ADEQ
RENEWAL OPERATING AIR PERMIT

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

Permit #: 597-AOP-R4
Renewal #1
IS ISSUED TO:

Georgia-Pacific Corporation - Crossett Paper Operations
100 Paper Mill Road
Crossett, AR 71635
Ashley County
AFIN: 02-0013

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

and

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

_____

Keith A. Michaels Date

SECTION I: FACILITY INFORMATION

PERMITTEE:	Georgia-Pacific Corporation - Crossett Paper Operations
AFIN:	02-00013
PERMIT NUMBER:	597-AOP-R4
FACILITY ADDRESS:	100 Paper Mill Road Crossett, AR 71635
COUNTY:	Ashley
CONTACT POSITION:	Ms. Helene Weber
TELEPHONE NUMBER:	870-567-8483
REVIEWING ENGINEER:	Paula Parker
UTM North-South (X):	3667.483
UTM East-West (Y):	595.752 Zone 15

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

SECTION II: INTRODUCTION

Georgia-Pacific Corporation owns and operates a bleached Kraft pulp and paper mill in Crossett, Arkansas. This facility produces a variety of paper products on eight paper machines and two paper extruding machines. The paper machines include two fine paper machines, one board paper machine and five tissue machines.

Summary of Permit Activity

The Georgia-Pacific Crossett - Paper Operations facility is renewing their Title V permit and include CAM requirements for SN-03, SN-22, SN-50, SN-81, and SN-83. The facility has also been issued a CAO for the Incinerator, SN-83, and Bleach Plant, SN-30, in order to correct emission estimates. Also included with the renewal permit are two minor modifications. The first modification is to rebuild a Repulper (SN-93) damaged by a recent fire. The second minor modification involves the installation of an additional electrostatic treater and associated burner to the No. 8 Extruder, SN-71. Total emission increases for all modifications are 6.6 tons/yr particulate, 242.6 ton/yr CO, 0.6 ton/yr VOC, 0.7 ton/yr ozone, and 0.6 ton/yr chloroform.

Particulate emissions for the incinerator were underestimated by 6.6 tons per year. The assumed stack gas temperature and moisture content were assumed incorrectly. In addition, the scrubber removal efficiency for particulate was actually 93% instead of 95% as stated in the application.

Carbon monoxide emissions from the bleach plant, resulting from **the converting of bleaching operations to elemental chlorine free (ECF) bleaching**, were also underestimated. The source requires a permitted increase of 242.6 tons of CO per year. Limited data was available at the time of the modification to illustrate any potential increase in CO emissions and none was assumed. The bleach plant modification was part of a PCP (Pollution Control Project) so that the facility may comply with Cluster Rule requirements.

Changes to the bleach plant included a fourth stage of bleaching addition to hardwood lines, the phasing out of chlorine and hypochlorite as bleaching agents, the reduction of applied chlorinated compound usage, and the achievement of a closed-vent system. The only source of emission increases was thought to be the Incinerator (SN-83) as **the primary combustion source of LVHC, HVLC, and stripped overhead gas (SOG) streams for the Mill**. Due to a lack of industry or regulatory information, carbon monoxide emissions from the bleach plant were assumed to be independent of chlorine substitution by NCASI. The project was determined to be 'environmentally beneficial' **and thus exempt from PSD review**.
Annual testing for CO had been required since the initial permit, but no indication of potential emission exceedences were encountered until after total conversion was achieved in March 2001. Stack test results conducted in November and December of 2001 indicated that the CO

emissions from the bleaching process were significantly higher than the permitted limits. Based upon these stack results, a CAO was issued to the facility which established an interim CO emission limit and required the installation and operation of a continuous emissions monitor (CEM) for a period of sixty days.

The proposed emission rate is based upon the stack testing conducted, scaled to maximum pulp production capacity, and including a 20% safety factor. The increases for CO for the Bleach Plant are above the PSD significance 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.

Plantwide Permitted Emissions (ton/yr)				
Pollutant	**SN-30 from Permit 597-AOP-R3**	**SN-30 from Permit 597-AOP-R4**	**Change**	**PSD Significance Level**
CO	353.5	596.1	242.6	100

PREVENTION OF SIGNIFICANT DETERIORATION

For this modification there was no netting procedure to offset the increases in CO emissions from SN-30. Chlorine dioxide bleaching is now the standard industry procedure for bleaching brownstock, and there is no commercial alternative. 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 lb/ton of pulp for its bleach plant, with BACT determined to be "efficient operation." A Weyerhauser facility in Plymouth, NC had a limit of 2.2 lb CO/ton of pulp. BACT was determined to be "no controls".

Total CO emissions from the Bleach Plant are 596.1 tpy, or 1.56 lb CO per ton of air dried bleached pulp (ADBP). BACT is no controls for this project.

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 I Area. The Crossett mill is located 293 kilometers of the Caney Creek Wilderness Area located in the Ouachita National Forest. Therefore, notification to the Federal Land Manger and a Class I Area Impact Analysis is not required.

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

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 mill's 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

Modeling was performed for all contributing CO emission points. The highest concentration with the 1-hour standard was 7,542.6 $\mu g/m^3$, and for the 8-hour standard, 1,544.8 $\mu g/m^3$. Monitored concentrations for CO are not available for the impacted area. The figures for Little Rock are used here for the background concentration.

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

NAAQS Analysis Results for CO

Averaging Period	Concentration ($\mu g/m^{3)}$	Background ($\mu g/m^3$)	Total ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)
1- hour	7,542.6	4,353.3	11,895.9	40,000
8- hour	1,544.8	2,291.2	3,835.0	10,000

*Listed values are primary, as there are no secondary values for CO.

PSD Increment Analysis

The 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 Ashley county. Also, PSD Increments for CO in Class I and Class II areas have not been established.

Process Description

Chips are received at the Mill by truck and rail. Upon unloading, the chips are pneumatically blown to the distribution tower and are then dropped onto the chip piles. Round logs are also received at the facility. After storage, the logs are transported to the debarking drums for bark

removal. The debarked logs are fed to the chipper and the produced chips are then conveyed to the chip piles. The chips from the chip piles are screened prior to entering the chip silos. Rejected chips from the screening are burned in the Mill's combination boiler. The removed bark is pneumatically sent to bark piles for storage and eventual use in the Mill's boilers.

The chips from the silos are conveyed to the Mill's thirteen batch digesters. The function of the digesters is to cook the chips using white liquor, black liquor, and the steam from the boilers. In the digestion process, these products are combined and cooked at a set pressure and temperature until the quality pulp is obtained. At the end of each "cook", the blow valves at the bottom of the digesters are opened, with the resulting pressure forcing the pulp mass through a blow line into one of the two blow tanks.

The blow tanks are at atmospheric pressure and the contents of the digesters enter the blow tanks tangentially at the top. When the chips hit the lower pressure in the tank, the liquor and water flash, blowing the chips apart to produce the pulp fibers. The vapors from the blow tanks are sent to the blow heat condensing system, where non-condensable gases (NCGs) are removed. The steam vapors are condensed in the accumulator. The accumulator water is sent to the stripper and returned to the washers as cleaned condensate. Knots (e.g. undercooked wood chips, irregularly shaped or overly thick pieces of wood, etc.) are removed with the use of vibrating knotters/screens.

The pulp is washed to remove spent cooking chemicals. The Mill has two horizontal washers. In the washers, the wash water and pulp move in counter current directions. The washed pulp is passed through screening and cleaning stages which remove debris from the stock. After screening, the pulp passes through the decker system, which thickens the pulp for storage in high density storage chests.

The unbleached Kraft pulp is taken from the high density storage chests for further processing in the bleach plant. The bleaching process removes the remaining lignin and Kraft color from the unbleached pulp. Bleaching is performed in several stages using chlorine dioxide, caustic soda, oxygen, and hydrogen peroxide.

Recovery describes the set of operations that recovers the spent cooking chemicals for reuse in the digesters. The recovery process utilizes a multi-effect evaporator to concentrate weak black liquor. The concentrated black liquor is burned in the Mill's recovery furnace. The spent chemicals leave the recovery furnace from the bottom in a molten form and enter the smelt dissolving tanks. The causticizing operation reacts molten inorganic salts from the smelt dissolving tanks with weak wash water to form green liquor. This green liquor is then treated with slaked lime to form white liquor. The white liquor is then ready for use as the main cooking liquor in the digesters.

The facility, in order to accommodate production levels, may export black liquor to another mill with excess recovery capacity in exchange for white or green liquor. The 'liquor-swapping' is considered routine and normal for the industry, and equipment needed for the exchange has been present since the facility has been built.

Paper products are currently manufactured on eight paper machines and two paper extruding machines. The paper machines include two fine paper machines, one board paper machine, and five tissue machines. Each machine has its own stock preparation, head box, wire section, press section, dryer sections, coater section, calendar stacks, reel, and drum winder. The two fine paper machines produce a variety of products including but not limited to bond, envelope, tablet, and copier paper.

Tissue and towel converting includes the operations involved with converting large parent rolls of tissue/towel from the machines into finished product. This includes rewinding onto smaller sized rolls, folding, printing, cutting, packaging, and shipping.

The two extruding machines receive board from the board paper machine and from outside board customers and apply a polymer coating. Rolls of board are loaded onto an unwind stand before passing through a calendar stack, where they are subjected to burners which flame seal the board. An extruded poly sheet is then pressed together with the board.

The Mill boilers generate steam and provide electrical power. The boilers include two, multi-fuel combination boilers and two, natural gas/oil-fired boilers.

Regulations

Georgia-Pacific Corporation-Crossett Paper Operations is subject to regulation under *Arkansas Air Pollution Control Code* (Regulation 18), the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19), the *Regulations of the Arkansas Air Permit Operating Program* (Regulation 26). Georgia-Pacific is also subject to 40 CFR Part 60, *New Source Performance Standards (NSPS) Subpart A--General Provisions*, *Subpart D--Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971*, *Subpart Kb--Standards of Performance for Volatile Organic Liquid Storage Vessels*, and *Subpart BB--Standards of Performance for Kraft Pulp Mills*. Georgia-Pacific is subject to 40 CFR Part 63 *NESHAP Subpart S--National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry*. Georgia-Pacific is also subject to applicable provisions of the air standards to control emissions of toxic air pollutants from the chemical recovery area at pulp and paper mills. Georgia-Pacific is potentially subject to 40 CFR Part 61 *National Emissions Standards for Hazardous Air Pollutants (NESHAP) Subpart M--*

National Emission Standard for Asbestos, depending on future asbestos removal and demolition activities, and specific sections of 40 CFR Part 82 *Protection of Stratospheric Ozone*.

Georgia-Pacific Corporation-Crossett Paper Operations is classified as a major stationary source under the regulations of 40 CFR Part 52.21, *Prevention of Significant Deterioration of Air Quality* (PSD).

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.

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
	Total Allowance Emissions	PM	452.7	1,966.9	N/A
		PM_{10}	451.6	1,965.9	
		SO_2	1,940.0	8,495.2	
		VOC	1061.2	**4345.7**	
		CO	5,770.7	25,266.3	
		NO_x	1,419.5	6,094.9	
		TRS	33.7	145.8	
		Pb	0.7	1.4	
	HAPs*	Acetaldehyde	22.59	98.02	N/A
		Acetophenone	0.12	0.49	
		Acrolein	6.37	27.94	
		Antimony	0.10	0.42	
		Arsenic	1.26	5.39	
		Benzene	8.12	35.50	
		Beryllium	0.04	0.05	
		Biphenyl	1.56	0.06	
		CadmiumCarbon	1.820.07	7.930.26	
		Tetrachloride	9.24	40.43	

		Chlorine	4.68	20.50	
		Chlorine Dioxide	14.09	61.00	
		Chloroform	1.96	8.48	
		Chromium	2.89	12.67	
		Chromium, total	0.12	0.49	
		Cobalt	0.45	1.94	
		O-Cresol	0.18	0.72	
		1,2-Dichlorobenzene	0.28	1.19	
		1,2-Dichloroethane	0.02	0.03	
		Dinitro-o-cresol	0.02	0.02	
		2,4-Dinitrotoluene	0.08	0.33	
		Epichlorohydin	21.22	92.60	
		Formaldehyde	4.84	20.91	
		n-Hexane	0.02	0.02	
		Hexachlorobenzene	83.00	495.00	
		Hydrogen Chloride	2.89	12.67	
		Manganese	0.07	0.30	
		Methyl Chloroform	0.63	2.72	
		Methylene Chloride	4.48	19.44	
		Methyl Ethyl Ketone	1.18	5.00	
		Mercury	77.23	174.15	
		Methanol	0.84	3.03	
		Napthalene	1.52	6.56	
		Nickel	1.01	5.44	
		Phenol	0.43	1.50	
		Phosphorus	0.38	1.60	
		Polycyclic Organic	0.15	0.59	
		Matter	0.04	0.14	
		Propionaldehyde	2.01	8.69	
		Selenium	0.49	1.97	
		Styrene	1.21	5.18	
		Tetrachloroethylene	0.07	0.27	
		1,2,4-	0.37	1.41	
		Trichlorobenzene	1.56	6.80	
		Vinyl Chloride			
		Xylene			
		Zinc			

