15, 2001, compliance with the shower water and the white water concentration tests required for other sources in this permit shall be deemed compliance with the emission rates for sources SN-21.
- 276. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(a), the requirements of this section apply to owners or operators of kraft processes subject to the requirements of this subpart.
- 277. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(b), the pulping process condensates from the following equipment systems shall be treated to meet the requirements specified in (c), (d), and (e) of this section:
  - A. Each digester system;
  - B. Each turpentine recovery system;
  - C. Each evaporator stage where weak liquor is introduced (feed stages) in the evaporator system;
  - D. Each HVLC collection system; and
  - E. Each LVHC collection system.
- 278. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(c)(1) through (c)(3), one of the following combinations of HAP-containing pulping process condensates generated, produced, or associated with the equipment systems listed in paragraph (b) of this section shall be subject to the requirements of paragraphs (d) and (e) of this section:
  - A. All pulping process condensates from the equipment systems listed in paragraphs (b)(1) through (b)(5) of this section.
  - B. The combined pulping process condensates from the equipment systems specified in paragraphs (b)(4) and (b)(5) of this section, plus pulping process condensate stream(s) that in total contain at least 65% of the total HAP mass from the pulping

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process condensates from equipment systems listed in paragraphs (b)(1) through (b)(3) of this section.

- C. The pulping process condensates from equipment systems listed in paragraphs (b)(1) through (b)(5) of this section that in total contain a total HAP mass of 5.5 kilograms or more of total HAP per megagram (11.1 pounds per ton) of ODP for mills that perform bleaching.
- 279. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(d), the pulping process condensates from the equipment systems listed in paragraph (b) of this section shall be conveyed in a closed collection system that is designed and operated to meet the requirements specified in paragraphs (d)(1) and (d)(2) of this section.
- Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(d)(1), each closed collection system shall meet the individual drain system requirements specified in §§63.960, 63.961, and 63.962 of subpart RR of this part, except for closed vent systems and control devices shall be designed and operated in accordance with §863.443(d) and 63.450, instead of in accordance with §63.693 as specified in §63.962(a)(3)(ii), (b)(3)(ii)(A), and (b)(3)(ii)(B)(5)(iii).
- 281. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(d)(2)(i) and (d)(2)(ii), if a condensate tank is used in the closed collection system, the tank shall meet the following requirements:
  - A. The fixed roof and all openings (e.g., access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated by an instrument reading of less than 500 ppm above background, and vented into a closed-vent system that meets the requirements in §63.450 and routed to a control device that meets the requirements in §63.443(d); and
  - B. Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

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- 282. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(e)(2), (e)(3), and (e)(5), each pulping process condensate from the equipment systems listed in paragraph (b) of this section shall be treated according to one of the following options:
  - A. Discharge the pulping process condensate below the liquid surface of a biological treatment system meeting the requirement specified in paragraph (e)(3) of this section; or
  - B. Treat the pulping process condensates to reduce or destroy the total HAPs by 92% or more by weight; or
  - C. At mills that perform bleaching, treat the pulping process condensates to remove 5.1 kilograms or more of total HAP per megagram (10.2 pounds per ton) of ODP, or achieve a total HAP concentration of 300 ppm or less by weight at the outlet of the control device.
- Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(f), each HAP removed from a pulping process condensate stream during treatment and handling under paragraphs (d) and (e) of this section, except for those treated according to paragraph (e)(2) of this section, shall be controlled as specified in §63.443(c) and (d).
- 284. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.446(h), each owner or operator of a new or existing affected source subject to the requirements of this section shall evaluate all new or modified pulping process condensates to determine if they meet the applicable requirements of this section.
- 285. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(j), each owner or operator using a biological treatment system to comply with §63.446(e)(2) shall perform the following monitoring procedures:
  - A. On a daily basis, monitor the following parameters for each biological treatment unit:
    - i. Composite daily sample of outlet soluble BOD<sub>5</sub> concentration to monitor for maximum daily and maximum monthly average;
    - ii. Mixed liquor volatile suspended solids;
    - iii. Horsepower of aerator unit(s);
    - iv. Inlet liquid flow; and

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- v. Liquid temperature.
- B. Obtain daily inlet and outlet liquid grab samples from each biological treatment unit to have HAP data available to perform quarterly percent reduction tests specified in paragraph (j)(2)(ii) of this section (Item (B)(ii) of this specific condition) and the compliance percent reduction tests specified in paragraph (p)(1)(i) of this section (See item of Specific Condition). Perform the following procedures with the liquid samples:
  - i. Store the samples for 5 days as specified in  $\S63.457(n)$ . The 5 days storage requirement is required since the soluble BOD<sub>5</sub> test requires 5 days to obtain results. If the results of the soluble BOD<sub>5</sub> test are outside of the range established during the initial performance test, then the archive sample shall be used to perform the percent reduction test specified in  $\S63.457(1)$ .
  - ii. Perform the percent reduction test procedures specified in §63.457(l) within 45 days after the beginning of each quarter as follows:
    - 1. The percent reduction test performed in the first quarter (annually) shall be performed for total HAP and the percent reduction obtained from the test shall be at least as great as the total HAP reduction specified in §63.446(e)(2).
    - 2. The remaining quarterly percent reduction tests shall be performed for methanol and the percent reduction obtained from the test shall be at least as great as the methanol reduction determined in the previous first-quarter test specified in paragraph (j)(2)(ii)(A) of this section (Item (B)(ii)(1) of this specific condition).
    - 3. The parameter values used to calculate the percent reductions required in paragraphs (j)(2)(ii)(A) and (j)(2)(ii)(B) (Items (B)(ii)(1) and (B)(ii)(2), respectively, of this specific condition) of this section shall be parameter values measured and samples taken in paragraph (j)(1) of this section.

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- 286. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(l), each pulping process condensate closed collection system used to comply with §63.446(d) shall be visually inspected every 30 days and shall comply with the inspection and monitoring requirements specified in §63.964 of subpart RR of this part.
- 287. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(p), each owner or operator of a biological treatment system complying with 40 CFR §63.453(j) shall perform all the following requirements when the monitoring parameters specified in paragraphs (j)(1)(i) through (j)(1)(iii) of this section are below minimum operating parameter values or above maximum operating parameter values established in paragraph (n) of this section.
  - A. The following shall occur and be recorded as soon as practical:
    - i. Determine compliance with §63.446(e)(2) using the percent reduction test procedures specified in paragraph §63.457(l) and the monitoring data specified in paragraph (j)(1) of this section that coincide with the time period of the parameter excursion;
    - ii. Steps shall be taken to repair or adjust the operation of the process to end the parameter excursion period; and
    - iii. Steps shall be taken to minimize total HAP emissions to the atmosphere during the parameter excursion period.
  - B. A parameter excursion is not a violation of the applicable emission standard if the percent reduction test specified in paragraph (p)(1)(i) of this section demonstrates compliance with §63.446(e)(2), and no maintenance or changes have been made to the process or control device after the beginning of a parameter excursion that would influence the results of the determination.

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# SN-22 No. 1A and No. 1B Brownstock Washer Vents

## **Source Description**

Source SN-22 consists of the drum and belt washers which are used to wash the spent cooking chemicals from the brownstock. The liquid formed in this washing process is called weak black liquor and is routed to the weak black liquor tanks (SN-36). No control equipment is associated with the brownstock washers.

The permittee performed formaldehyde testing at this source as required by Permit #287-AOP-R0. The permittee is not required to perform any more testing at this point because no formaldehyde emissions were detected during the test.