	Air Contaminants*	Acetone Sulfuric Acid	6.4 6.01	26.3 26.30	N/A
03	10A Boiler	PM PM_{10} SO_2 VOC CO NO_X Pb Acetaldehyde Acrolein Antimony Arsenic Benzene Beryllium Cadmium Carbon Tetrachloride Chlorine Chloroform Chromium +6 Chromium, total Cobalt 1,2-Dichloroethane Dinitro-o-cresol 2,4-Dinitrotoluene Formaldehyde n-Hexane Hexachlorobenzene Hydrogen Chloride Manganese Methyl Ethyl Ketone Mercury	100.1 100.1 21.0 151.0 600.0 500.5 0.2 10.20 3.60 0.05 0.72 4.68 0.01 1.05 0.04 0.73 0.04 1.12 1.68 0.05 0.16 0.01 0.01 11.50 1.42 0.01 90.4 1.68 0.02 0.67	438.4 438.4 92.0 661.4 2,628.0 2,192.2 0.6 44.80 15.80 0.18 3.12 20.50 0.02 4.61 0.15 3.16 0.15 4.90 7.37 0.21 0.69 0.02 0.01 50.50 6.19 0.01 396.0 7.37 0.07 2.89	30
03	10A Boiler (Continued)	Methyl Chlorform Methylene Chloride Napthalene Nickel Phenol	0.04 0.35 0.16 0.66 0.34	0.17 1.52 0.69 2.86 1.48	30

		Phosphorus	0.08	0.32	
		Polycyclic Organic	0.21	0.89	
		Matter	0.08	0.32	
		Propionaldehyde	0.02	0.08	
		Selenium	2.28	10.00	
		Styrene	0.05	0.21	
		Tetrachloroethylene	0.02	0.07	
		Vinyl Chloride	0.06	0.22	
		Xylene	0.78	3.40	
		Zinc			
18	5A Boiler	PM	28.7	125.6	41
		PM_{10}	28.7	125.6	
		SO_2	265.7	1,163.8	
		VOC	3.3	14.2	
		CO	14.8	64.5	
		NO_X	92.0	403.0	
		Pb	0.1	0.2	
		Antimony	0.01	0.04	
		Arsenic	0.01	0.01	
		Beryllium	0.01	0.01	
		Chromium, +6	0.01	0.01	
		Cobalt	0.02	0.05	
		Formaldehyde	0.09	0.36	
		Hexane	0.47	2.04	
		Mercury	0.01	0.01	
		Nickel	0.15	0.63	
		Phosphorus	0.02	0.08	
		Polycyclic Organic	0.01	0.03	
		Matter			
19	6A Boiler	PM	60.0	262.8	44
		PM_{10}	60.0	262.8	
		SO_2	431.1	1,888.3	
		VOC	2.4	10.1	
		CO	78.6	344.3	
		NO_X	165.0	722.7	
		Pb	0.1	0.3	
		Antimony	0.02	0.07	
		Arsenic	0.01	0.02	
		Beryllium	0.01	0.01	

		Cadmium	0.01	0.01	
		Cobalt	0.02	0.08	
		Formaldehyde	0.14	0.58	
		Hexane	0.76	3.30	
		Mercury	0.01	0.01	
		Nickel	0.24	1.02	
		Phosphorus	0.03	0.12	
		Polycyclic Organic Matter	0.01	0.04	
22	9A Boiler	PM	90.0	394.2	47
		PM_{10}	90.0	394.2	
		SO_2	869.5	3,808.5	
		VOC	49.7	217.7	
		CO	504.0	2,207.5	
		NO_X	345.0	1,511.1	
		Pb	0.1	0.1	
		Acetaldehyde	7.34	32.20	
		Acrolein	2.59	11.40	
		Antimony	0.03	0.13	
		Arsenic	0.52	2.24	
		Benzene	3.37	14.80	
		Beryllium	0.01	0.02	
		Cadmium	0.76	3.31	
		Carbon Tetrachloride	0.03	0.11	
		Chlorine	0.52	2.27	
		Chloroform	0.03	0.11	
		Chromium +6	0.81	3.52	
		Chromium, total	1.21	5.30	
		Cobalt	0.04	0.15	
		1,2-Dichloroethane	0.12	0.50	
22	9A Boiler (Continued)	Dinitro-o-cresol	0.01	0.01	47
		2,4-Dinitrotoluene	0.01	0.01	
		Formaldehyde	8.29	36.40	
		n-Hexane	1.52	6.66	
		Hexachlorobenzene	0.01	0.01	
		Hydrogen Chloride	22.6	99.0	
		Manganese	1.21	5.30	
		Mercury	0.48	2.08	
		Methyl Chloroform	0.03	0.13	

		Methylene Chloride Methyl Ethyl Ketone Nickel Napthalene Phenol Phosphorus Polycyclic Organic Matter Propionaldehyde Selenium Styrene Tetrachloroethylene Vinyl Chloride Xylene Zinc	0.26 0.02 0.47 0.12 1.27 0.06 0.15 0.06 0.02 1.64 0.04 0.02 0.04 0.78	1.10 0.05 2.05 0.50 1.06 0.23 0.64 0.23 0.06 7.19 0.15 0.05 0.16 3.40	
25	No. 4 Lime Kiln	PM PM_{10} SO_2 VOC CO NO_X Pb TRS Acetaldehyde Formaldehyde Methanol Napthalene Phenol Phosphorus Tetrachloroethylene	27.1 27.1 36.8 19.4 625.0 72.0 0.1 1.5 0.04 0.07 0.26 0.47 0.02 0.24 0.02	118.7 118.7 160.8 85.0 2,737.5 186.3 0.1 6.6 0.11 0.20 0.82 1.45 0.05 0.75 0.04	79
26	8R Recovery Furnace	PM PM_{10} SO_2 VOC CO NO_X TRS Pb Mercury	93.0 93.0 300.0 39.4 3,750.0 190.0 9.0 0.1 0.01	407.3 407.3 1,314.0 172.5 16,425.0 832.2 39.4 0.1 0.01	67

		Sulfuric Acid	6.01	26.30	
27A	Smelt Dissolving Tank (East)	PM	10.0	43.8	74
		PM_{10}	10.0	43.8	
		SO_2	3.0	13.2	
		VOC	6.3	27.2	
		NO_X	2.0	8.5	
		TRS	2.2	9.5	
		Acetaldehyde	0.05	0.19	
		Acetone	0.1	0.1	
		Formaldehyde	0.28	1.19	
		Methanol	0.78	3.39	
		Napthalene	0.04	0.17	
		Styrene	0.01	0.05	
27B	Smelt Dissolving Tank (West)	PM	10.0	43.8	74
		PM_{10}	10.0	43.8	
		SO_2	3.0	13.2	
		VOC	6.3	27.2	
		NO_X	2.0	8.5	
		TRS	2.2	9.5	
		Acetaldehyde	0.05	0.19	
		Acetone	0.1	0.1	
		Formaldehyde	0.28	1.19	
		Methanol	0.78	3.39	
		Napthalene	0.04	0.17	
		Styrene	0.01	0.05	
30	Bleach Plant	VOC	1.0	4.2	63
		CO	136.1	596.1	
		Chlorine	8.00	35.00	
		Chloroform	12.00	52.60	
		Chlorine Dioxide	4.68	20.50	
33	Line 1 Washer	VOC	10.4	45.6	60
		TRS	2.9		
		Acetophenone	0.08	12.6	
		Acrolein		0.35	
		o-Cresol	0.01	0.01	
			0.24	1.04	
		Methanol		14.20	

		Phenol	3.24 0.26	1.13	
34	Line 2 Washer	VOC TRS Acetaldehyde Acetophenone Acrolein Methanol	21.0 8.8 0.08 0.04 0.01 3.00	92.1 38.2 0.35 0.14 0.01 13.14	60
35F	Aeration Stabilization Basin	VOC Chloroform Methanol Methyl Ethyl Ketone Napthalene	16.5 1.53 0.08 0.02 0.01	70.8 6.69 0.36 0.06 0.05	123
40	Methanol Storage Tank	VOC Methanol	37.5 37.50	1.2 1.20	125
46	Tissue Machine No. 4 Burners	PM PM_{10} SO_2 VOC CO NO_x Formaldehyde Hexane	0.2 0.2 0.1 1.2 4.3 2.4 0.01 0.05	0.8 0.8 0.1 4.9 18.8 10.3 0.01 0.19	92
47	Tissue Machine No. 5 Burners	PM PM_{10} SO_2 VOC CO NO_x Formaldehyde Hexane	0.2 0.2 0.1 1.2 4.5 1.2 0.01 0.05	0.8 0.8 0.1 5.2 19.7 5.0 0.01 0.20	95
48	Tissue Machine No. 6 Burners	PM PM_{10} SO_2 VOC CO	0.6 0.6 0.1 1.2 6.7	2.3 2.3 0.2 4.9 29.1	100

		NO_x Formaldehyde Hexane	3.2 0.01 0.13	13.8 0.03 0.54	
49	Tissue Machine No. 7 Burners	PM PM_{10} SO_2 VOC CO NO_x Formaldehyde Hexane	0.4 0.4 0.1 0.8 4.7 2.3 0.01 0.09	1.6 1.6 0.1 3.4 20.4 9.7 0.02 0.38	105
50	Tissue Machine No. 7 Dust System	PM PM_{10}	0.5 0.5	2.1 2.1	105
51	Tissue Machine No. 6 Rewinder	PM PM_{10}	0.5 0.5	1.9 1.9	100
52	Tissue Machine No. 6 Dust System	PM PM_{10}	0.5 0.5	1.9 1.9	100
54	Tissue Machine No. 5 Dust System	PM PM_{10}	0.3 0.3	1.1 1.1	95
55F	Slaker Vent #1	VOC	0.5	2.1	85
56F	Slaker Vent #2	VOC	0.5	2.1	85
57F	Woodyard Debarking Drum	PM PM_{10}	0.3 0.6	1.2 2.3	54
58F	Woodyard	VOC	472.6	2,069.8	54

	Chip Storage Piles & Chippers				
59	Batch Digesters (13)	VOC TRS Acetaldehyde Methanol Methyl Ethyl Ketone Xylene	55.9 4.3 0.11 0.60 0.02 0.04	244.6 18.9 0.50 2.60 0.09 0.14	56
60	Line 1 Decker	Emissions are routed to the Incinerator (SN-83)			
61	Line 2 Decker	VOC TRS Acetaldehyde Acrolein O-Cresol Methanol Methyl Ethyl Ketone Propionaldehyde Styrene Tetrachlorothylene 1,2,4-Trichlorobenzene	3.1 1.4 0.05 0.01 0.21 2.04 0.06 0.07 0.01 0.02 0.06	13.5 6.0 0.20 0.02 0.90 8.94 0.27 0.28 0.04 0.08 0.25	60
62	Fine Paper Machine No. 1	VOC Acetone Acetaldehyde Acrolein Benzene 1,2-Dichlorobenzene Formaldehyde Methanol Methyl Ethyl Ketone 1,2,4-Trichlorobenzene Styrene Tetrachloroethylene Xylene	1.4 0.4 0.73 0.04 0.01 0.05 0.11 1.59 0.06 0.26 0.06 0.09 0.06	6.0 1.5 3.2 0.16 0.04 0.22 0.47 6.95 0.24 1.13 0.26 0.39 0.20	86

63	Fine Paper Machine No. 2	VOC Acetaldehyde Acrolein Benzene Formaldehyde Methanol Methyl Ethyl Ketone Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	1.6 0.81 0.04 0.01 0.12 1.74 0.06 0.07 0.10 0.29 0.05	6.6 3.52 0.17 0.05 0.52 7.64 0.26 0.29 0.43 1.25 0.23	86
64	Board Paper Machine No. 3	VOC Acetone Hexane	2.4 1.4 0.03	10.2 5.9 0.12	88
65	Board Paper Machine No. 3 Burners	PM PM_{10} SO_2 VOC CO NO_x	0.2 0.2 0.1 0.1 1.3 1.5	0.5 0.5 0.1 0.4 5.4 6.5	88
66	Tissue Machine No. 4	VOC TRS Acetaldehyde Acrolein Benzene 1,2-Dichlorobenzene Formaldehyde Methanol Methyl Ethyl Ketone Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	0.4 0.1 0.29 0.02 0.01 0.02 0.05 0.61 0.03 0.03 0.04 0.10 0.02	1.4 0.2 1.23 0.06 0.02 0.09 0.18 2.67 0.10 0.10 0.15 0.44 0.08	92
67	Tissue Machine No.	PM PM_{10}	0.3 0.3	1.1 1.1	92

	4 Dust System				
68	Tissue Machine No. 5	VOC TRS Acetaldehyde Acrolein Benzene 1,2-Dichlorobenzene Formaldehyde Methanol Methyl Ethyl Ketone Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	0.2 0.1 0.16 0.01 0.01 0.02 0.03 0.35 0.02 0.02 0.02 0.06 0.01	0.8 0.2 0.69 0.04 0.01 0.05 0.11 1.50 0.06 0.06 0.09 0.25 0.05	95
69	Tissue Machine No. 6	VOC TRS Acetaldehyde Acrolein Benzene 1,2-Dichlorobenzene Formaldehyde Methanol Methyl Ethyl Ketone Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	0.6 0.1 0.44 0.03 0.01 0.03 0.07 0.96 0.03 0.04 0.06 0.16 0.03	2.2 0.3 1.92 0.10 0.03 0.13 0.29 4.17 0.15 0.16 0.24 0.68 0.12	100
70	Tissue Machine No. 7	VOC TRS Acetaldehyde Acetone Acrolein Benzene 1,2-Dichlorobenzene Formaldehyde	0.5 0.1 0.41 0.4 0.02 0.01 0.03 0.06	2.1 0.3 1.78 1.7 0.09 0.03 0.12 0.26	105

		Methyl Ethyl Ketone Methanol Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	0.03 0.89 0.04 0.05 0.15 0.03	0.14 3.86 0.15 0.22 0.63 0.11	
71	No. 8 Extruder Electrostatic Treaters (A&B)	PM PM_{10} Ozone	0.4 0.4 1.8	1.4 1.4 7.9	121
72	No. 9 Extruder Electrostatic Treater	PM PM_{10} Ozone	0.6 0.6 1.5	2.5 2.5 6.3	121
75	Pulp Storage Chests	VOC Methanol	9.3 2.16	40.7 9.47	125
76F	Black Liquor Storage Basin No. 1	VOC Acetaldehyde Acetone Methanol Methyl Ethyl Ketone	28.1 1.31 2.3 16.07 4.10	122.8 5.72 9.9 70.38 17.94	125
78F	Road Emissions	PM PM_{10}	15.3 15.3	67.1 67.1	125
79	Tissue Machine No. 8 Burners	PM PM_{10} SO_2 VOC CO NO_x Formaldehyde Hexane	0.5 0.5 0.1 1.0 5.7 2.7 0.01 0.11	2.0 2.0 0.2 4.2 24.9 11.8 0.02 0.47	109
80	Tissue Machine No. 8	VOC TRS Acetaldehyde Acetone Acrolein Benzene	0.5 0.1 0.35 0.4 0.02 0.01	1.8 0.3 1.51 1.4 0.08 0.02	109

		1,2-Dichlorobenzene Formaldehyde Methanol Methyl Ethyl Ketone Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	0.03 0.06 0.75 0.03 0.03 0.05 0.13 0.03	0.11 0.23 3.27 0.12 0.13 0.19 0.55 0.10	
81	Tissue Machine No. 8 Dust System	PM PM_{10}	1.7 1.7	7.2 7.2	109
82F	Landfill Operations	PM PM_{10} VOC	2.7 1.3 4.3	0.5 0.3 18.7	125
83	Incinerator	PM PM_{10} SO_2 VOC CO NO_x TRS Methanol	2.7 2.7 9.1 0.8 6.0 23.0 0.9 0.80	11.8 11.8 39.9 3.5 26.3 100.7 3.8 3.50	133
84	Vacuum Pump Exhaust	PM PM_{10} VOC Acetaldehyde Biphenyl Chloroform Methanol	0.2 0.2 0.2 0.01 0.02 0.02 0.03	0.6 0.6 0.7 0.04 0.08 0.08 0.10	114
85A	TAD Exhaust 1	PM PM_{10} SO_2 VOC CO	0.9 0.9 0.1 3.6 14.4	3.9 3.9 0.3 15.8 63.1	114

		NO_x	7.3	32.0	
		Acetaldehyde	0.05	0.23	
		Biphenyl	0.24	1.17	
		Formaldehyde	0.01	0.03	
		Hexane	0.17	0.72	
85B	TAD Exhaust 2	PM	1.8	7.8	114
		PM_{10}	1.8	7.8	
		SO_2	0.1	0.2	
		VOC	2.7	11.8	
		CO	10.8	47.3	
		NO_x	5.5	24.0	
		Acetaldehyde	0.03	0.12	
		Biphenyl	0.16	0.63	
		Formaldehyde	0.01	0.02	
		Hexane	0.08	0.38	
86	Mist Elimination System	PM	0.2	0.7	114
		PM_{10}	0.2	0.7	
		VOC	0.6	2.6	
		Acetaldehyde	0.02	0.09	
		Biphenyl	0.17	0.74	
		Methylene Chloride	0.01	0.05	
		Phenol	0.20	0.86	
87	Dust Collector System	PM	1.1	4.7	114
		PM_{10}	1.1	4.7	
		VOC	0.1	0.2	
		Chloroform	0.10	0.20	
88	Converting Repulper “A”	PM	0.1	0.4	114
		PM_{10}	0.1	0.4	
		VOC	0.1	0.3	
		Chloroform	0.10	0.30	
89	Yankee Aircap Exhaust	PM	0.4	1.5	114
		PM_{10}	0.4	1.5	
		SO_2	0.1	0.2	
		VOC	0.4	1.8	
		CO	3.8	8.4	
		NO_x	1.9	16.6	

		Acetaldehyde Biphenyl Hexane	0.08 0.40 0.04	0.35 1.80 0.17	
90	No. 9 Paper Machine	PM PM_{10} VOC Acetaldehyde Biphenyl Methylene Chloride Phenol Epichlorohydrin	1.2 1.2 66.3 0.02 0.17 0.01 0.20 0.08	4.9 4.9 289.8 0.09 0.74 0.05 0.86 0.33	114
91	Converting Equipment				
92	Fan Pump Silo Vent	VOC	0.1	0.2	114
93	Repulper C (All VOCs are Chloroform)	VOC Chloroform	0.6 0.60	2.3 2.3	128
94	Green Liquor Clarifier	VOC	1.5	6.4	85
95	White Liquor Clarifier	VOC	1.5	6.4	85
96	Salt Cake Mix Tank	VOC	0.1	0.1	67
97	Storage Tanks	VOC Methanol	33.0 1.5	6.8 6.0	125

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

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

SECTION III: PERMIT HISTORY

The first paper machine at Georgia-Pacific Crossett Paper Operations was constructed in 1937.

On March 27, 1970, Georgia-Pacific was issued its first permit, Permit #16-A. On August 30, 1971 Georgia-Pacific was issued its second permit, Permit #68-A.

Permit #133-A, issued on December 15, 1972, allowed the installation of an extrusion and a laminating machine.

Permit #137-A was also issued on December 15, 1972. It permitted the installation of a fume scrubber on the digester feed system to control emissions from the digester and the installation of a cyclone and baghouse to control emissions from the sanding operations.

Permit #144-A, issued on March 28, 1973, allowed the installation of the 9A power boiler.

Permit #149-A was also issued on March 28, 1973. It permitted the installation of an odor control system to collect, hold and distribute gases which are normally vented from the pulp mill digesters. The gases are burned in the lime kiln.

Permit #140-A was issued on July 23, 1976. This permit dealt with equipment maintenance problems such as the repair of boilers and the replacement of control devices. This permit allowed Georgia-Pacific to operate an additional boiler to provide steam while the existing boilers are taken out of service for repairs.

Permit #411-A, issued to Georgia-Pacific on May 27, 1977, permitted the installation of a venturi scrubber for the control of lime dust emissions from the lime slaker and lime handling system at the mill.

Permit #597-A, issued to Georgia-Pacific on March 6, 1980, permitted the installation of new equipment in the pulping and power utility areas. In the pulping area the 8R Recovery Furnace, the No. 4 Lime Kiln, a set of evaporators, new digesters and new washers were installed. In the power utility area two wood fire boilers each equipped with a multiclone and a venturi scrubber were installed.

Permit #597-AR-1 was issued on July 23, 1982. It was modified by Permit #597-AR-2, issued on November 1, 1984. Permit #597-AR-2 superseded all previously issued air permits. Permit #597-AR-2 allowed Georgia-Pacific to convert a recovery furnace to a power boiler, the 10A Boiler. This was a major modification of a major stationary source and therefore was subject to PSD review. Only NO_X and CO became subject to the PSD requirements because of reductions

in all the other pollutants. Modeling predicted that the ambient air concentrations due to the increase in NO_X and CO emission would be less than the de minimis levels. Therefore, preconstruction ambient air monitoring was not required.

Permit #597-AR-3 was issued to Georgia-Pacific on August 18, 1988. Emission limits for the 10A Boiler, 8R Recovery Furnace and the No. 4 Lime Kiln were revised as the result of testing.

Permit #597-AR-4 was issued on July 11, 1989. Expansions at the bleach plant were permitted.

Permit #597-AR-5 was issued to Georgia-Pacific on March 18, 1993. This permit included sources at the mill that were not previously permitted. It allowed Georgia-Pacific to burn Tire Derived Fuel (TDF), other scrap rubber products and Refuse Derived Fuel (RDF) in the 10A and 9A Boilers. In addition, a new hardwood brownstock washer system was installed to replace the existing drum washers installed in 1968.

Georgia-Pacific was issued a Prevention of Significant Deterioration (PSD) permit, Permit #1449-A, on May 18, 1993. Stack testing of the 8R Recovery Furnace showed that the current permitted emission rate for NO_X was not attainable. The allowable emission rate of NO_X from the 8R Recovery Furnace was increased by 402.1 tons per year, thus triggering PSD review.

Permit #597-AOP-R0, issued on February 28, 1997, was the first operating air permit issued to Georgia-Pacific Corporation Crossett Paper Operations under Regulation #26. This permit incorporated sources that were not previously permitted. Some allowable emission rates were modified from the previous permit to reflect new emission factors, new test data and/or alternate fuel. This permit also incorporated the Prevention of Significant Deterioration (PSD) permit application submitted in relation to the installation of the new No. 8 Tissue Machine.

Permit #597-AOP-R1, issued on June 29, 1999, was the second Title V operating permit issued to Georgia-Pacific Corporation -- Crossett Paper Operations under Regulation #26. The changes in this permit were solely related to air pollutant emission rates and did not affect the Mill's production limits established in the original Title V permit. One purpose of this modification was to address the requirements of a CAO regarding carbon monoxide emissions from the Bleach Plant Scrubber (SN-30). Due to a lack of industry or regulatory information suggesting otherwise, carbon monoxide emissions from the bleach plant were not included in Permit #597-AOP-R0. Specific Condition #73 of that permit required Georgia-Pacific to test for carbon monoxide emissions from SN-30. The required stack testing was performed on September 24, 1997. Emission rates were derived from the stack tests and were added to the permit.

On February 15, 1999, revised versions of Regulations #18 and #19 became effective. All regulatory citations in the permit were changed in 597-AOP-R1 to reflect the new regulations.

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

Compliance demonstrations for all opacity limits have been added to the permit. Opacity demonstrations include, but are not limited to, daily or weekly observations and monitoring of control equipment operating parameters. The compliance demonstrations for all emission limits have been specifically identified in the permit. Applicable provisions of NSPS and NESHAP Subparts have been written into the permit.

The second purpose of this modification was to address the addition of pollution control equipment to comply with the requirements of 40 CFR Part 63 Subpart S -- National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry (NESHAP Subpart S or "Cluster Rule"). **This modification qualified as a Pollution Control Project (PCP), and thus the new point source (an Incinerator, SN-83) was exempt from PSD.**

Section 19.8 of Regulation #19 provides that the Lime Kiln at GP Crossett should have a TRS emission limit of 8 ppm. Because a source limited to 5 ppm was routed to the Lime Kiln, the lime kiln was assigned a 5 ppm limit. 597-AOP-R1 stipulated that once the HVLC system was routed to collect the emissions from the 5 ppm source, the emission rate for the Lime Kiln could be raised back to 8 ppm. This change has been completed.

597-AOP-R2 was finalized on December 14, 1999. A typographical error was made in a previous permit application which listed the minimum scrubbing liquid flow rate to the #4 tissue machine scrubber (SN-67) as 300 gpm. The actual minimum scrubber flow rate was 70 gpm. Note that the #4 and #5 tissue machine scrubbers are similar and that the #5 tissue machine minimum scrubbing flow rate was also 70 gpm. There was no emission increase associated with this minor modification.

On March 29, 1999, EPA Region 6 issued GP Crossett Paper Operations a NOV addressing the failure to install a continuous opacity monitor for SN-03, the 10A boiler. The current permit will be revised, in a timely manner, to assure compliance with any new applicable requirements resulting from the resolution of this issue.

597-AOP-R3 was finalized on December 14, 2001. This modification, which required PSD review, allowed the Crossett Mill to add the No. 9 Machine to produce tissue and towel. The No. 9 Machine was projected to have a production capacity of 250 Machine Dried Tons of paper (MDT) per day. The installation included the machine itself along with associated stock preparation and converting equipment. The proposed modification exceeded the PSD significant rate thresholds for PM_{10}, VOC, CO, and NO_x.

SECTION IV: EMISSION UNIT INFORMATION

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

SN-# 03
10A Boiler

Source Description

The 10A Boiler is capable of firing woodwaste, refuse derived fuel (RDF), agriculture derived fuel (ADF), tire derived fuel (TDF) and natural gas. A woodwaste storage pile is associated with the 10A Boiler. Woodwaste consists of bark, wood scraps, wax coated paper, wax coated cardboard, wax coated sawdust, creosote treated railroad crossties and paper pellets (waste paper and wax paper). The majority of the woodwaste for the boiler is delivered by truck and occasionally by rail. It is then transferred by conveyors to either the 9A or the 10A woodwaste storage pile.

RDF and ADF are directly added to the chip piles. RDF consists of pelletized paper, lawn clippings and similar materials that will not have a plastics content greater than 10%. TDF and other scrap rubber products are stored in segregated piles near the woodwaste piles. TDF is loaded several times a day by a front end loader into feeder bins in the vicinity. These solid fuels are then fed onto a conveyor system and delivered to the boilers. ADF consists of, but is not limited to, corn cobs, shucks, and vegetable starch.

The 7R Recovery Boiler was originally constructed in 1968. In 1984 it was converted to the 10A Boiler. The 10A Boiler (SN-03) is a 1001 million Btu per hour combination fuel boiler used to generate steam. This boiler is equipped with a wet venturi scrubber.

The 10A Boiler can operate under three different operating scenarios. The boiler can fire up to 1001 million Btu per hour of which only 669 million Btu per hour can be from natural gas. The first fuel firing scenario consists of the 10A Boiler burning just natural gas. The second fuel firing scenario consists of the 10A Boiler burning a combination of fuels none of which is natural gas. The third fuel firing scenario consists of the 10A Boiler burning a combination of fuels of which the contribution of natural gas can not exceed 669 million Btu per hour.

The 10A Boiler is subject to NSPS Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971. Monitoring of NO_X is not required since the results of a performance test showed emissions of less than 70% of the applicable standard (40 CFR 60.45 (b)(3)). Monitoring of SO_2 is not required under 40 CFR 60.45(b)(1). The CO and NO_X emissions from this boiler are regulated under PSD.

Specific Conditions

1. Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective February 15, 1999 (Regulation #19), and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #14 through #18.

Pollutant	lb/hr	ton/yr
Scenario #1: Natural gas only (669 MMBtu/hr)		
SO_2	1.0	4.4
VOC	2.0	8.8
Scenario #2: Any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
SO_2	21.0	92.0
VOC	151.0	661.4
Pb	0.13	0.54
Scenario #3: Natural gas and any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
SO_2	21.0	92.0
VOC	151.0	661.4
Pb	0.13	0.54

2. Pursuant to §19.304, §19.501 et seq, and §19.901 et seq of Regulation #19; 40 CFR Part 52 Subpart E; and 40 CFR §60.44, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #12 and #13.