# **Specific Conditions**

288. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-22. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
VOC	59.2	259.1

289. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-22. Compliance with the acetone and methanol emission rates will be demonstrated through the required monitoring of this source. Compliance with the formaldehyde emission rates will be demonstrated through compliance with Plantwide Condition 4.

Pollutant	lb/hr	tpy
Acetone	8.80	38.60
Formaldehyde	0.20	0.88
Methanol	59.00	258.20

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290. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, compliance with the VOC emissions shall be determined through compliance with the methanol emission rates at source SN-22.

- 291. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the methanol concentration in the shower water at source SN-22 shall not exceed 300 ppm and the acetone concentration shall not exceed 200 ppm.
- 292. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test the shower water at source SN-22 at least once each year in order to obtain the methanol and the acetone concentrations and in order to demonstrate compliance with Specific Condition 291 and which may be used by the Department for enforcement purposes. These records shall be kept on site and made available to Department personnel upon request. If one of the tests is failed, the permittee must test weekly for that pollutant until ten consecutive tests have been passed. The permittee must receive written permission from the Department prior to decreasing the frequency of the testing.

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# SN-23, SN-24, SN-25, SN-26, and SN-28 Storage Tanks

# **Source Description**

These tanks are used to store various chemicals used at this facility. Compliance with the emission rates will be demonstrated by throughput records.

Source SN-23, installed in 1989, is subject to the provisions of 40 CFR Part 60, Subpart Kb due to its size and its date of installation. None of the other storage tanks listed in this section are subject to any of the New Source Performance Standards.

#### **Specific Conditions**

293. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-23. Compliance with these emission rates will be demonstrated through the recordkeeping requirements for this source.

SN	Pollutant	lb/hr	tpy
23	VOC	1.0	4.0
28	VOC	0.2	0.9

294. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at the designated sources. Compliance with these emission rates will be demonstrated through the respective recordkeeping requirements for these sources.

SN	Pollutant	lb/hr	tpy
23	Methanol	0.91	4.00
24	Ammonia	0.10	0.10
25	Phosphoric Acid	0.01	0.10
26	Sulfuric Acid	0.10	0.44

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- 295. Source SN-23 is subject to the regulations of 40 CFR, Part 60, Subpart A, General Provisions, and 40 CFR Part 60, Subpart Kb, Standards of Performance due to a capacity greater than 40 m<sup>3</sup> and an installation date after July 23, 1984. A copy of Subpart Kb is provided in Appendix E. Applicable provisions of Subpart Kb are outlined in Specific Conditions 296 and 297.
- 296. Pursuant to §60.116b (b), the permittee shall keep readily accessible records showing the dimension of this storage vessel and an analysis showing the capacity of the storage vessel.
- 297. Pursuant to §60.116b (d), the permittee shall notify the Administrator within 30 days when the maximum true vapor pressure exceeds 27.6 kPa. The vapor pressure may be obtained from standard reference texts, determined by ASTM Method D2879-83, measured by an appropriate method approved by the Administrator, or calculated by an appropriate method approved by the Administrator. The appropriate MSDS may be used to determine the vapor pressure of the material stored at source SN-23.
- 298. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall store only methanol at SN-23.
- 299. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed 18,850,000 pounds of methanol usage at SN-23 in any consecutive twelve month period.
- 300. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of methanol throughput at source SN-23 in order to demonstrate compliance with Specific Condition 299 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the fifteenth day of the month following the month which the records represent, shall be kept on site, and shall be submitted to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 301. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall store only ammonia at source SN-24.
- 302. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, ammonia throughput at source SN-24 shall not exceed 800,000 lbs in any consecutive twelve month period.

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- 303. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the ammonia throughput at source SN-24 in order to demonstrate compliance with Specific Condition 302 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 304. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall store only nutrient solutions containing phosphoric acid at source SN-25.
- 305. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, throughput of phosphoric acid at source SN-25 shall not exceed 1.5 million pounds in any consecutive twelve month period.
- 306. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the phosphoric acid throughput at source SN-25 in order to demonstrate compliance with Specific Condition 305 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 307. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall store only sulfuric acid at source SN-26.
- 308. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, throughput of sulfuric acid at source SN-26 shall not exceed 105,120,000 pounds in any consecutive twelve month period.

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- 309. Pursuant to §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the sulfuric acid throughput at source SN-26 in order to demonstrate compliance with Specific Condition 308 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.
- 310. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall store only formic acid at source SN-28.
- 311. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, throughput of formic acid at source SN-28 shall not exceed 5,336,000 pounds in any consecutive twelve month period.
- 312. Pursuant to §19.705 of Regulation 19 and 40 CFR 70.6, the permittee shall maintain records of the formic acid throughput at source SN-28 in order to demonstrate compliance with Specific Condition 311 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.

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# SN-29 Recausticizer Vents

## **Source Description**

Normal operation of source SN-29 includes slaking of lime with green liquor from one of the recovery boilers. When emergency shutdowns occur due to power outages, a standby engine is used for agitation of the lime mud in some of the storage tanks. This is done to prevent the lime mud from hardening and causing the system to be shut down to clean the tanks.

The slakers on both of the recaust lines are controlled by scrubbers.

#### **Specific Conditions**

313. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-29. Compliance with these emission rates will be demonstrated through the recordkeeping requirements for this source.

Pollutant	lb/hr	tpy
VOC	3.0	12.8

Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-29. Compliance with these emission rates will be demonstrated through the recordkeeping requirements for this source.

Pollutant	lb/hr	tpy
Acetaldehyde	0.51	2.24
Ammonia	18.00	78.84
Methanol	2.40	10.52

315. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not process in excess of 420,500 tons of lime at source SN-29 in any consecutive twelve month period.

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316. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of lime processed at source SN-29 in order to demonstrate compliance with Specific Condition 315 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request.

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### SN-30, SN-31, SN-32, SN-33, SN-34, & SN-35 PCC Carbonators

### **Source Description**

Lime is delivered by rail or truck and stored on site in silos. The precipitated calcium carbonate (PCC) plant scrubs carbon dioxide from one of the two lime kiln stacks to manufacture PCC. The process takes the stack gases from either kiln, scrubs the gases to remove particulate, cools the gases to maintain product quality, and reacts the gases with the slacked lime to produce PCC. The PCC is then stored in tanks until pumped to one of the paper machines.

Currently, there are six PCC Carbonators located at this facility. The PCC process does not create any new emissions. All emissions are caused by the lime kiln exhaust gases. Therefore, the annual emissions for these sources are included in the lime kiln emissions.

#### **Specific Conditions**

317. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at the designated sources. Compliance with these emission rates will be demonstrated through compliance with the required testing of these sources.

SN	Pollutant	lb/hr
30	$PM_{10}$	0.8
	$SO_2$	0.4
	VOC	2.1
	CO	9.1
	$NO_x$	10.9
	TRŜ	0.06
31	$PM_{10}$	0.8
	$SO_2^{10}$	0.4
	VOC	2.1
	CO	9.1
	$NO_x$	10.9
	TRS	0.06

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SN	Pollutant	lb/hr
32	$\begin{array}{c} PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.4 2.1 9.1 10.9 0.06
33	PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>X</sub> TRS	0.8 0.4 2.1 9.1 10.9 0.06
34	$\begin{array}{c} PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.4 2.1 9.1 10.9 0.06
35	$\begin{array}{c} PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ TRS \end{array}$	0.8 0.4 2.1 9.1 10.9 0.06

318. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the following emission rates at the designated sources. Compliance with these emission rates will be demonstrated through compliance with the required testing of these sources.