Pollutant	lb/hr	ton/yr
Scenario #1: Natural gas only (669 MMBtu/hr)		
NO_X	200.2	586.1

Pollutant	lb/hr	ton/yr
	0.2 lb/MMBtu	
Scenario #2: Scenario #2: Any combination of woodwaste, sludge,TDF, RDF & ADF (1001 MMBtu/hr)		
NO_X	500.5	2192.2
	0.5 lb/MMBtu	
Scenario #3: Natural gas and any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
NO_X	300.3	1315.4
	0.3 lb/MMBtu	

3. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #12 and #13.

Pollutant	lb/hr	ton/yr
Scenario #1: Natural gas only (669 MMBtu/hr)		
CO	133.8	596.1
	0.2 lb/MMBtu	
Scenario #2: Any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
CO	600.0	2630.6
	0.6 lb/MMBtu	
Scenario #3: Natural gas and any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
CO	600.0	2630.6

Pollutant	lb/hr	ton/yr
	0.6 lb/MMBtu	

4. Pursuant to§19.304 and §19.501 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR §60.42, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #14 through #18 and #20.

Pollutant	lb/hr	ton/yr
Scenario #1: Natural gas only (669 MMBtu/hr)		
PM PM_{10}	66.9	293.1
	0.1 lb/MMBtu	
Scenario #2: Any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
PM PM_{10}	100.1	438.4
	0.1 lb/MMBtu	
Scenario #3: Natural gas and any combination of woodwaste, sludge, TDF, RDF & ADF (1001 MMBtu/hr)		
PM PM_{10}	100.1	438.4
	0.1 lb/MMBtu	

5. Pursuant to §18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation #18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the 10A Boiler shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #14 through #18.

Pollutant	lb/hr	ton/yr

Acetaldehyde	10.20	44.80
Acrolein	3.60	15.80
Antimony	0.04	0.18
Arsenic	0.72	3.12
Benzene	4.68	20.50
Beryllium	0.01	0.01
Cadmium	1.05	4.61
Carbon Tetrachloride	0.04	0.15
ChlorineChloroform	0.730.04	3.160.15
Chromium +6	1.12	4.90
Chromium, total	1.68	7.37
Cobalt	0.05	0.21
1,2-Dichloroethane	0.16	0.69
Dinitro-o-cresol	0.01	0.02
2,4-Dinitrotoluene	0.01	0.01
Formaldehyde	11.50	50.50
n-Hexane	1.42	6.19
Hexachlorobenzene	0.01	0.01
Hydrogen Chloride	838.00	3,670.00
Manganese	1.68	7.37
Methyl Ethyl Ketone	0.01	0.07
Mercury	0.67	2.89
Methanol	1.50	6.60
Methyl Chloroform	0.04	0.17
Methylene Chloride	0.35	1.52
Napthalene	0.16	0.69
Nickel	0.66	2.86
Phenol	0.34	1.48
Phosphorus	0.08	0.32
Polycyclic Organic	0.21	0.89
Matter	0.08	0.32
Propionaldehyde	0.02	0.08
Selenium	2.28	10.00
Styrene	0.05	0.21
Tetrachloroethylene	0.02	0.07
Vinyl Chloride	0.05	0.22
Xylene	0.78	3.40
Zinc		

6. Pursuant to §19.304 of Regulation #19 and 40 CFR 60.42(a)(2), when operating under any scenario, the permittee shall not cause to be discharged to the atmosphere from the 10A Boiler gases which exhibit an opacity greater than 20% except for one six-minute period per hour of not more than 27% opacity.

   Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, when operating under Scenario #1, the permittee shall not cause to be discharged to the atmosphere from the 10A Boiler gases which exhibit an opacity greater than 5%.

   Compliance shall be demonstrated by compliance with Specific Condition #9 for fuel Scenarios #2 and #3. Compliance shall be demonstrated during fuel Scenario #1 by the use of natural gas only. The opacity shall be measured in accordance with EPA Reference Method 9.

7. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct weekly observations of the opacity at SN-03. Observations shall be conducted by personnel familiar with the permittee's visible emissions and certified in the EPA Reference Method 9. If visible emissions appear to be in excess of the permitted opacity are detected, the permittee shall:
   a) Take immediate action to identify the cause of the visible emissions.
   b) Implement all necessary corrective action.
   c) Reassess the visible emissions after corrective action is taken.
      i. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
      ii. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

   The permittee shall maintain records related to all Method 9 Readings, to be updated on a weekly basis. The records shall be kept on site and made available to Department personnel upon request. The records shall contain the following items:

   1) The date and time of each observation/reading.
   2) Any observance of visible emissions appearing to be above permitted limits, or any Method 9 reading which indicates exceedence.
   3) The cause of any observed exceedence of opacity limits, corrective action taken, and results of the reassessment.

4) The name of the person conducting the observation/reading.

8. The 10A Boiler (SN-03) is subject to and shall comply with all applicable provisions of 40 CFR Part 60 Subpart D Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 because it burns natural gas, was constructed after August 17, 1971 and is greater than 250 million Btu per hour.

A. Pursuant to 40 CFR §60.42(a)(1), the permittee shall not cause to be discharged into the atmosphere gases which contain particulate matter in excess of 0.10 lb per million Btu derived from gaseous fossil fuel of fossil fuel and wood residue.

B. Pursuant to 40 CFR §60.43(c), compliance with the sulfur dioxide standard shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

C. Pursuant to 40 CFR §60.44(a)(1), the permittee shall not cause to be discharged into the atmosphere gases which contain nitrogen oxides, expressed as NO_2, in excess of 0.20 lb per million Btu derived from gaseous fossil fuel.

D. Pursuant to 40 CFR §60.44(a)(2), the permittee shall not cause to be discharged into the atmosphere gases which contain nitrogen oxides, expressed as NO_2, in excess of 0.30 lb per million Btu derived from gaseous fossil fuel and wood residue.

E. Pursuant to 40 CFR §60.45(a), the permittee shall install, calibrate, maintain, and operate continuous monitoring systems for measuring opacity and either oxygen or carbon dioxide. In an Alternative Monitoring exemption granted by the EPA in 1999, the facility is not required to install a continuous monitoring system for opacity provided the facility conducts periodic testing, scrubber parameter monitoring, and weekly opacity observations. This exemption is included in appendix G.

F. Pursuant to 40 CFR §60.45(g), excess emission and monitoring system performance reports shall be submitted to the Department for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR §60.7(c).

G. Pursuant to 40 CFR §60.46(a), in conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in 40 CFR §60.8(b).

9. Pursuant to §19.304 of Regulation #19 and 40 CFR §60.7(c), the permittee shall continue to submit quarterly excess emission reports to the following address:

Arkansas Department of Environmental Quality
Air Division
Attn: Air Enforcement Branch
Post Office Box 8913
Little Rock, Arkansas 72119

10. 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 Continuous Emission Monitor (CEM) for CO using O_2 monitoring on the 10A Boiler shall be operated in accordance with the Department Continuous Emission Monitoring Systems Conditions (Appendix A) and the applicable Performance Standards of 40 CFR Part 60 Appendix B

11. Pursuant to §19.703 and §19.901 et seq 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 properly maintain and operate the following existing continuous monitoring instrumentation: O_2, pressure drop across the scrubber and the liquid supply flow at the 10A Boiler (SN-03).

12. 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, all continuous monitoring data for O_2, may at the discretion of the Department, be used to determine violations of NO_X or CO emissions limits. Continuous monitoring data shall be used to demonstrate compliance with the three different fuel firing scenarios of the 10A Boiler.

13. Pursuant to §19.703 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, compliance with the NO_X and CO limits for the 10A Boiler shall be demonstrated by monitoring flue gas O_2 and maintaining the hourly average percent O_2 within the following limits when the steam flow is greater than 100,000 pounds per hour (at actual stack gas moisture contents):

A. Full load on natural gas and any combination of woodwaste, sludge, RDF, TDF and ADF: not less than 2.0% nor more than 7.5% O_2

B. Reduced load (100,000 to 400,000 pounds per hour steam) on natural gas and any combination of woodwaste, sludge, RDF, TDF and ADF: not less than 2.2% not more than 8.0% O_2

C. Full load on gas only: not less than 1.5% nor more than 6.0% O_2

D. Reduced load (100,000 to 400,000 pounds per hour steam) on gas only: not less than 1.5% nor more than 4.5% O_2

The above limits for gas only shall not apply when firing gas only for periods of two consecutive hours or less due to an unscheduled outage of woodwaste feed, instead, the above limits for natural gas and any combination of woodwaste, sludge, RDF, TDF and ADF shall apply. Records shall be kept of each unscheduled outage. An operation outside of these average limits shall constitute noncompliance with this Specific Condition and shall be reported quarterly along with excess emissions (see Specific Condition #13). The permittee shall maintain records of flue gas O_2 for the 10A Boiler and shall make them available to Department personnel upon request.

14. 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, TDF, ADF, RDF, woodwaste, sludge, and natural gas may be used as fuel in the 10A Boiler. Creosote treated railroad crossties shall not constitute more than 22.5% of the fuel requirement of the 10A Boiler.

15. 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 burn in excess of 669 thousand standard cubic feet (scf) of natural gas per hour or 5860.5 million scf of natural gas per twelve consecutive months in the 10A Boiler (SN-03).

16. 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 burn in excess of 100 pounds of TDF per minute in the 10A Boiler (SN-03).

17. 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 burn in excess of 250 tons of RDF per day in the 10A Boiler.

18. 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 burn in excess of 62.5 BDT sludge per hour in the 10A Boiler.

19. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Conditions #14, #15, #16, #17, and #18. The permittee shall maintain records of the types and quantities of fuels being used in the 10A Boiler. These records shall be sufficient to demonstrate compliance with the three fuel firing scenarios of the 10A Boiler. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted to the Department in accordance with General Provision #7.

20. The 10A Boiler (SN-03) is subject to and shall comply with all applicable provisions §19.703 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring.

    A. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a scrubber liquid flowrate of at least 1,500 gallons per minute**.**

    B. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a gas pressure drop of at least 5 inches of water.

    C. Pursuant to 40 CFR Part §64.6(c)(3), the permittee shall monitor and maintain daily records to demonstrate compliance with Specific Condition #20 (a) and (b). Records shall be kept onsite and made available to the Department upon request.

    D. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain the scrubber in good working condition at all times so that pollutant removal is maintained.

21. The 10A Boiler (SN-03) is subject to and shall comply with all applicable provisions §19.703 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.9 for Compliance Assurance Monitoring. The following information pertaining to exceedances or excursions from permitted values shall be submitted in semi-annual reports in accordance with General Provision #7 as outlined in 40 CFR §70.69.

    A. Pursuant to 40 CFR §64.9(a)(2)(i) and §64.9(b), the permittee shall maintain records for SN-03 that summarize the number, duration, and cause of excursions or exceedances of emission limits as well as corrective action taken.

B. Pursuant to 40 CFR §64.9(a)(2)(ii) and §64.9(b), the permittee shall maintain records for SN-03 that summarize the number, duration, and cause of monitoring equipment downtime incidents, other than routine downtime for calibration checks.

C. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain a quality improvement plan (QIP) threshold for each indicator of no more than nine excursions or 5% of the daily averages in a six-month period.

D. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall develop and implement a new QIP if the threshold is exceeded during any six-month period.

E. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain records for SN-03 that describe the actions taken to implement the QIP. Upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances.

22. **Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test particulate matter emissions from the 10A Boiler (SN-03). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5. The testing shall be conducted using a representative fuel mixture. The proportions of each permitted fuel in the representative fuel mixture shall be based upon the month during which the fuel that generates the highest particulate matter emissions was used in greatest proportion.** During the test the permittee shall operate the boiler within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity cannot be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

SN#-18
5A Boiler

Source Description

The 5A Boiler (SN-18) is a 220 million Btu per hour boiler. The boiler is able to burn natural gas and specification grade oil. The 5A Boiler was manufactured in 1953 and has never been modified. Therefore it is not subject to NSPS regulations. The 5A Boiler can use specification grade oil and natural gas as fuel. Specification grade oil consists of new oil, used oil, used oil absorbent material and pitch from the production of tall oil. However, used oil absorbent material is not used as a fuel in the 5A Boiler.

Specific Conditions

23. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #27 and #28.

Pollutant	lb/hr	tpy
PM_{10}	28.7	125.6
SO_2	265.7	1163.8
VOC	3.3	14.2
CO	14.8	64.5
NO_X	92.0	403.0
Pb	0.1	0.2

24. 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 this Specific Condition shall be demonstrated by compliance with Specific Condition #27.

Pollutant	lb/hr	ton/yr

PM	28.7	125.6
Antimony	0.01	0.04
Arsenic	0.01	0.01
Beryllium	0.01	0.01
Chromium, +6Cobalt	0.010.02	0.010.05
Formaldehyde	0.09	0.36
Hexane	0.47	2.04
Mercury	0.01	0.01
Nickel	0.15	0.63
Phosphorus	0.02	0.08
Polycyclic Organic Matter	0.01	0.03

25. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, when using specification grade oils or a combination of specification grade oils and natural gas, the permittee shall not cause to be discharged to the atmosphere from the 5A Boiler gases which exhibit an opacity greater than 20% . Emissions not exceeding 60% opacity will be allowed for six (6) minutes in any consecutive 60-minute period and no more than three (3) times during any 24-hour period.

    Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, when operating using natural gas only, the permittee shall not cause to be discharged to the atmosphere from the 5A Boiler gases which exhibit an opacity greater than 5%.

    Compliance with this opacity limit while using specification grade oils or a combination of specification grade oils and natural gas shall be demonstrated by compliance with Specific Condition #27. Compliance with this opacity limit while using natural gas only shall be demonstrated by the use of natural gas. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

26. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, when using specification grade oils or a combination of specification grade oils and natural gas, the permittee shall conduct daily observations of the opacity from the 5A Boiler, and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and shall be made available to Department personnel upon request.

27. Pursuant to §18.1004 of Regulation #18, §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, specification grade oils and natural gas may be used as fuel in the 5A Boiler.

28. 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 specification grade oils shall not exceed 1.0% by weight.

29. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the sulfur content of the fuel oil shall be verified by testing or vendors' guarantees. The permittee shall maintain a record of each fuel shipment and the associated sulfur content. This record shall be updated with each shipment, kept on site, shall be made available to Department personnel upon request and may be used by the Department for enforcement purposes. This report shall be submitted to the Department in accordance with General Provision #7.

SN-#19
6A Boiler

Source Description

The 6A Boiler (SN-19) is a 357 million Btu per hour boiler. The boiler is able to burn natural gas and specification grade oil. The 6A Boiler was manufactured in 1962 and has never been modified. Therefore it is not subject to NSPS regulations. The 6A Boiler can use specification grade oil and natural gas as fuel. Specification grade oil consists of new oil, used oil, used oil absorbent material and pitch from the production of tall oil. However, used oil absorbent material is not used as a fuel in the 6A Boiler.

Specific Conditions

30. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #34 and #35.

Pollutant	lb/hr	ton/yr
PM_{10}	60.0	262.8
SO_2	431.1	1888.3
VOC	2.4	10.1
CO	78.6	344.3
NO_X	165.0	722.7
Pb	0.1	0.3

31. 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 this Specific Condition shall be demonstrated by compliance with Specific Condition #34.

Pollutant	lb/hr	ton/yr
PM	60.0	262.8
Antimony	0.02	0.07
Arsenic	0.01	0.02
Beryllium	0.01	0.01

CadmiumCobalt	0.010.02	0.010.08
Formaldehyde	0.14	0.58
Hexane	0.76	3.30
Mercury	0.01	0.01
Nickel	0.24	1.02
Phosphorus	0.03	0.12
Polycyclic Organic Matter	0.01	0.04

32. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, when using specification grade oils or a combination of specification grade oils and natural gas, the permittee shall not cause to be discharged to the atmosphere from the 6A Boiler gases which exhibit an opacity greater than 20% . Emissions not exceeding 60% opacity will be allowed for six (6) minutes in any consecutive 60-minute period and no more than three (3) times during any 24-hour period.

Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, when operating using natural gas only, the permittee shall not cause to be discharged to the atmosphere from the 6A Boiler gases which exhibit an opacity greater than 5%.

Compliance with this opacity limit while using specification grade oils or a combination of specification grade oils and natural gas shall be demonstrated by compliance with Specific Condition #34. Compliance with this opacity limit while using natural gas only shall be demonstrated by the use of natural gas. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

33. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, when using specification grade oils or a combination of specification grade oils and natural gas, the permittee shall conduct daily observations of the opacity from the 6A Boiler, and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and shall be made available to Department personnel upon request.

34. Pursuant to §18.1004 of Regulation #18, §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, specification grade oils and natural gas may be used as fuel in the 6A Boiler.

35. 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 specification grade oils shall not exceed 1.0% by weight.

36. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the sulfur content of the fuel oil shall be verified by testing or vendors' guarantees. The permittee shall maintain a record of each fuel shipment and the associated sulfur content. This record shall be updated with each shipment, kept on site, shall be made available to Department personnel upon request and may be used by the Department for enforcement purposes. This report shall be submitted to the Department in accordance with General Provision #7.

SN#-22
9A Boiler

Source Description

The 9A Boiler is capable of firing tire derived fuel (TDF), agriculture derived fuel (ADF), refuse derived fuel (RDF), non-condensable gases (NCGs), woodwaste, specification grade oil, natural gas and sludge. A woodwaste storage pile is associated with the 9A Boiler. Woodwaste consists of bark, wood scraps, wax coated paper, wax coated cardboard, wax coated sawdust, creosote treated railroad crossties and paper pellets (waste paper and wax paper). Bark from the debarker in the Woodyard is pneumatically transferred to the 9A pile. A cyclone is located at the end of the pneumatic transfer line to control particulate matter emissions. The majority of the woodwaste is delivered by truck and occasionally by rail. It is then transferred by conveyors to either the 9A or the 10A woodwaste storage pile.

RDF, ADF and sludge are directly added to the chip piles. RDF consists of pelletized paper, lawn clippings and similar materials that will not have a plastics content greater than 10%. TDF and other scrap rubber products are stored in segregated piles near the woodwaste piles. TDF is loaded several times a day by a front end loader into feeder bins in the vicinity. These solid fuels are then fed onto a conveyor system and delivered to the boilers. ADF consists of, but is not limited to, corn cobs, shucks, and vegetable starch.

Specification grade oil consists of new oil, used oil, used oil absorbent material and pitch from the production of tall oil. Used oil absorbent material shall include used oil filter paper, used rags, sorbant booms, etc. that meet the specification grade oil criteria (40 CFR 279.11).

The 9A Boiler (SN-22) is a 720 million Btu per hour combination fuel boiler used to generate steam. The 9A Boiler is equipped with a wet venturi scrubber. This boiler was constructed prior to 1971 and is therefore not subject to regulation under NSPS Subpart D or Db. The 9A Boiler may serve as backup combustion unit during times when the incinerator (SN-83) is offline.

Specific Conditions

37. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #47 through #51, #53, #55, #56, and #57.

Pollutant	lb/hr	ton/yr
PM_{10}	90.0	394.2
SO_2	869.5	3808.5
VOC	49.7	217.7
CO	504.0	2207.5
NO_X	345.0	1511.1
Pb	0.1	0.1

38. 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 this Specific Condition shall be demonstrated by compliance with Specific Condition #47 thru #51 and #55.

Pollutant	lb/hr	ton/yr
PM	90.0	394.2
Acetaldehyde	7.34	32.2
Acrolein	2.59	11.4
Antimony	0.03	0.13
Arsenic	0.52	2.24
Benzene	3.37	14.80
Beryllium	0.01	0.02
Cadmium	0.76	3.31
Carbon Tetrachloride	0.03	0.11
Chlorine	0.52	2.27
Chloroform	0.03	0.11
Chromium +6	0.81	3.52
Chromium, total	1.21	5.30
Cobalt	0.04	0.15
1,2-Dichloroethane	0.12	0.50
Dinitro-o-cresol	0.01	0.01
2,4-Dinitrotoluene	0.01	0.01
Formaldehyde	8.29	36.40
n-HexaneHexachlorobenzene	1.520.01	6.660.01

Hydrogen Chloride	602.00	2,640.0
Manganese	1.21	5.30
Mercury	0.48	2.08
Methyl Chloroform	0.03	0.13
Methylene Chloride	0.26	1.10
Methyl Ethyl Ketone	0.02	0.05
Nickel	0.47	2.05
Napthalene	0.12	0.50
Phenol	0.25	1.06
Phosphorus	0.06	0.23
Polycyclic Organic Matter	0.15	0.64
Propionaldehyde	0.06	0.23
Selenium	0.02	0.06
Styrene	1.64	7.19
Tetrachloroethylene	0.04	0.15
Vinyl Chloride	0.02	0.05
Xylene	0.04	0.16
Zinc	0.78	3.40

39. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, for all fuel scenarios except natural gas only, the permittee shall not cause to be discharged to the atmosphere from the 9A Boiler, gases which exhibit an opacity greater than 20% . Emissions not exceeding 60% opacity will be allowed for six (6) minutes in any consecutive 60-minute period and no more than three (3) times during any 24-hour period.

    Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, when operating using natural gas only, the permittee shall not cause to be discharged to the atmosphere from the 9A Boiler gases which exhibit an opacity greater than 5%.

    Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #44 for all fuel scenarios other than using natural gas only. Compliance with this opacity limit while using natural gas only shall be demonstrated by the use of natural gas.The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

40. 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 Continuous Emission Monitor (CEM) for CO using O_2 monitoring on the 9A Boiler shall be operated in accordance with the Department Continuous Emission Monitoring Systems Conditions (Appendix A) and the applicable Performance Standards of 40 CFR Part 60 Appendix B.

41. 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 properly maintain and operate the following existing continuous monitoring instrumentation: O_2, pressure drop across the scrubber and liquid supply flow at the 9A Boiler.

42. 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, continuous monitoring data from the continuous monitoring instrumentation listed in Specific Condition #41 may, at the discretion of the Department, be used to determine violations of the emissions limits or conditions of this permit.

43. 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 CO limit for the 9A Boiler shall be demonstrated by monitoring flue gas O_2 and maintaining the O_2 setpoint at not less than 2.0% O_2 (dry basis). Any operation outside this hourly average limit shall constitute noncompliance with this Specific Condition.

The permittee shall maintain records of flue gas O_2 for the 9A Boiler and shall make them available to Department personnel upon request. These limits do not apply during startup and shutdown of the 9A Boiler. Startup and shutdown shall be defined as when the steam flow is less that 100,000 pounds per hour.

44. The 9A Boiler (SN-22) is subject to and shall comply with all applicable provisions §19.703 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring

A. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a scrubber liquid flowrate of at least 1,500 gallons per minute

B. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a gas pressure drop of at least 5 inches of water.

C. Pursuant to 40 CFR Part §64.6(c)(3), the permittee shall monitor and maintain daily records to demonstrate compliance with Specific Condition #44 (a) and (b). Records shall be kept onsite and made available to the Department upon request.

D. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain the scrubber in good working condition at all times so that pollutant removal is maintained.

45. The 9A Boiler (SN-22) is subject to and shall comply with all applicable provisions §19.703 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.9 for Compliance Assurance Monitoring. The following information pertaining to exceedances or excursions from permitted values shall be submitted in semi-annual reports in accordance with General Provision 7 as outlined in 40 CFR §70.69.

    A. Pursuant to 40 CFR §64.9(a)(2)(i) and §64.9(b), the permittee shall maintain records for SN-22 that summarize the number, duration, and cause of excursions or exceedances of emission limits as well as corrective action taken.

    B. Pursuant to 40 CFR §64.9(a)(2)(ii) and §64.9(b), the permittee shall maintain records for SN-22 that summarize the number, duration, and cause of monitoring equipment downtime incidents, other than routine downtime for calibration checks.

    C. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain a quality improvement plan (QIP) threshold for each indicator of no more than nine excursions or 5% of the daily averages in a six-month period.

    D. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall develop and implement a new QIP if the threshold is exceeded during any six-month period.

    E. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain records for SN-22 that describe the actions taken to implement the QIP. Upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances.

46. Pursuant to §19.801 et seq of of Regulation #19, the permittee may use the 9A Boiler as an alternate incinerator for NCGs and SOGs during periods when the Incinerator (SN-83) or its associated control equipment is inoperative.

47. Pursuant to §18.1004 of Regulation #18, §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, specification grade oils, natural gas, woodwaste, TDF, ADF, RDF and wastewater sludge may be used as fuel in the 9A Boiler. Creosote treated railroad crossties shall not constitute more than 25% of the fuel requirement of the 9A Boiler.

48. Pursuant to §18.1004 of Regulation #18, §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 burn in excess of 35 pounds per minute of TDF in the 9A Boiler.

49. Pursuant to §18.1004 of Regulation #18, §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 burn in excess of 250 tons of RDF per day in the 9A Boiler.

50. 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 burn in excess of 45 BDT sludge per hour in the 9A Boiler.

51. Pursuant to §18.1004 of Regulation #18, §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 burn in excess of 200 tons of used oil absorbant material per month in the 9A Boiler. The used oil absorbant material shall meet the specification grade oil criteria found in 40 CFR 279.11.

52. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with Specific Conditions #47, #48, #49, #50, and #51. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

53. 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 specification grade oils shall not exceed 1.0% by weight.

54. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the sulfur content of the fuel oil shall be verified by testing or vendors' guarantees. The permittee shall maintain a record of each fuel shipment and the associated sulfur content. This record shall be updated with each shipment, kept on site, shall be made available to Department personnel upon request and may be used by the Department for enforcement purposes. This report shall be submitted to the Department in accordance with General Provision #7.

55. **Pursuant to §18.1002 of Regulation #18, §19.702 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 annually test particulate matter emissions from the 9A Boiler (SN-22). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 found in 40 CFR Part 60 Appendix A. The testing shall be conducted using a representative fuel mixture. The proportions of each permitted fuel in the representative fuel mixture shall be based upon the month during which the fuel that generates the highest particulate matter emissions was used in greatest proportion. During the test the permittee shall operate the boiler within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

56. **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, sulfur dioxide emission shall be determined through a mass balance based on incoming materials and worst-case firing of specification grade oil based on the limits in Specific Condition #54. This mass balance shall be submitted to the Department in accordance with General Provision #7.**

57. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test nitrogen oxides emissions from the 9A Boiler (SN-22). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E as found in 40 CFR Part 60 Appendix A. The testing shall be done using a representative fuel mixture. **The proportions of each permitted fuel in the representative fuel mixture shall be based upon the month during which the fuel that generates the highest nitrogen oxides emissions was used in greatest proportion.** During the test the permittee shall operate the boiler within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

SN-#57F and #58F
Woodyard

Source Description

Activities in the Woodyard include unloading incoming chips and wood, wood transferring, debarking (SN-57F), chipping (SN-58F), chip storage (SN-58F) and chip screening. Emissions are controlled by the use of water sprays.

Chips are delivered either by trucks or rail cars. The truck shipments are unloaded at an inclining truck dump. The rail car shipments are emptied by rolling the rail car over. From these two delivery points the chips are conveyed to the distribution tower and are then dropped into the chip piles. Water is added to the pneumatic transfer system to control dust.