SN	Pollutant	lb/hr
30	PM	0.8
31	PM	0.8

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SN	Pollutant	lb/hr
32	PM	0.8
33	PM	0.8
34	PM	0.8
35	PM	0.8

319. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, or §18.1002 of Regulation 18 and A.C.A. §8-4-204 as referenced by §8-4-304 and §8-4-311, the permittee shall test two of the PCC Carbonators every five years for the pollutants listed below using the indicated EPA Reference Methods. The Department reserves the right to determine which of the PCC Carbonators will be tested.

Pollutant	EPA Reference Method
$PM/PM_{10}$	5
$SO_2$	6C
VOC	25A
$NO_X$	7E

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# SN-36 Weak Black Liquor Tanks

#### **Source Description**

The weak black liquor from the washing lines is sent to one of the weak black liquor tanks prior to being sent to the recovery process.

No control equipment is associated with any of the weak black liquor tanks.

#### **Specific Conditions**

320. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-36. Compliance with these emission rates will be determined through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
VOC	7.3	32.0
TRS	0.1	0.5

Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-36. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
Methanol	6.30	27.60

322. Pursuant to §19.703 of Regulation 19 and 40 CFR Part 52, Subpart E or §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the temperature at source SN-36 shall not exceed 203EF.

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323. Pursuant to §19.703 of Regulation 19 and 40 CFR Part 52, Subpart E or §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the temperature at source SN-36.

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# SN-37 Pulp Dryer Hood and Vacuum Exhausts

#### **Source Description**

The main emissions from this source consist of residual methanol which is carried over from the bleaching process. The pollutants are emitted through the former exhaust fan, hood fans, and vacuum pump exhausts. No control equipment is associated with the pulp drying process.

The permittee tested this source for acetaldehyde and methanol as required under Permit #287-AOP-R0. No acetaldehyde or methanol emissions were detected during the testing. Therefore, the permittee is not required to conduct further testing for acetaldehyde or methanol at this time from source SN-37.

#### **Specific Conditions**

324. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-37. Compliance with these emission rates will be determined through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
VOC	4.7	20.5

Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-37. Compliance with these emission rates will be demonstrated through compliance with Plantwide Condition 4.

Pollutant	lb/hr	tpy
Acetaldehdye	0.70	3.10
Methanol	2.60	11.40

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326. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the VOC concentration in the white water at source SN-37 shall not exceed 20 ppm.

327. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test the white water at source SN-37 at least once each year in order to demonstrate compliance with Specific Condition 326 and which may be used by the Department for enforcement purposes. These records shall be kept on site and made available to Department personnel upon request. If one of the tests is failed, the permittee shall test weekly until ten consecutive tests have been passed. The permittee must receive written permission from the Department prior to decreasing the frequency of testing.

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# SN-38 No. 2 and No. 3 Woodyards

#### **Source Description**

The woodyards are used to store logs when they are first brought on site. The woodyard also processes the logs for use in making pulp and fuel for the boilers (mainly bark). No control equipment is associated with the woodyards.

# **Specific Conditions**

328. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-38. Compliance with these emission rates will be demonstrated through compliance with the amount of wood chips that may be processed at this source.

Pollutant	lb/hr	tpy
VOC	123.0	540.0

- 329. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not process in excess of 4,320,000 tons of wood chips in any consecutive twelve month period.
- 330. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of wood chips processed at the woodyards in order to demonstrate compliance with Specific Condition 329 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the tenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each month's individual data shall be submitted to the Department in accordance with General Provision 7.

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# SN-39 High Density Storage Tanks

#### **Source Description**

The high density storage tanks are used to store the brownstock before it is sent to one of the three bleach plants located at this facility. No control equipment is associated with the high density storage tanks.

# **Specific Conditions**

331. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-39. Compliance with these emission rates will be determined through the work practice standards set forth for this source.

Pollutant	lb/hr	tpy
VOC	1.2	5.3

332. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with these emission rates will be determined through the work practice standards set forth for this source.

Pollutant	lb/hr	tpy
Methanol	0.80	3.50

333. Pursuant to §19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and/or §18.1004 of Regulation 18, the permittee shall keep the sampling port closed at all times except when samples are being taken.

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334. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the times when the sample port is opened to retrieve a sample and the length of time for which the port was opened in order to demonstrate compliance with Specific Condition 333 and which may be used by the Department for enforcement purposes. These records shall be updated daily, kept on site, and made available to Department personnel upon request.

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# SN-40 No. 1A and No. 1B Digester Chip Fill Exhausts

#### **Source Description**

The digesters are used to cook the wood chips under pressure with white liquor and black liquor. Emissions result when the chips are blown from the digesters to the blow tanks. No control equipment is associated with this source.

Due to the nature of the emissions from this source, it would be difficult to obtain an accurate lb/hr measurement of the emissions. Therefore, lb/day limits are replacing lb/hr rates for this source.

### **Specific Conditions**

335. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-40. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/day	tpy
VOC	241.0	44.0
TRS	48.4	8.8

336. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-40. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/day	tpy
Methanol	138.00	25.1

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337. Pursuant to §19.705 of Regulation 19, 40 CFR 70.6, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and/or §18.1004 of Regulation 18, the spacing of the digester blows shall not fall below 25 minutes. If the digesters are blown less than 25 minutes apart, it shall be considered a violation of the emission rates for this source.

338. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the spacing of the digester blows in order to demonstrate compliance with Specific Condition 337 and which may be used by the Department for enforcement purposes. These records shall be updated daily, shall be kept on site, and shall be made available to Department personnel upon request.

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# SN-41 Sludge Landfill

# **Source Description**

Sludge from the mill is disposed of in a landfill on site. The hourly emission rates were based on a worst-case scenario. Compliance with the annual emission rates will be demonstrated through recordkeeping requirements.

### **Specific Conditions**

339. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-41. Compliance with these emission rates will be demonstrated through the recordkeeping requirements for this source.

Pollutant	lb/hr	tpy
VOC	11.6	51.0

340. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-41. Compliance with these emission rates will be demonstrated through the recordkeeping requirements for this source.

Pollutant	lb/hr	tpy
Methanol	0.28	1.23

341. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not place in excess of 344,000 cubic yards (163,000 tons) of sludge in the landfill in any consecutive twelve month period.

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342. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of sludge placed in the landfill in order to demonstrate compliance with Specific Condition 341 and which may be used by the Department for enforcement purposes. The records which the permittee is required to keep for the Solid Waste Division at the Department may be used to fulfill this recordkeeping requirement. These records shall be kept on site and shall be made available to Department personnel upon request. An annual total and each quarter's individual data shall be submitted to the Department in accordance with General Provision 7.

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### SN-42 No. 2 Decker

### **Source Description**

The decker is used to thicken the brownstock before it is routed to one of the brownstock high density storage tanks. No control equipment is associated with this source.

### **Specific Conditions**

343. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-42. Compliance with these emission rates will be demonstrated through the required testing and monitoring of these sources.

Pollutant	lb/hr	tpy
VOC	5.6	24.5

Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-42. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
Acetone	7.50	32.90
Methanol	3.30	10.10

- 345. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, compliance with the VOC emissions shall be determined through compliance with the methanol emission rates.
- 346. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the methanol concentration in the shower water at source SN-42 shall not exceed 300 ppm and the acetone concentration shall not exceed 200 ppm.

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347. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test the shower water at source SN-42 at least once each year in order to obtain the methanol and the acetone concentrations and in order to demonstrate compliance with Specific Condition 346 and which may be used by the Department for enforcement purposes. These records shall be kept on site and made available to Department personnel upon request. If one of the tests is failed, the permittee shall test weekly for that pollutant until ten consecutive tests have been passed. The permittee must receive written permission from the Department prior to decreasing the frequency of testing.