In addition to chips, Georgia-Pacific also receives round logs. After storage, the logs are transported to the debarking drum for bark removal. The removed bark is pneumatically sent to the bark piles for storage and eventual use in the 9A and 10A Boilers of the Utilities Operations. The debarked logs are fed to the chipper. The chips that are produced are conveyed to the distribution tower and deposited onto the chip piles.

Chips from the chip piles are screened prior to entering the chip silo. Rejected chips from the screening process are sent to the combination boilers for use in steam production.

Specific Conditions

58. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #60.

SN	Description	Pollutant	lb/hr	ton/yr
57F	Woodyard Debarking Drum	PM_{10}	0.3	1.2
58F	Woodyard Chip Storage Piles	VOC	472.6	2,069.8

59. 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 this Specific Condition shall be demonstrated by compliance with Specific Condition #62.

Pollutant	lb/hr	ton/yr
PM	0.6	2.3

60. Pursuant to §18.1004 of Regulation #18, §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 8400 tons of wet wood as received in the Woodyard per day, 30 day rolling average.

61. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limit in Specific Condition #60. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

62. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall use water sprays in the discharge from the conveyance system in the Woodyard area to reduce particulate matter emissions except during periods when rain provides equivalent dust suppression, or when inclement weather creates a safety hazard to operators.

63. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, when the NCASI study used to quantify emissions for SN-58F becomes final, the permittee may at that time revise the permitted emission rates for SN-58F to reflect the final study.

SN-#59
Batch Digesters

Source Description

Chips from the Woodyard are sent to the pulp mill where they are converted to pulp using the chemical Kraft process. The chip conveying system regulates the flow of chips from the silos in the Woodyard to one of the thirteen batch digesters (SN-59). The function of the digesters is to cook chips using white liquor, black liquor and steam from the boilers. In the digestion process these products are combined and cooked at a set pressure and temperature until a quality pulp is obtained. At the end of each cook the blow valve at the bottom of the digester is opened. The pressure in the digester forces the pulp mass through a blow line into the blow tanks.

The mill has two large cylindrical blow tanks. All remaining process equipment in the Pulp Mill is divided into two parallel but separate lines. The blow tanks are at atmospheric pressure. When the chips hit the lower pressure in the tank the liquor and water flash, blowing apart the chips to produce the pulp fibers. The fibers and the spent cooking liquor fall to the bottom of the blow tank.

The vapors from the blow tanks exit through a vapor line at the top of each blow tank. The vapors from each tank are combined and sent to the blow heat condensing system. Flow to the condensing system is maintained in the absence of blow downs by steam supplements. There is a series of condensers that remove condensable gases (primarily turpentine) from the blow gas. The steam vapors are condensed in the accumulator tank and used as hot water for the washers. Gases that do not condense are sent to the Incinerator (primary), or the Lime Kiln (primary until the Incinerator is installed, backup afterwards) and/or the 9A Boiler (backup) for thermal destruction.

During the loading of chips the digester caps are opened allowing for emissions.

Specific Conditions

64. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #69.

Pollutant	lb/hr	ton/yr
VOC	55.9	244.6

65. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the pollutant emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Condition #69.

Pollutant	lb/hr	ton/yr
Acetaldehyde	0.11	0.50
Methanol	0.60	2.60
Methyl Ethyl Ketone	0.02	0.09
Xylene	0.04	0.14

66. Pursuant to §19.304 and §19.501 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR §60.283, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #67.

Pollutant	lb/hr	ton/yr
TRS	4.3	18.9
	5 ppmdv corrected to 10% O_2	

67. The Batch Digesters (SN-59) are subject to and shall comply with all applicable provisions of 40 CFR Part 60 Subpart A General Provisions and Subpart BB Standards of Performance for Kraft Pulp and Paper Mills because the equipment was constructed or modified after September 24, 1976.

A copy of Subpart BB is provided in Appendix C. Applicable provisions of Subpart BB include, but are not limited to, the following:

A. Pursuant to 40 CFR §60.283(a)(1), the permittee shall not cause to be discharged into the atmosphere from the digester system any gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the conditions of 40 CFR §60.283(a)(1)(i)-(vi) are met.

B. Pursuant to 40 CFR §60.284(a)(2), 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 of oxygen by volume on a dry basis in the gases discharged into the atmosphere from the digester system, except where the provisions of 40 CFR §60.283(a)(1)(iii) or (iv) apply. This system shall be located downstream of the control device and the span shall be set at a TRS concentration of 30 ppm for the TRS continuous monitoring system and at 20 percent oxygen for the continuous oxygen monitoring system.

C. Pursuant to 40 CFR §284(c)(1), except where the provisions of 40 CFR §60.283(a)(1)(iv) or (a)(4) apply, 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 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

D. Pursuant to 40 CFR §60.284(d), for the purpose of reports required under 40 CFR §60.7(c), the permittee shall report semiannually periods of excess emissions.

E. Pursuant to 40 CFR §60.285(a), in conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures in this section, except as provided in 40 CFR §60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

68. Pursuant to §19.801 et seq of Regulation #19, the permittee may use the 9A Boiler or Lime Kiln (SN-25) as an incinerator for Low Volume High Concentration (LVHC) NCGs only during periods when the incinerator (SN-83) is inoperative.

69. 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 8,592 tons of wood chips per day, 30 day rolling average.

70. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the limits specified in Specific Condition #69. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

SN-#33, #34, #60 and #61
Pulp Mill Operations

Source Description

When the pulp and black liquor exit the blow tank, the pulp goes through several processing steps before it is stored in the unbleached high density storage chest. First, knots are removed prior to washing. The knots are recovered and used as woodwaste fuel. Second, the pulp is washed to separate the pulp from the spent cooking chemicals and the black liquor. There are two horizontal washers. There are no emissions directly from the Line 1 Washer (SN-33). The emissions from the associated black liquor storage tank and Line 1 Decker (SN-60) are routed to the Incinerator (SN-83), with the Lime Kiln scrubber operating as a backup control device. The Line 2 Washer (SN-34) is not equipped with any control equipment. Next, the pulp passes through the decker system. The decker system (SN-60 and 61) thickens the pulp for storage in the high density storage chests. Although the operations at the pulp mill are in parallel, the two lines are run separately.

Specific Conditions

71. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #69.

SN	Description	Pollutant	lb/hr	ton/yr
33	Line 1 Washer	VOC TRS	10.4 2.9	45.6 12.6
34	Line 2 Washer	VOC TRS	21.1 8.8	92.1 38.2
60	Line 1 Decker	Emissions are routed to the Incinerator (SN-83)		
61	Line 2 Decker	VOC TRS	3.1 1.40	13.5 6.0

72. **Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the**

following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Condition #69.

SN	Description	Pollutant	lb/hr	ton/yr
33	Line 1 Washer	Acetophenone	0.08	0.35
		Acrolein		0.01
		o-Cresol	0.01	1.04
			0.24	14.20
		Methanol		1.13
		Phenol	3.24	
			0.26	
34	Line 2 Washer	Acetaldehyde	0.08	0.35
		Acetophenone	0.04	0.14
		Acrolein	0.01	0.01
		Methanol	3.00	13.14
60	Line 1 Decker	Emissions are routed to the Incinerator (SN-83)		
61	Line 2 Decker	Acetaldehyde	0.05	0.20
		Acrolein	0.01	0.02
		O-Cresol	0.21	0.90
		Methanol	2.04	8.94
		Methyl Ethyl Ketone	0.06	0.27
		Propionaldehyde	0.07	0.28
		Styrene	0.01	0.04
		Tetrachlorothylene	0.02	0.08

73. The Line 1 Washer (SN-33) and the Line 2 Washer (SN-34) are subject to and shall comply with all applicable provisions of 40 CFR Part 60 Subpart A General Provisions and Subpart BB Standards of Performance for Kraft Pulp and Paper Mills because the equipment was constructed or modified after September 24, 1976.

A copy of Subpart BB is provided in Appendix C. See also Compliance Plan on page 141. Applicable provisions of Subpart BB include, but are not limited to, the following:

A. Pursuant to 40 CFR §60.283(a)(1), the permittee shall not cause to be discharged into the atmosphere from SN-33 and SN-34 any gases which contain TRS in

excess of 5 ppm by volume on a dry basis, corrected to 10 percent oxygen, unless the conditions of 40 CFR §60.283(a)(1)(i)-(vi) are met.

B Pursuant to 40 CFR §60.284(a)(2), 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 of oxygen by volume on a dry basis in the gases discharged into the atmosphere from SN-33 and SN-34, except where the provisions of 40 CFR §60.283(a)(1)(iii) or (iv) apply. This system shall be located downstream of the control device and the span shall be set at a TRS concentration of 30 ppm for the TRS continuous monitoring system and at 20 percent oxygen for the continuous oxygen monitoring system.

C. Pursuant to 40 CFR §60.284(c)(1), except where the provisions of 40 CFR §60.283(a)(1)(iv) or (a)(4) apply, 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 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

D. Pursuant to 40 CFR §60.284(d), for the purpose of reports required under 40 CFR §60.7(c), the permittee shall report semiannually periods of excess emissions. The applicant must also report the nature and cause of the excess emissions in accordance with 40 CFR §60.7(c)(2).

E. Pursuant to 40 CFR §60.285(a), in conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures in this section, except as provided in 40 CFR §60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

SN-#30
Bleach Plant

Source Description

The unbleached Kraft pulp is taken from the high density storage chest for further processing in the bleach plant. The bleaching process removes lignin and Kraft color from the unbleached pulp.

Bleaching is performed in several stages using chlorine/chlorine dioxide, caustic soda, oxygen, acid, hydrogen peroxide, and other non-chlorine bleaching aids. Chlorine dioxide is generated using sodium chlorate, methanol and sulfuric acid. The chlorine dioxide gas that is produced is absorbed in chilled water and sent to storage for further use in the bleaching operations.

The bleach plant uses a scrubber (SN-30) to control chlorine/chlorine dioxide emissions. All equipment in the bleach plant is either pressurized or is kept under negative pressure and connected to the scrubbing system. The Bleach Plant scrubber is a packed tower with mist eliminators.

Bleach Plant Modifications

Carbon Monoxide Emissions: Due to a lack of industry or regulatory information suggesting otherwise, carbon monoxide emissions from the bleach plant were not included in the initial permit. The permit required Georgia-Pacific to test for carbon monoxide emissions from SN-30. The stack testing was performed on September 24, 1997. Emission rates were derived from the stack tests and were added to the permit.

Cluster Rule Requirements: In order to satisfy Cluster Rule requirements, Crossett Paper Operations has phased out Cl_2 and hypochlorite usage by the Cluster Rule compliance date deadline of April 16, 2001.

Specific Conditions

74. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #76.

Pollutant	lb/hr	ton/yr

Pollutant	lb/hr	ton/yr
VOC	1.0	4.2
CO	136.1	596.1

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 pollutant emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #76.

Pollutant	lb/hr	ton/yr
Chlorine	8.00	35.00
Chloroform	12.00	52.60
ClO_2	4.68	20.50

76. 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 produce in excess of 2,100 air dried tons of bleached pulp per day, 30 day rolling average.

77. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #76. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

78. 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 determine emissions of chlorine, chlorine dioxide and chloroform using NCASI Methods TB 520 and TB 531 or an alternative method approved by the Air Division. Records of emission tests shall be kept on site, provided to Department personnel upon request and may be used for enforcement purposes. The annual total shall be submitted in accordance with General Provision #7. During the test the permittee shall operate the plant within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

79. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test for carbon monoxide emissions from the Bleach Plant Scrubber (SN-30).

Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 10 as found in 40 CFR Appendix A. During the test the permittee shall operate the plant within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

80. The Bleach Plant is subject to and shall comply with applicable 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. Applicable provisions include, but are not limited to, the following:

A Pursuant to 40 CFR §63.445(b), the equipment at each bleaching stage, of the bleaching systems listed in paragraph (a) of 40 CFR §63.445, 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 40 CFR §63.445. The enclosures and closed-vent system shall meet the requirements specified in 40 CFR §63.450.

B. Pursuant to 40 CFR §63.445(c)(3), the control device used to reduce chlorinated HAP emission (not including chloroform) from the equipment specified in paragraph (b) of 40 CFR §63.445**, the permittee shall comply with the emissions limitations required for bleaching systems by one of the following methods 1) achieving a 99% reduction efficiency across the scrubber or 2) achieving <10 ppm HAPs or 0.002 lbs/ODTP, measured as chlorine.**

C. Pursuant to 40 CFR §63.445(d), the owner or operator of each bleaching system subject to paragraph (a)(2) of 40 CFR §63.445 shall comply with paragraph (d)(1) or (d)(2) of 40 CFR §63.445 to reduce chloroform air emissions to the atmosphere, except where the owner or operator of each bleaching system complying with extended compliance under 40 CFR §63.440(d)(3)(ii) shall comply with paragraph (d)(1) of 40 CFR §63.445.

D. Pursuant to 40 CFR §63.445(d)(2), the permittee shall use no hypochlorite or elemental chlorine for bleaching in the bleaching system or line.

81. The Bleach Plant is subject to and shall comply with applicable 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. The scrubber shall be kept in good working condition at all times and shall meet the following

conditions as part of an alternative monitoring requirement approved by the EPA on July 26, 2001. A copy of this letter is included in appendix H.

A. Perform a successful initial performance test to determine an acceptable range of electrical current (amps) within which the fan needs to be operated. Testing shall be completed and reported to the Department no more than six months from final permit.

B. Continuously record and monitor the fan motor amperage loading to ensure proper rotational fan speed and pressure drop for the bleach plant scrubber fan.

C. Conduct monthly visual inspections under the Leak Detection and Repair plan provisions for the scrubber fan and associated process.

D. Conduct annual negative pressure checks to ensure that the bleach plant scrubber fan induces the desired negative pressure across the system.

E. Conduct periodic preventitive maintenance of the bleach plant scrubber fan to ensure safe and proper operation of the system.