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## SN-43 Tub Grinder

# **Source Description**

The tub grinder is used to grind various wood waste products at this facility. Diesel fuel is used to power the tub grinder's engine. No control equipment is associated with this source.

# **Specific Conditions**

348. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-43. The hourly emission rates were based upon the use of diesel fuel at maximum capacity of the equipment. Compliance with the annual emission rates will be demonstrated through the recordkeeping requirements for this source.

Pollutant	lb/hr	tpy
$PM_{10}$	0.9	2.9
$SO_2^{10}$	1.1	4.8
VOC	0.5	1.6
CO	8.0	25.8
$NO_{X}$	12.0	38.7

Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-43. The hourly emissions are based upon the use of diesel fuel at maximum capacity of the equipment. Compliance with the annual emission rates will be demonstrated through the recordkeeping requirements for this source.

Pollutant	lb/hr	tpy
PM	0.9	2.9

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350. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, diesel fuel shall be the only fuel used for the tub grinder.

- 351. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not use in excess of 258,000 gallons of diesel fuel at the tube grinder in any consecutive twelve month period.
- 352. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of diesel fuel used at the tub grinder in order to demonstrate compliance with Specific Condition 351 and which may be used by the Department for enforcement purposes. These records shall be updated no later than the fifteenth day of the month following the month which the records represent, shall be kept on site, and shall be made available to Department personnel upon request. An annual total and each individual month's data shall be submitted to the Department in accordance with General Provision 7.

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# SN-44a, SN-44b, SN-44c, & SN-44d Paper Machines

# **Source Description**

Currently, there are four paper machines of varying sizes located at this facility. No control equipment is associated with any of the paper machines.

The permittee conducted tests in September of 1997 for emissions of several HAPs. No HAP emissions were detected during these tests. However, methanol emissions were detected at sources SN-44b, SN-44c, and SN-44d during previous testing. Therefore, this permit contains methanol emission limits for those sources which are based on the previous testing. Any other HAP emissions from these sources would be considered below de minimis levels.

Under this permit, the facility will be adding a mist eliminator to SN-44d, consisting of a separator chamber to collect condensed water and fibers. The exhaust is provided by a 15,000 cfm fan, and will consist of moist air.

### **Specific Conditions**

353. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at the designated sources. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

SN	Pollutant	Fan #	lb/hr per fan	lb/hr total	tpy
44a	VOC	1	0.7	2.4	10.6
		2	0.6		
		3, 4	0.4		
		5	0.3		
44b	VOC	1, 2, 3, 8	0.7	4.7	20.6
		4	0.6		
		5	0.5		

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SN	Pollutant	Fan #	lb/hr per fan	lb/hr total	tpy
		6, 7	0.4		
44c	VOC	1, 2, 3, 4	0.7	5.6	24.6
		5, 6, 7	0.6		
		8, 9	0.5		
44d	VOC	1, 2	0.8	6.8	29.8
		3	0.7		
		4, 5	0.5		
		6, 7, 8, 9	0.4		
		10, 11, 12	0.3		
		13, 14, 15, 16, 17	0.2		

Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at the designated sources. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

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SN	Pollutant	Fan #	lb/hr per fan	lb/hr total	tpy
44b	Methanol	1, 2, 3	0.7	4.00	17.52
		4	0.6		
		5	0.5		
		6, 7	0.4		
44c	Methanol	1, 2, 3, 4	0.7	5.60	24.53
		5, 6, 7	0.6		
		8, 9	0.5		
44d	Methanol	1, 2	0.8	6.80	29.80
		3	0.7		
		4, 5	0.5		
		6, 7, 8, 9	0.4		
		10, 11, 12	0.3		
		13, 14, 15, 16, 17	0.2		

- 355. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, compliance with the VOC emission rates will be determined through compliance with the methanol emission rates for sources SN-44b, SN-44c, and SN-44d.
- 356. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the VOC shower water concentration at source SN-44a shall not exceed 2 ppm.
- 357. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test for the VOC shower water concentration at source SN-44a at least once each year using a Department approved method

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in order to demonstrate compliance with Specific Condition 356 and which may be used by the Department for enforcement purposes. After 12 consecutive monthly tests have been passed, the permittee may petition the Department to reduce the frequency of the testing. The permittee must receive written permission from the Department prior to reducing the testing frequency.

- 358. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the methanol content of the shower water at sources SN-44b, SN-44c, and SN-44d shall not exceed 20 ppm.
- 359. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test the methanol content of the shower water at sources SN-44b, SN-44c, and SN-44d at least once each year using a Department approved test method in order to demonstrate compliance with Specific Condition 358 and which may be used by the Department for enforcement purposes. After 12 consecutive monthly tests have been passed, the permittee may petition the Department to reduce the frequency of the testing. The permittee must receive written permission from the Department prior to reducing the testing frequency.

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# SN-45 Oxygen Delignification System

# **Source Description**

The oxygen delignification system reacts elemental oxygen with the brownstock before the bleaching process. The oxidation of the organic chemicals releases carbon monoxide and some volatile organic compounds, primarily methanol. Carbon monoxide is essentially insoluble in water, so there is no effective control for this pollutant.

### **Specific Conditions**

360. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at source SN-45. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
VOC	9.1	39.9
CO	16.5	72.3

361. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table at source SN-45. Compliance with these emission rates will be demonstrated through the required testing and monitoring of this source.

Pollutant	lb/hr	tpy
Methanol	9.11	39.90

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362. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the VOC emissions from source SN-45 using EPA Reference Method 25A. All tests shall be conducted in accordance with Plantwide Condition 3. The permittee shall also conduct tests of parameters at source SN-45 which may be used at later dates to demonstrate compliance with the VOC emission rates.

- Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct annual testing of the carbon monoxide emissions from source SN-45 using EPA Reference Method 10. All tests shall be conducted in accordance with Plantwide Condition 3.
- 364. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use third party testing firms to test the carbon monoxide and portable analyzers to test the VOC emissions from source SN-45. One of these tests shall be conducted at the same time as the tests required by Specific Conditions 362 and 363. The permittee shall notify the Department at least fifteen days prior to these tests taking place.
- 365. Pursuant to §18.1003 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, compliance with the VOC emission rates shall be deemed compliance with the methanol emission rates.

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#### **SECTION V: COMPLIANCE PLAN**

Domtar Industries - Ashdown Mill is in compliance with the applicable regulations cited in the permit application. Domtar Industries - Ashdown Mill 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.

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#### **SECTION VI: PLANTWIDE CONDITIONS**

- 1. Pursuant to Section 19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
- 2. Pursuant to Section 19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance if the work involved in the construction or modification is suspended for a total of 18 months or more.
- 3. Pursuant to Section 19.702(E), 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, each emission point for which an emission test method is specified in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Two copies of the compliance test results shall be submitted to the Department within thirty (30) days after the completed testing. The permittee shall provide:
  - (1) Sampling ports adequate for applicable test methods
  - (2) Safe sampling platforms
  - (3) Safe access to sampling platforms
  - (4) Utilities for sampling and testing equipment
- 4. Pursuant to Section 19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.
- 5. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.
- 6. Pursuant to §18.801 of Regulation 18, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.

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7. Pursuant to §18.901 of Regulation 18, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants from becoming airborne.