F. Respond immediately to any signs or indications of visible emissions from the scrubber stack, washer hoods, or towers at the bleach plant.

G. Replacement of fan blades or fan motor will require a demonstration by the facility that gas flow rate to the scrubber has not increased or a performance test to ensure that the scrubber meets the emission limitations.

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

SN-26 and 96
8R Recovery Furnace and Salt Cake Mix Tank

Source Description

Recovery is the set of operations that recover spent cooking chemicals for reuse in the digesters. The recovery process uses a multi-effect evaporator to concentrate weak black liquor. Concentrated black liquor is burned in the 8R Recovery Furnace (SN-26) to recover spent chemicals, the inorganic chemicals that are necessary for pulp making. Auxiliary fuels, such as oil, may be used by the furnace for startup or to augment liquor combustion. Exhaust gases from the recovery furnace are treated in an electrostatic wet bottom precipitator. The spent chemicals leave the recovery furnace in a molten form and enter the smelt dissolving tanks.

Evaporation and concentration operations remove water from the black liquor in order to facilitate combustion in the recovery furnace. The solids in the liquor are generated from the digester and washing filtrates. The evaporators convert the weak black liquor to strong (heavy) black liquor.

There are six effects in the evaporator train at the mill, each effect operating at a different pressure. Plant steam flows countercurrent to the black liquor through the evaporators. Combined condensate from the evaporator is used in washing and recausticizing. **A Low Energy Environmental Pre-evaporator and Stripper (LEEPS) system added to the evaporator system treats the foul (or strip) condensates produced in the evaporation process. The LEEPS system also treats foul condensates generated from the pulping process. The clean water produced is re-used for pulp washing. The stripped condensate (methanol) is be routed to the incinerator as a liquid for destruction. The stripper overhead gases (SOGs) are routed to the incinerator for destruction, or as a backup, to the No. 4 Lime Kiln or the 9A Boiler.**

Black liquor of varying concentration is stored in above ground storage tanks. There are two large weak black liquor tanks and one weak black liquor storage basin (approximately 4 acres, SN-76F). In addition, there are two strong black liquor tanks and two concentrated strong black liquor holding tanks. There are also seven multiple service tanks that may store black liquor. There are also additional, smaller black liquor storage tanks.

The concentrated black liquor is burned in the 8R Recovery Furnace with the heat being used to produce steam and electricity. Flue gas from the furnace is sent through an economizer followed by an electrostatic precipitator (ESP). The ESP is used to control particulate matter emissions. The 8R Recovery Furnace was installed in 1981. It is subject to regulation under NSPS Subpart BB. The NO_X emissions from the furnace are also regulated under PSD. Salt cake from the

ESP is sent to the Salt Cake Mix Tank (SN-96).

Specific Conditions

82. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #90, #91, and #93.

Pollutant	lb/hr	ton/yr
SO_2	300.0	1314.0
VOC	39.4	172.5
CO	3750.0	16425.0
Pb	0.1	0.1

83. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #90, #91, and #96.

Pollutant	lb/hr	ton/yr
NO_X	190.0	832.2
	110 ppmdv @ 8% O_2	

84. Pursuant to §19.304 and §19.501 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR §60.282, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #90, #91 and #95.

Pollutant	lb/hr	ton/yr
PM PM_{10}	93.0	407.3
	0.044 gr/dscf @ 8% O_2	

85. Pursuant to §19.304, §19.501 et seq, and §19.801 et seq of Regulation #19; 40 CFR Part 52 Subpart E; and 40 CFR §60.283, the permittee shall not exceed the emission rates set

forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #90 and #91.

Pollutant	lb/hr	ton/yr
TRS	9.0	39.4
	5 ppm @ 8% O_2	

86. 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 this Specific Condition shall be demonstrated by compliance with Specific Conditions #90 and #91.

Pollutant	lb/hr	ton/yr
Mercury	0.01	0.01
Sulfuric Acid	6.01	26.30

87. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the 8R Recovery Furnace gases which exhibit an opacity greater than 20%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance shall be demonstrated by the use of the Recovery Boiler continuous opacity monitor.

88. The 8R Recovery Furnace (SN-26) is subject to and shall comply with all applicable provisions of 40 CFR Part 60 Subpart A General Provisions and 40 CFR Part 60 Subpart BB Standards of Performance for Kraft Pulp and Paper Mills due to the fact it was constructed or modified after September 24, 1976.

A copy of Subpart BB is provided in Appendix C. Applicable provisions of Subpart BB include, but are not limited to, the following:

A. Pursuant to 40 CFR §60.282(a)(1)(i), the permittee shall not cause to be discharged into the atmosphere from the recovery furnace gases which contain particulate matter in excess of 0.044 gr/dscf corrected to 8 percent oxygen.
B. Pursuant to 40 CFR §60.282(a)(1)(ii), the permittee shall not cause to be discharged into the atmosphere from the recovery furnace gases which exhibit 35 percent opacity or greater.

C. Pursuant to 40 CFR §60.283(a)(2), the permittee shall not cause to be discharged into the atmosphere from the recovery furnace gases which contain TRS in excess of 5 ppm by volume on a dry basis, corrected to 8 percent oxygen.

D. Pursuant to 40 CFR §60.284(a)(2), the permittee shall install, calibrate, maintain, and operate continuous monitoring systems (CEMs) to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere from the recovery furnace. This system shall be located downstream of the control device and the span shall be set at a TRS concentration of 50 ppm for the TRS continuous monitoring system and at 20 percent oxygen for the continuous oxygen monitoring system.

E. Pursuant to 40 CFR §60.284(c)(1), 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 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

F. Pursuant to 40 CFR §60.284(c)(2), 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 the recovery furnace. These 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 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

G. Pursuant to 40 CFR §60.284(d), for the purpose of reports required under 40 CFR §60.7(c), the permittee shall report semiannually periods of excess emissions.

H. Pursuant to 40 CFR §60.285(a), in conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures in this section, except as provided in 40 CFR §60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

89. In accordance with §19.304 of Regulation #19, 40 CFR §60.7(c), and 40 CFR §60.284, the permittee shall continue to quarterly submit excess emission reports to the following address:

    Arkansas Department of Environmental Quality
    Air Division
    Attn: Air Enforcement Branch
    Post Office Box 8913
    Little Rock, Arkansas 72119

90. 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 fire in excess of 1.04 million tons of black liquor solids to the recovery furnace per twelve consecutive months.

91. 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, specification grade oil may be used as fuel in the 8R Recovery Furnace (SN-26).

92. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Conditions #90 and #91. These records shall be updated monthly, kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted to the Department in accordance with General Provision #7.

93. 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 specification grade oil shall not exceed 1.0% by weight.

94. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the sulfur content of the specification grade oil shall be verified by testing or vendors' guarantees. The permittee shall maintain a record of each fuel shipment and the associated sulfur content. This record shall be updated with each shipment, kept on site, shall be made available to Department personnel upon request and may be used by the Department for enforcement purposes.

95. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test particulate matter emissions from the 8R Recovery Furnace (SN-26). Annual testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 as found in 40 CFR Part 60 Appendix A. During the test the

permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

96. Pursuant to §19.702 and §19.901 et seq of Regulation #19, and 40 CFR Part 52, Subpart E, the permittee shall continue to perform annual testing of the hourly NO_x emissions rate on the 8R Recovery Furnace (SN-26) for compliance and enforcement purposes. Compliance with the NOx limit will be based on the average of three one-hour tests. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E as found in 40 CFR Part 60 Appendix A. During the test, the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity cannot be achieved, the permittee shall be rated to 11 percent above the actual tested throughput.

97. Pursuant to §19.304 and §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.284, the permittee shall continue to operate and maintain opacity, TRS and O_2 continuous emission monitors at the 8R Recovery Furnace (SN-26).

98. 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 continuous emission monitors for TRS and O_2 at the 8R Recovery Furnace shall be operated in accordance with the Department Continuous Emission Monitoring Systems Conditions (Appendix A) and the applicable Performance Standards of 40 CFR Part 60 Appendix B.

99. 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, all continuous monitoring data may, at the discretion of the Department, be used to determine violations of the emissions limits or conditions of this permit.

100. Pursuant to §19.304 and §19.801 et seq of Regulation #19, 40 CFR §60.283, and 40 CFR §60.284, the TRS concentration of gases leaving the 8R Recovery Furnace (SN-26) shall not exceed 5 ppm, measured as H_2S on a dry basis and on a 12 hour average, corrected to 8% volume oxygen. The permittee shall continue to operate and maintain CEMs which record the TRS concentration of gases leaving the 8R Recovery Furnace (SN-26). The TRS monitors shall be operated in accordance with the requirements of 40 CFR §60.284 (date of installation notwithstanding) and the Department Continuous Emission Monitoring Systems Conditions (Appendix A).

SN-#27A and #27B
Smelt Dissolving Tanks

Source Description

The combusted black liquor generates molten salts that are drained from the bottom of the 8R Recovery Furnace into one of two smelt dissolving tanks (SN-27A and SN-27B) on either side of the 8R Recovery Furnace. The smelt dissolving tanks cool the molten salts in large water tanks. Each smelt dissolving tank has an independent stack that is routed through a wet scrubber. The smelt dissolving tanks are subject to NSPS Subpart BB.

Specific Conditions

101. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #90.

SN	Description	Pollutant	lb/hr	ton/yr
27A	Smelt Dissolving Tank (East)	SO_2 VOC NO_X	3.0 6.3 2.0	13.2 27.2 8.5
27B	Smelt Dissolving Tank (West)	SO_2 VOC NO_X	3.0 6.3 2.0	13.2 27.2 8.5

102. Pursuant to §19.304 and §19.501 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR §60.282, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #90 and #110.

SN	Description	Pollutant	lb/hr	ton/yr
27A	Smelt Dissolving Tank (East)	PM PM_{10}	10.0	43.8
			0.2 lb PM/PM_{10} per ton of black liquor solids(TBLS)	
			10.0	43.8

SN	Description	Pollutant	lb/hr	ton/yr
27B	Smelt Dissolving Tank (West)	PM PM_{10}	0.2 lb PM/PM_{10} per ton of black liquor solids (TBLS)	

103. Pursuant to §19.304, §19.501 et seq, and §19.801 et seq of Regulation #19; 40 CFR Part 52 Subpart E; and 40 CFR §60.283, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #90 and #111.

SN	Description	Pollutant	lb/hr	ton/yr
27A	Smelt Dissolving Tank (East)	TRS	2.2	9.5
			0.016 g TRS per kg of black liquor solids (0.033 lb/TBLS) as H_2S	
27B	Smelt Dissolving Tank (West)	TRS	2.2	9.5
			0.016 g TRS per kg of black liquor solids (0.033 lb/TBLS) as H_2S	

104. 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 this Specific Condition shall be demonstrated by compliance with Specific Condition #90.

SN	Description	Pollutant	lb/hr	ton/yr
27A	Smelt Dissolving Tank (East)	Acetaldehyde	0.05	0.19
		Acetone	0.1	0.1
		Formaldehyde	0.28	1.19
		Methanol	0.78	3.39
		Napthalene	0.04	0.17
		Styrene	0.01	0.05
27B	Smelt Dissolving Tank (West)	Acetaldehyde	0.05	0.19
		Acetone	0.1	0.1
		Formaldehyde	0.28	1.19
		Methanol	0.78	3.39
		Napthalene	0.04	0.17

SN	Description	Pollutant	lb/hr	ton/yr
		Styrene	0.01	0.05

105. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged from the Smelt Dissolving Tanks (SN-27A and 27B) gases which exhibit an opacity greater than 20%. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #107. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

106. Pursuant to §19.304 and §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.284, the permittee shall continue to operate and maintain a monitoring device for the continuous measurement of the differential pressure drop across the scrubber.

107. **Pursuant to §19.303 of Regulation #19 and A.C.A. §8 4 203 as referenced by §8 4 304 and §8 4 311, the scrubbers shall be kept in good working condition at all times and shall meet the conditions shown in the following table. The scrubber liquid flow rate and the gas pressure drop across the units shall be measured daily. The results shall be kept on site and be available to the Department personnel upon request. Future compliance tests may be used to establish the daily average pressure drop and flowrate values that are contained in the permit. The pressure drop and flow rate values recorded during a compliant test event may be used as subsequent minimum values.**

SN	Control Equipment	Parameter	Units	Operation Limits (minimum)
27A	scrubber	liquid flow rate, top	gal/min	35
		liquid flow rate, bottom	gal/min	100
		gas pressure drop	inches, H_2O	5

SN	Control Equipment	Parameter	Units	Operation Limits (minimum)
27B	scrubber	liquid flow rate, top	gal/min	35
		liquid flow rate, bottom	gal/min	100

SN	Control Equipment	Parameter	Units	Operation Limits (minimum)
		gas pressure drop	inches, H_2O	5

108. **Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311,** the permittee shall abide by the following alternative scenario only during emergency maintenance for scrubbers for the Smelt Dissolving Tanks (SN-27A and 27B).

A Black liquor solids feed to the 8R Boiler (SN-26) shall be reduced to 3.91 MM lb/day.

B. Uncontrolled emissions shall be quantified and recorded.

C. Repair time must not extend beyond a 6 hour period.

D. Down time of the equipment will be monitored and submitted to the Department in accordance with General Provision 8.

109. The Smelt Dissolving Tanks (SN-27A and 27B) are subject to and shall comply with all applicable 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 the fact that they were constructed or modified after September 24, 1976.

A copy of Subpart BB is provided in Appendix C. Applicable provisions of Subpart BB include, but are not limited to, the following:

A. Pursuant to 40 CFR §60.282(a)(2), the permittee shall not cause to be discharged into the atmosphere from the smelt dissolving tanks any gases which contain particulate matter in excess of 0.2 lb/ton black liquor solids (dry weight).