- 8. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee is not required to test those sources for criteria pollutants which are not in operation for a minimum of 25% of a calendar quarter. The permittee will be required to resume the testing schedule outline for a particular source when its operation exceeds 25% of a calendar quarter. The Department reserves the right to require testing upon the equipment's return to normal operations.
- 9. Pursuant to §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee is not required to test those sources for non-criteria pollutants which are not in operation for a minimum of 25% of a calendar quarter. The permittee will be required to resume the testing schedule outline for a particular source when its operation exceeds 25% of a calendar quarter. The Department reserves the right to require testing upon the equipment's return to normal operations.
- 10. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the operation of the sources referenced in Plantwide Conditions 8 and 9 in order to demonstrate that testing is not required. These records shall be kept on site and made available to Department personnel upon request. The permittee shall submit these records to the Department on a semi-annual basis.
- 11. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, for those sources where testing will take place using both a portable analyzer and an independent third party, the higher of the two results shall be used to determine compliance with the applicable emission rate. Also, if the difference of the results of the independent third party test and the test done with the portable analyzer is more than 10%, the permittee will be required to perform future tests using an independent third party and not the portable analyzer.
- 12. Pursuant to §19.304 and §19.705 of Regulation 19 and 40 CFR Part 60, only one excess emissions report (EER) is needed for those sources for which the permittee is required to submit an EER under an NSPS subpart and/or the Department's CEMS standards. The EER must contain all information required by the applicable NSPS subpart and the Department's CEMS standards.

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13. Domtar Industries - Ashdown Mill is subject to the provisions of 40 CFR Part 63, Subpart A - General Provisions and 40 CFR Part 63, Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. A copy of this subpart has been included in Appendix F of this permit. Domtar Industries - Ashdown Mill is required to comply with all applicable provisions of this subpart within the time frames specified. This includes notifications to the Department of applicability and options which have been chosen to demonstrate compliance with this regulation.

### Standards for the Pulping System at Kraft Processes

- 14. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.443(a)(1), the owner or operator of each pulping system using the kraft process subject to the requirements of this subpart shall control the total HAP emissions from the following existing affected sources, as specified in paragraphs (c) and (d) of this section.
  - A. Each LVHC system;
  - B. Each knotter or screen system with total HAP mass emission rates greater than or equal to the rates specified in paragraphs (a)(1)(ii)(A) or (a)(1)(ii)(B) (Items (B)(i) or (B)(ii) of this Plantwide Condition) of this section or the combined rate specified in paragraph (a)(1)(ii)(C) (Item (B)(iii) of this Plantwide Condition) of this section.
    - i. Each knotter system with emissions of 0.05 kilograms or more of total HAP per megagram of ODP (0.1 pounds per ton).
    - ii. Each screen system with emissions of 0.10 kilograms or more of total HAP per megagram of ODP (0.2 pounds per ton).
    - iii. Each knotter and screen system with emissions of 0.15 kilograms or more of total HAP per megagram of ODP (0.3 pounds per ton).
  - C. Each pulp washing system;
  - D. Each decker system that:
    - i. Uses any process water other than fresh water or paper machine white water; or
    - ii. Uses any process water with a total HAP concentration greater than 400 parts per million by weight; and

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- E. Each oxygen delignification system.
- 15. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.443(a)(2), at new affected sources, the total HAP emissions from the equipment listed in paragraphs (a)(1)(i), (a)(1)(iii), and (a)(1)(v) of this section and the following equipment shall be controlled:
  - A. Each knotter system;
  - B. Each screen system;
  - C. Each decker system; and
  - D. Each weak liquor storage tank.
- 16. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.443(c), equipment systems listed in paragraphs (a) and (b) of this section shall be enclosed and vented into a closed-vent system and routed to a control device that meets the requirements specified in paragraph (d) of this section. The enclosures and closed-vent system shall meet the requirements specified in paragraph §63.450.
- 17. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.443(d)(4), the control device used to reduce total HAP emissions from each equipment system listed in paragraphs (a) and (b) of this section shall reduce the total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone.
- 18. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.443(e)(1) through (e)(4), periods of excess emissions reported under §63.455 shall not be a violation of §63.443(c) and (d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:
  - A. One percent for control devices used to reduce the total HAP emissions from the LVHC system; and
  - B. Four percent for control devices used to reduce the total HAP emissions from the HVLC system; and
  - C. Four percent for control devices used to reduce the total HAP emissions from both the LVHC and the HVLC systems.

#### Standards for Enclosures and Closed-Vent Systems

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19. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.450(a), each enclosure and closed-vent system specified in §§63.443(c), 63.444(b), and 63.445(b) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) through (d) of this section.

- 20. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.450(b), each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.
- 21. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.450(c), each component of the closed-vent system used to comply with §\$63.443(c), 63.444(b), and 63.445(b) 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).
- 22. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.450(d), each bypass line in the closed vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in §§63.443, 63.444, or 63.445 shall comply with either of the requirements in Plantwide Conditions 23 and 24.
- 23. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.450(d)(1), on each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every fifteen minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line.
- 24. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.450(d)(2), for bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

# Monitoring Requirements

25. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(a), each owner or operator subject to the standards specified in §§63.443(c) and (d), 63.444(b) and (c), 63.445(b) and (c), 63.446(c), (d), and (e), 63.447(b) or §63.450(d), shall install, calibrate, certify, operate, and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in §63.2 of this part) as specified in paragraphs (b) through (m) of this

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section. The CMS shall include a continuous recorder. (Note: Some of the specific monitoring requirements may be contained in other parts of this permit.)

- 26. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(k)(1), for each enclosure opening, a visual inspection of the closure mechanism specified in §63.450(b) shall be performed at least once every thirty days to ensure the opening is maintained in the closed postion and sealed.
- 27. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(k)(2), each closed-vent system required by §63.450(a) 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.
- 28. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(k)(3), for positive pressure closed-vent systems or portions of closed-vent systems, the permittee shall demonstrate no detectable leaks as specified in §63.450(c) measured initially and annually by the procedures specified in §63.457(d).
- 29. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(k)(4), the permittee shall demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in §63.457(e).
- 30. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(k)(5), the valve or closure mechanism specified in §63.450(d)(2) 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.
- 31. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(k)(6), if an inspection required by paragraphs (k)(1) through (k)(5) of this section identifies visible defects in ductwork, piping, enclosures or connections to covers required by §63.450, or if an instrument reading of 500 parts per million by volume or greater above background concentration is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable.
  - A. 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.
  - B. The repair or corrective action shall be completed no later than fifteen calendar days after the problem is identified.

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Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(m), each owner or operator using a control device, technique, or an alternative parameter other than those specified in paragraphs (b) through (l) of this section shall install a CMS and establish appropriate operating parameters to be monitored that demonstrate, to the Administrator's satisfaction, continuous compliance with the applicable control requirements.

- 33. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(n)(1) through (n)(4), to establish or reestablish, the value for each operating parameter required to be monitored under paragraphs (b) through (j), (l), and (m) of this section or to establish appropriate parameters for paragraphs (f), (i), and (m) of this section, each owner or operator shall use the following procedures:
  - A. During the initial performance test required in §63.457(a) or any subsequent performance test, continuously record the operating parameter.
  - B. Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations.
  - C. The owner or operator shall provide for the Administrator's approval the rationale for selecting the monitoring parameters necessary to comply with (f), (i), and (m) of this section; and
  - D. Provide for the Administrator's approval, the rationale for the selected operating parameter value, 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.

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34. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.453(o), each owner or operator of a control device subject to the monitoring provisions of this section shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under paragraphs (a) through (n) of this section and established under this subpart. Except as provided in paragraph (p) of this section, §63.443(e), or §63.446(g), operation of the control device below the minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

# Recordkeeping Requirements

- 35. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.454(a), the owner or operator of each affected source subject to the requirements of this subpart shall comply with the recordkeeping requirements of §63.10 of subpart A of this part, as shown in Table 1, and the requirements specified in paragraphs (b) and (d) of this section for the monitoring parameters specified in §63.453.
- 36. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.454(b)(1) through (b)(12), 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:
  - A. Date of inspection;
  - B. The equipment type and identification;
  - C. Results of negative pressure tests for enclosures;
  - D. Results of leak detection tests;
  - E. The nature of the defect or leak and the method of detection (i.e., visual inspection or instrument detection);
  - F. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

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- G. Repair methods applied in each attempt to repair the defect or leak;
- H. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;
- I. The expected date of successful repair of the defect or leak;
- J. The date of successful repair of the defect or leak;
- K. The position and duration of opening bypass line valves and the condition of any valve seals; and
- L. The duration of the use of the bypass valves on computer controlled valves.
- 37. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.454(d), the owner or operator shall record the CMS parameters specified in §63.453 and meet the requirements specified in paragraph (a) of this section for any new affected process equipment or pulping process condensate stream that becomes subject to the standards in this subpart due to a process change or modification.

#### Test Methods and Procedures

- Pursuant to §19.304 and §19.702 of Regulation 19 and 40 CFR §63.457(a), an initial performance test is required for all emission sources subject to the limitations in §§63.443, 63.444, 63.445, 63.446, and 63.447, except those controlled by a combustion device that is designed and operated as specified in §63.443(d)(3) or (d)(4).
- 39. Pursuant to §19.503(B)(1) of Regulation 19, for incinerators and fuel burning equipment, exclusively, emissions shall not exceed 20% opacity except that emissions greater than 20% opacity but not exceeding 60% opacity will be allowed for not more than six (6) minutes in the aggregate in any consecutive 60-minute period, provided that such emissions will not be permitted more than three (3) times during any 24-hour period.

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#### Permit Shield

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

A. The following have been specifically identified as applicable requirements based upon information submitted by the permittee in an application dated October 29, 1999.

Source No.	Regulation	Description	
Facility	19	SIP	
Facility	26	Title V regs.	
Facility	40 CFR Part 63, Subpart S	National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry	
01	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
01	40 CFR §52.21	Prevention of Significant Deterioration	
02	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	
02	40 CFR §52.21	Prevention of Significant Deterioration	
05	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	
05	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced after August 17, 1971	
06	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	
06	40 CFR §52.21	Prevention of Significant Deterioration	
08	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	
08	40 CFR §52.21	Prevention of Significant Deterioration	
09	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	
12	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
14	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	
14	40 CFR §52.21	Prevention of Significant Deterioration	

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Source No.	Regulation	Description
15	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
15	40 CFR §52.21	Prevention of Significant Deterioration

B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in an application dated October 29, 1999.

Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
SN-01	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam generating unit.
	40 CFR §60.46b(h)(2)	Standards of Performance for Industrial- Commercial Steam Generating Units	This boiler does not have a federally enforceable provision that limits it to an annual capacity factor of 10% or less.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Heat input exceeds 100 MMBTU/hr.
03	40 CFR Part 60, Subpart D	Standards of Performance for Fossil- Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler was constructed before effective date.
	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam generating unit and was constructed prior to the effective date.
	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial- Commercial Steam Generating Units	Boiler was constructed prior to the effective date.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and was constructed prior to the effective date.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
05	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam generating unit and was constructed prior to the effective date.
	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial- Commercial Steam Generating Units	Boiler was constructed prior to the effective date.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and was constructed prior to the effective date.
06	40 CFR Part 60, Subpart D	Standards of Performance for Fossil- Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	This boiler is not fired with fossil fuel.
	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	This boiler is not an electric utility steam generating unit.
	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial- Commercial Steam Generating Units	Boiler was constructed prior to the effective date.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and was constructed prior to the effective date.
11	40 CFR Part 60, Subpart D	Standards of Performance for Fossil- Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler's heat input capacity is less than 250 MMBTU/hr.
	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	Boiler is not an electric utility steam generating unit.
	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial- Commercial Steam Generating Units	Boiler was constructed before the effective date.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr and was constructed before the effective date.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
12	40 CFR Part 60, Subpart D	Standards of Performance for Fossil- Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler's heat input capacity is less than 250 MMBTU/hr.
	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	Boiler is not an electric utility steam generating unit.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr.
14	40 CFR Part 60, Subpart D	Standards of Performance for Fossil- Fuel-Fired Steam Generators for Which Construction Commenced after August 17, 1971	Boiler is not fired with fossil fuel.
	40 CFR Part 60, Subpart Da	Standards of Performance for Electric Utility Steam Generators for Which Construction Commenced after September 18, 1978	Boiler is not an electric utility steam generating unit.
	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial- Commercial Steam Generating Units	Boiler does not burn fossil fuels and is not in SIC 28.
	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler's heat input capacity exceeds 100 MMBTU/hr.
16	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Bleachplants are not included in the affected facilities for this subpart.
17	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Bleachplants are not included in the affected facilities for this subpart.
18	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Bleachplants are not included in the affected facilities for this subpart.
19	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Chlorine dioxide generators are not included in the affected facilities for this subpart.
20	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Chlorine dioxide generators are not included in the affected facilities for this subpart.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
21	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Wastewater treatment systems are not included in the affected facilities for this subpart.
22(1A)	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Constructed prior to the effective date of this subpart.
23	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Methanol is not a petroleum liquid and source was constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Methanol is not a petroleum liquid and source was constructed after 1984.
	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Methanol tanks are not included in the affected facilities for this subpart.
28	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Formic acid is not a petroleum liquid and source was constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Formic Acid is not a petroleum liquid and source was constructed after 1984.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Tank's volume is less than 40 m <sup>3</sup> and the liquid vapor pressure is less than 3.5 KPa.
29	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Recausticizer vents are not included in the affected sources of this subpart.
30	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.

Domtar Industries, Inc. - Ashdown Mill CSN: 41-0002

Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
31	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.
32	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.
33	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Carbonators are not included in the affected sources of this subpart.
PCC Plant	40 CFR Part 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants	The PCC plant does not crush or grind nonmetallic minerals.
Turpentine Storage Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Turpentine is not a petroleum liquid and source was constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Turpentine is not a petroleum liquid and the tank's capacity is less than 40,000 gallons.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
Turpentine Decanter	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Turpentine is not a petroleum liquid and source was constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Turpentine is not a petroleum liquid and the tank's capacity is less than 40,000 gallons.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
#6 Fuel Oil Day Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Source was constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tank was constructed after 1984.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
#6 Fuel Oil Storage Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	These tanks were constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	These tanks were constructed after 1984.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
Pulpmill Pitch Dispersant Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Source was constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Source was constructed after 1984.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
Pulpmill Defoamer Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tanks were constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks were constructed after 1984.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or a non-attainment area.
44	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Papermachines are not included in the subpart's affected sources.
62 Papermachine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks were constructed after 1984 and have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
61 Papermachine Calendar Stack Reservoirs	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tanks were constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks were constructed after 1984.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
62 Papermachine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tanks have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks were constructed before 1978 and have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sources were constructed prior to effective date.
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
63 Papermachine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tanks were constructed after 1978 and have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks have capacities less than 40,000 gallons.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sources constructed prior to effective date.
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
64 Papermachine Lubricating and Hydraulic Oil Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tanks were constructed after 1978 and have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks were constructed after 1984 and have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Papermachine Retention Aid Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Retention aid is not a petroleum liquid and tanks were constructed after 1978.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Retention Aid is not a petroleum liquid.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Zinc Chloride Storage Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Zinc Chloride is not a petroleum liquid or a volatile organic compound.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Zinc Chloride is not a petroleum liquid or a volatile organic compound.
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Zinc Chloride is not a petroleum liquid or a volatile organic compound.
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.
Pulpdryer Lubricating and Hydraulic Units	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tanks were constructed after 1978 and have capacities less than 40,000 gallons.
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Tanks capacities are less than 40,000 gallons.

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Tanks were constructed prior to the effective date of the subpart.	
Woodyard Diesel Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Source was constructed after 1978 and capacity is less than 40,000 gallons.	
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984  Source was constructed after and capacity is less than 40,00 gallons.		
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .	
	§19.10 Regulations for the Control of Volatile Organic Compounds in Pulaski County		This facility is not located in Pulaski County or in a non-attainment area.	
Gasoline Room Storage Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Source was constructed after 1978.	
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Constructed after 1984 and capacity is less than 40,000 gallons.	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity of tank is less than 40 m <sup>3</sup> .	

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination	
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.	
Wastewater Nutrient Storage Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978  Nutrient is not a petroleum lic a volatile organic compound.		
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Nutrient is not a petroleum liquid or a volatile organic compound.	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984		
		This facility is not located in Pulaski County or in a non-attainment area.		
Sodium Hypochlorite Tanks  40 CFR Part 60, Subpart K  Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978		§19.10		
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Sodium hypochlorite is not a petroleum liquid or a volatile organic compound.	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.	Sodium hypochlorite is not a petroleum liquid or a volatile organic compound.	
Sodium Hydrosulfide Storage Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978  Sodium hydrosulfide is not a petroleum liquid or a volatile organic compound.		

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination	
	40 CFR Part 60, Subpart Ka Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984		Sodium hydrosulfide is not a petroleum liquid or a volatile organic compound.	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984		
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.	
Powerhouse Defoamer Storage Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Tank capacity is less than 40,000 gallons.	
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Source was constructed prior to 1978.	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984		
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.	
62 Fluorescent Dye Storage Tank	Dye Storage 60, Subpart K Vessels for Petroleum Liquids for Which		Source was constructed after 1978.	
	40 CFR Part 60, Subpart Ka  Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984		Tank capacity is less than 40,000 gallons.	

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Source was constructed prior to effective date.	
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.	
63 Fluorescent Dye Storage Tank	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Source was constructed after 1978.	
40 CFR Part 60, Subpart Ka  Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984		Tank capacity is less than 40,000 gallons.		
	40 CFR Part 60, Subpart Kb  Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984		Source was constructed prior to effective date.	
	§19.10	Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.	
Storage Tanks 60, Subpart K Vessels f Construc Modifica		Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Dye tanks do not contain petroleum liquids or volatile organic compounds.	
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Dye tanks do not contain petroleum liquids or volatile organic compounds.	

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Dye tanks do not contain petroleum liquids or volatile organic compounds.	
Alum Storage Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Alum is not a petroleum liquid or a volatile organic compound.	
	40 CFR Part 60, Subpart Ka	Alum is not a petroleum liquid or a volatile organic compound.		
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Alum is not a petroleum liquid or a volatile organic compound.	
Sodium Hydroxide Storage Tanks	40 CFR Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978	Sodium hydroxide is not a volatile organic compound.	
	40 CFR Part 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984	Sodium hydroxide is not a volatile organic compound.	
	40 CFR Part 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Sodium hydroxide is not a volatile organic compound.	
		Regulations for the Control of Volatile Organic Compounds in Pulaski County	This facility is not located in Pulaski County or in a non-attainment area.	

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Affected Source	Regulatory Citation	Description of Regulation	Basis for Determination	
Cooling Towers	40 CFR Part 63, Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	No chromium-based water treatment chemicals are used in cooling water treatment.	
No. 1A Brownstock Decker	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Source was constructed prior to the effective date.	
No. 2 Brownstock Decker	40 CFR §60.284	Standards of Performance for Kraft Pulp Mills	Monitoring not feasible for deckers and concentration of TRS below 5 ppm.	
No. 2 Brownstock Decker	40 CFR §60.285	Standards of Performance for Kraft Pulp Mills	Particulate and TRS standards do not apply to deckers.	
37	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Pulpdryers are not included in this subpart's affected sources.	
Finishing Room	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Finishing rooms are not included in the subpart's affected sources.	
Shipping Operations	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft Pulp Mills	Shipping operations are not included in the subpart's affected sources.	
38	40 CFR Part 60, Subpart BB			

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C. Nothing shall alter or affect the following:

Provisions of Section 303 of the Clean Air Act;

The liability of an owner or operator 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 Section 408(a) of the Clean Air Act; or

The ability of the EPA to obtain information under Section 114 of the Clean Air Act.

#### Title VI Provisions

- 41. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - A. All containers containing a class I or class II substance is 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 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.
- 42. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - A. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - B. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - C. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.

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- 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.
- 43. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 44. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
  - The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or systems used on passenger busses using HCFC-22 refrigerant.
- 45. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.

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### SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.3(d) of Regulation 26, the following sources are insignificant activities. Insignificant and trivial activities will be allowable after approval and federal register notice publication of a final list as part of the operating air permit program. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §3(d) of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated September 13, 1996.

De Minimis Emission Source	Exemption
Woodyard Hydraulic Oil Storage Tank	Group A, #3
Betz Defoamer Storage Tanks	Group A, #3
Betz Rx52A Storage Tanks	Group A, #3
Betz Rx68 Storage Tanks	Group A, #3
Betz Rx96w Storage Tanks	Group A, #3
Betz Custom Clean B Storage Tanks	Group A, #3
Betz Custom Clean N Storage Tanks	Group A, #3
Nalco 7577 Totebins	Group A, #3
Nalco 7634 Totebins	Group A, #3
Nalco 7648 Totebins	Group A, #3
Nalco 7562 Totebins	Group A, #3
Nalco 7570 Totebins	Group A, #3
Nalco 7678 Totebins	Group A, #3
Pulpmill Defoamer Storage Tanks	Group A, #3
Pulpmill Dispersant Storage Tanks	Group A, #3
Powerhouse Defoamer Storage Tank	Group A, #3
Powerhouse Polymer System	Group A, #3
SMA Systems	Group A, #3

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De Minimis Emission Source	Exemption
Totebins or other small containers used for temporary trial purposes containing chemicals with vapor pressure less than or equal to 0.5 psia	Group A, #3
Pulpmill Caustic Storage Tanks	Group A, #4
Powerhouse Caustic Storage Tanks	Group A, #4
Water Treatment Caustic Storage Tanks	Group A, #4
Papermachine Caustic Storage Tanks	Group A, #4
Miscellaneous and/or temporary caustic storage tanks used throughout the facility for cleaning purposes	Group A, #4
Main Laboratory	Group A, #5
Pulp Dryer Laboratory	Group A, #5
Bleachplant Laboratory	Group A, #5
Papermachine Laboratory	Group A, #5
Quality Assurance Laboratories found in papermachine and finishing areas	Group A, #5
ICP Vent in Main Laboratory	Group A, #5
Waterwashing of chemical drums less than or equal to 55 gallons with less than 3% by weight of the maximum container volume remaining	Group A, #6
#3 Lime Kiln Backup Drive Motor	Group A, #12
#2 Lime Kiln Backup Drive Motor	Group A, #12
Cyclone & Air Separator Chamber - Converting Area	Group A, #13
Emergency diesel-powered lift pump for mill effluent	Group A, #1

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

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### SECTION VIII: GENERAL PROVISIONS

- 1. Pursuant to 40 CFR 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
- 2. Pursuant to 40 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, this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
- 3. Pursuant to §26.406 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
- 4. Pursuant to 40 CFR 70.6(a)(1)(ii) and §26.701(A)(2) of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
- 5. Pursuant to 40 CFR 70.6(a)(3)(ii)(A) and §26.701(C)(2) of Regulation #26, records of monitoring information required by this permit shall include the following:
  - A. The date, place as defined in this permit, and time of sampling or measurements;
  - B. The date(s) analyses were performed;
  - C. The company or entity that performed the analyses:
  - D. The analytical techniques or methods used;
  - E. The results of such analyses; and
  - F. The operating conditions existing at the time of sampling or measurement.

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6. Pursuant to 40 CFR 70.6(a)(3)(ii)(B) and §26.701(C)(2)(b) of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

7. Pursuant to 40 CFR 70.6(a)(3)(iii)(A) and §26.701(C)(3)(a) of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

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

- 8. Pursuant to 40 CFR 70.6(a)(3)(iii)(B), §26.701(C)(3)(b) of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the 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 which is deviating from the permit limit,
  - C. The permit limit, including the identification of pollutants, from which deviation occurs.
  - D. The date and time the deviation started,
  - E. The duration of the deviation,
  - F. The average emissions during the deviation,
  - G. The probable cause of such deviations,
  - H. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
  - I. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of

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time for which said limits are exceeded. If the permittee wishes, they may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence and such report will serve as both the initial report and full report.

- 9. Pursuant to 40 CFR 70.6(a)(5) and §26.701(E) of Regulation #26, and A.C.A.§8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
- 10. Pursuant to 40 CFR 70.6(a)(6)(i) and §26.701(F)(1) of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- 11. Pursuant to 40 CFR 70.6(a)(6)(ii) and §26.701(F)(2) of Regulation #26, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 12. Pursuant to 40 CFR 70.6(a)(6)(iii) and §26.701(F)(3) of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 13. Pursuant to 40 CFR 70.6(a)(6)(iv) and §26.701(F)(4) of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
- 14. Pursuant to 40 CFR 70.6(a)(6)(v) and §26.701(F)(5) of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.

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15. Pursuant to 40 CFR 70.6(a)(7) and §26.701(G) of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.

- 16. Pursuant to 40 CFR 70.6(a)(8) and §26.701(H) of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.
- 17. Pursuant to 40 CFR 70.6(a)(9)(i) and §26.701(I)(1) of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
- 18. Pursuant to 40 CFR 70.6(b) and §26.702(A) and (B) of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.
- 19. Pursuant to 40 CFR 70.6(c)(1) and §26.703(A) of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
- 20. Pursuant to 40 CFR 70.6(c)(2) and §26.703(B) of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
  - A. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - C. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - D. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.
- 21. Pursuant to 40 CFR 70.6(c)(5) and §26.703(E)(3) of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification

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shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:

- A. The identification of each term or condition of the permit that is the basis of the certification;
- B. The compliance status;
- C. Whether compliance was continuous or intermittent;
- D. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
- E. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.
- 22. Pursuant to §26.704(C) of Regulation #26, nothing in this permit shall alter or affect the following:
  - A. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - B. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - C. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
  - D. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
- 23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.



January 3, 2002

Mr. Eric Reynolds Environmental Engineer Domtar Industries, Inc. - Ashdown Mill 285 Highway 71 South Ashdown, AR 71822

RE: Permit #: 287-AOP-R3 (CSN: 41-0002)

Dear Mr. Reynolds:

To answer your questions in the order of your E-mail inquiry of this date:

- 1. VOC emissions under EMISSION SUMMARY have decreased from 2829.2 tpy to 2718.2 tpy, a reduction of 111.0 tpy. The Introduction first paragraph will be changed from 11.0 tpy to 111.0 tpy. Thank you for catching the mistake.
- 2. In the following paragraph, lignification has been changed to delignification.
- 3. Specific Condition #49 has already been changed so that demonstrated is replaced by demonstrate.
- 4. Specific Condition #170 has already been revised as follows: "the permittee shall maintain a minimum of 65% solids on a 30-day rolling average in the lime mud fed to source SN-09 in order to demonstrate compliance with the VOC emission rates." I did not feel that this change was worth calling to anyone's attention.
- 5. We are aware of the two SC #41 conditions in the earlier permit. Changing the second of these would make it difficult to compare specific condition in the new and the old permits. How do you feel about changing these to 41a) and 41b)?
- 6. Specific Condition #364 has already been changed as requested. I just neglected to redline it, and will include it in the revisions going to EPA Region 6. It now reads as follows:

Domtar, Inc. Page 2

364. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall semiannually use third party testing firms to test the carbon monoxide and portable analyzers to test the VOC emissions from source SN-45. One of these tests shall be conducted at the same time as the tests required by Specific Conditions 359 and 359. The permittee shall notify the Department at least fifteen days prior to these tests taking place.

The PSD review was included to give you some idea of the steps involved when the emissions increase exceeds the PSD significance level. In this particular case, it was really a waste of time to go through the evaluation procedure, since there is no alternative process or equipment that is commercially feasible, and the CO increase in concentration at the maximum is well below the significant impact level.

Sincerely,

M. Lloyd Davis, Engineer, P. E., Air Division

## RESPONSE TO COMMENTS

Domtar Industries, Inc. - Ashdown Mill CSN: 41-0002 Permit: #287-AOP-R3

On February 21, 2002, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, Domtar requested that the emission rates for VOCs from the Oxygen Delignification System be increased to conform to a consent administrative order (CAO) issued by the Enforcement Branch as a result of recent testing that showed that emissions were greater than the limits set for sources based on estimates used for the existing permit. A response to these issues follows:

### **Issue #1:**

Domtar requests that the permit limits from the Oxygen Delignification System (SN-45) be set at 9.11 lb/hr and 39.9 tpy for VOCs, assuming 100% uptime from this source. This is actually on the low end of estimates from similar sources provided by NCASI, but there is insufficient test data to request higher limits at this time. Although the tested emission rate for this source borders on the PSD Significant Emission Increase, Permit #287-AOP-R2 allowed 6.1 tpy of VOCs for SN-45, so that the requested increase is actually 33.8 tpy. In addition, permit limits for the chlorine dioxide bleaching process were based on process estimates and not on test data, so that the actual increase in VOC emissions is not known.

# **Response #1:**

**Accepted.** The VOC limits for SN-45 have been changed accordingly on page 16 and page 132 of the new permit, and Total Allowable VOC Emissions on page 7 have been increased as follows:

EMISSION SUMMARY					
Source	Description	Pollutant	<b>Emission Rates</b>		Cross
No.			lb/hr	tpy	Reference Page
Total Allowable Emissions		$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ Pb^1 \\ TRS^1 \end{array}$	725.8 725.8 3090.5 754.4 3003.8 1893.6 0.03 25.40	3158.5 3158.5 8111.6 2863.0 12473.3 7995.6 0.10 118.5	N/A
HAPs*		Acetaldehyde* Benzene* Chloroform* Formaldehyde* Hydrogen Chloride¹ Methanol* Napthalene* Styrene*	2.47 1.38 23.30 3.19 111.45 116.46 1.00 0.27	451.24 6.06 101.89 13.99 488.20 536.82 4.38 1.20	
Air Contaminants **		Acetone <sup>1</sup> Ammonia <sup>1</sup> Barium Chlorine <sup>1</sup> Chlorine Dioxide <sup>1</sup> Phosphoric Acid Sulfuric Acid <sup>1</sup>	16.3 103.1 1.12 6.30 8.00 0.01 7.52	10.86 71.5 4.92 27.66 30.68 0.10 32.94	