B. Pursuant to 40 CFR §60.283(a)(4), the permittee shall not cause to be discharged into the atmosphere from the smelt dissolving tanks any gases which contain TRS in excess of 0.033 lb/ton black liquor solids as H_2S.

C. Pursuant to 40 CFR §60.284(b)(2), the permittee shall install, calibrate, maintain, and operate a continuous monitoring devices for the smelt dissolving tanks because they use a scrubber emission control device.

D. Pursuant to 40 CFR §60.284(d), for the purpose of reports required under 40 CFR §60.7(c), the permittee shall report semiannually periods of excess emissions.

E. Pursuant to 40 CFR §60.285(a), in conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures in this section, except as provided in 40 CFR §60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

110. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test particulate matter emissions from the Smelt Dissolving Tanks (SN-27A and 27B). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 as found in 40 CFR Part 60 Appendix A. During the test the permittee shall operate the sources within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

111. Pursuant to §19.702 and §19.801 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the TRS concentration of gases leaving the Smelt Dissolving Tanks (SN-27A and 27B) shall not exceed 0.0168 g TRS per kg of black liquor solids. The permittee shall conduct annual compliance testing of TRS emissions from the Smelt Dissolving Tanks (SN-27A and 27B). Data reduction shall be performed as set forth in 40 CFR 60.8. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 16 as found in 40 CFR Part 60 Appendix A. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

SN-#25
No. 4 Lime Kiln

Source Description

The lime kiln heats calcium carbonate (lime mud) to form calcium oxide (lime product). Fuels used in the lime kiln include specification grade oil and natural gas. Emissions from the lime kiln are controlled by a wet scrubber. Non-condensable gases (NCGs) from processes are routed to the lime kiln for thermal destruction. The lime kiln is subject to NSPS Subpart BB. The maximum firing rate of the lime kiln is 150 million Btu per hour.

NCGs from several pulp mill sources are collected and routed to the lime kiln for combustion. The evaporator vents, digester vents and blow tank condensers are all part of the NCG system at the Crossett Paper Operations.

Reburnt lime product from the lime kiln is conveyed to a lime bin where it is fed into the slaker. The lime handling and storage system includes elevators, conveyors and lime bins. Conveyors transport lime from the storage silos to the slakers. Fresh lime is added to the system from delivery trucks by pneumatic conveyance to the two lime silos.

Specific Conditions

112. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #120 and #121.

Pollutant	lb/hr	ton/yr
SO_2	36.8	160.8
VOC	19.4	85.0
CO	625.0	2737.5
NO_X	72.0	186.3
Pb	0.02	0.05

113. Pursuant to §19.304 and §19.501 et seq of Regulation #19, 40 CFR Part 52 Subpart E, and 40 CFR §60.282, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #120 and #123.

Pollutant	lb/hr	ton/yr
Natural gas or natural gas and specification oil		

Pollutant	lb/hr	ton/yr
PM PM_{10}	27.1	118.7
	0.067 gr/dscf corrected to 10% oxygen	

114. Pursuant to §19.304, §19.501 et seq, and §19.801 et seq of Regulation #19; 40 CFR Part 52 Subpart E; and 40 CFR §60.283, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #122 and #128.

Pollutant	lb/hr	ton/yr
Natural gas or natural gas and specification oil firing.		
TRS	1.5	6.6
	8 ppm measured as H_2S on a dry basis, on a 12-hour average, corrected to 10% O_2	

115. 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 this Specific Condition shall be demonstrated by compliance with Specific Condition #120.

Pollutant	lb/hr	ton/yr
Acetaldehyde	0.04	0.11
Chromium, +6	0.02	0.05
Formaldehyde	0.07	0.20
Methanol	0.26	0.82
Napthalene	0.47	1.45
Phenol	0.02	0.05
Phosphorus	0.24	0.75
Tetrachloroethylene	0.02	0.04

116. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere gases which exhibit an opacity greater than 20%. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #117. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

117. Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the scrubbers shall be kept in good working condition at all times and shall meet the conditions shown in the following table. The scrubber liquid flow rate and the gas pressure drop across the units shall be measured daily. The results shall be kept on site and be available to the Department personnel upon request.

SN	Control Equipment	Parameter	Units	Operation Limits (minimum)
25	scrubber	liquid flow rate	gal/min	500
		gas pressure drop across unit	inches, H_2O	25

118. The No. 4 Lime Kiln (SN-25) is subject to and shall comply with all applicable 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 the fact it was constructed or modified after September 24, 1976.

A copy of Subpart BB is provided in Appendix C. Applicable provisions of Subpart BB include, but are not limited to, the following:

A. Pursuant to 40 CFR §60.282(a)(2), the permittee shall not cause to be discharged into the atmosphere from the lime kiln any gases which contain particulate matter in excess of 0.067 gr/dscf corrected to 10 percent oxygen, when gaseous fossil fuel is burned.

B. Pursuant to 40 CFR §60.283(a)(5), the permittee shall not cause to be discharged into the atmosphere from the lime kiln gases which contain TRS in excess of 8 ppm by volume on a dry basis, corrected to 10 percent oxygen.

C. Pursuant to 40 CFR §60.284(a)(2), the permittee shall install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the concentration of TRS emissions on a dry basis and the percent of oxygen by

volume on a dry basis in the gases discharged into the atmosphere from the lime kiln. This system shall be located downstream of the control device and the span shall be set at a TRS concentration of 30 ppm for the TRS continuous monitoring system and at 20 percent oxygen for the continuous oxygen monitoring system.

D. Pursuant to 40 CFR §60.284(b)(2), the permittee shall install, calibrate, maintain, and operate continuous monitoring devices (CEMs) for the lime kiln because it uses a scrubber emission control device.

E. Pursuant to 40 CFR §60.284(c)(1), 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 contiguous 1-hour average total reduced sulfur concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

F. Pursuant to 40 CFR §60.284(c)(2), 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 the lime kiln. These 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 contiguous 1-hour average oxygen concentrations provided by each continuous monitoring system installed under paragraph (a)(2) of this section.

G. Pursuant to 40 CFR §60.284(d), for the purpose of reports required under 40 CFR §60.7(c), the permittee shall report semiannually periods of excess emissions.

H. Pursuant to 40 CFR §60.285(a), in conducting the performance tests required in 40 CFR §60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures in this section, except as provided in 40 CFR §60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

119. In accordance with §19.304 of Regulation #19, 40 CFR §60.7(c), and 40 CFR §60.284, the permittee shall continue to quarterly submit excess emission reports to the following address:

Arkansas Department of Environmental Quality
Air Division

Attn: Air Enforcement Branch
Post Office Box 8913
Little Rock, Arkansas 72119

120. 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, either natural gas or natural gas and specification oil may be used as fuel in the No. 4 Lime Kiln.

121. 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 specification grade oil shall not exceed 1.0% by weight.

122. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the sulfur content of the specification grade oil shall be verified by testing or vendors' guarantees. The permittee shall maintain a record of each fuel shipment and the associated sulfur content. This record shall be updated with each shipment, kept on site, shall be made available to Department personnel upon request and may be used by the Department for enforcement purposes.

123. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test particulate matter emissions from the No. 4 Lime Kiln (SN-25). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 as found in 40 CFR Part 60 Appendix A. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

124. Pursuant to §19.304 and §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §60.284, the permittee shall continue to operate and maintain for the No. 4 Lime Kiln a continuous monitoring system to monitor and record TRS concentration on a dry basis, percent of O_2 by volume on a dry basis, pressure drop across the scrubber and liquid supply pressure.

125. 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 continuous emission monitors at the No. 4 Lime Kiln shall be operated in accordance with the Department Continuous Emission Monitoring Systems Conditions (Appendix A) and the applicable Performance Standards of 40 CFR Part 60 Appendix B.

126. 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, all continuous monitoring data may, at the discretion of the Department, be used to determine violations of the emissions limits or conditions of this permit.

127. Pursuant to §19.801 et seq of of Regulation #19, the permittee may use the No. 4 Lime Kiln (SN-25) as an alternate incinerator for NCGs and SOGs during periods when the Incinerator (SN-83) or its associated control equipment is inoperative.

128. Pursuant to §19.304, §19.501 et seq, and §19.801 et seq of Regulation #19; 40 CFR §60.283; and 40 CFR §60.284, the TRS concentration of gases leaving the No. 4 Lime Kiln (SN-25) shall not exceed 8 ppm, measured as H_2S on a dry basis and on a 12 hour average, corrected to 10% volume oxygen. The permittee shall continue to operate and maintain CEMs which record the TRS concentration of gases leaving the No. 4 Lime Kiln (SN-25). The TRS monitors shall be operated in accordance with the requirements of 40 CFR §60.284 (date of installation notwithstanding) and the Department Continuous Emission Monitoring Systems Conditions (Appendix A).

SN-#55F, 56F, SN-94, and SN-95
Slaker Vents, Green Liquor Clarifier, White Liquor Clarifier

Source Description

Causticing vents contributions are also included with the slaker emission estimates. The causticizing operation reacts molten inorganic salts from the smelt dissolving tanks with weak wash to form green liquor. Undissolved particles in the green liquor is allowed to settle out in the Green Liquor Clarifier (SN-94).

The mixing of green liquor with lime to form a slurry is termed slaking. The slaking process is designed to combine green liquor and burnt lime (CaO). This mixing, which involves an exothermic chemical reaction, takes place in one of two Slakers. The emissions are exhausted through two adjacent Slaker Vents, SN-55 and SN-56. After being mixed with lime in the slakers the green liquor goes through a series of causticizing tanks. These causticizers provide the residence time necessary for the lime to react with the green liquor and form white liquor.

White liquor is used as the main cooking liquor in the digester. The white liquor is allowed to settle in the White Liquor Clarifier (SN-95).

Specific Conditions

129. 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. Compliance with this Specific Condition is limited by maximum pulp production.

SN	Description	Pollutant	lb/hr	ton/yr
55F	Lime Slaker Vent #1	VOC	0.5	2.1
56F	Lime Slaker Vent #2	VOC	0.5	2.1
94	Green Liquor Clarifier	VOC	1.5	6.4
95	White Liquor Clarifier	VOC	0.1	0.1

SN-#62 and #63
Fine Paper Machines No. 1 and No. 2

Source Description

Communication paper is made on the two fine paper machines (No. 1 and 2 Fine Paper Machines). Each machine includes its own stock preparation, head box, wire section, press section, dryer sections, coater section, calendar stacks, reel and drum winder. The fine paper machines produce a variety of products, including but not limited to, bond paper, envelope, tablet and copier paper. Emissions from Fine Paper Machine No. 1 (SN-62) occur primarily from the fourdrinier vacuum pump exhausts, press section vents, dryer exhaust and coating section. Fine Paper Machine No. 2 (SN-63) is nearly identical to Fine Paper Machine No. 1.

Specific Conditions

130. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #132.

SN	Description	Pollutant	lb/hr	ton/yr
62	Fine Paper Machine No. 1	VOC	1.4	6.0
63	Fine Paper Machine No. 2	VOC	1.6	6.6

131. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Condition #132.

SN	Description	Pollutant	lb/hr	ton/yr
62	Fine Paper Machine No. 1	Acetone	0.4	1.5
		Acetaldehyde	0.73	3.2
		Acrolein	0.04	0.16
		Benzene	0.01	0.04

SN	Description	Pollutant	lb/hr	ton/yr
62	Fine Paper Machine No. 1 (Continued)	1,2-Dichlorobenzene	0.05	0.22
		Formaldehyde	0.11	0.47
		Methanol	1.59	6.95
		Methyl Ethyl Ketone	0.06	0.24
		1,2,4-Trichlorobenzene	0.26	1.13
		Styrene	0.06	0.26
		Tetrachloroethylene	0.09	0.39
		Xylene	0.06	0.20
63	Fine Paper Machine No. 2	Acetaldehyde	0.81	3.52
		Acrolein	0.04	0.17
		Benzene	0.01	0.05
		Formaldehyde	0.12	0.52
		Methanol	1.74	7.64
		Methyl Ethyl Ketone	0.06	0.26
		Styrene	0.07	0.29
		Tetrachloroethylene	0.10	0.43
		1,2,4-Trichlorobenzene	0.29	1.25
		Xylene	0.05	0.23

132. 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 produce in excess of 1050 machine dried tons of paper per day from the Fine Paper Machines No. 1 and No. 2 combined, 30 day rolling average.

133. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #132. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

SN-#64 and #65
Board Machine No. 3

Source Description

The Board Machine No. 3 produces bleached board using the wet end, dry end and broke systems. The board is used primarily as cup stock and liner board for boxes. Emissions from Board Machine No. 3 occur primarily from the vacuum pump exhausts, press section vents, dryer exhausts, coating section and combustion sources in the coating section. Emissions from the wet end, dry end and coating operations of Board Machine No. 3 are bubbled together (SN-64). There are sixteen gas burners (SN-65) with a total heating value of 12.3 million Btu per hour located on the board machine following the coating operations.

Specific Conditions

134. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #137 and #138

SN	Description	Pollutant	lb/hr	ton/yr
64	Board Machine No. 3	VOC	2.4	10.2
65	Board Machine No. 3 Burners	PM_{10} SO_2 VOC CO NO_X	0.2 0.1 0.1 1.3 1.5	0.5 0.1 0.4 5.4 6.5

135. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Conditions #137 and #138.

SN	Description	Pollutant	lb/hr	ton/yr
64	Board Machine No. 3	Acetone	1.4	5.9

SN	Description	Pollutant	lb/hr	ton/yr
		Hexane	0.03	0.12
65	Board Machine No. 3 Burners	PM	0.2	0.5

136. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the Board Machine No. 3 Burners (SN-65) gases which exhibit an opacity greater than 5%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

137. Pursuant to §18.1004 of Regulation #18, §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 for the Board Machine No. 3 Burners (SN-65).

138. Pursuant to §18.1004 of Regulation #18, §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 produce in excess of 850 machine dried tons of paper per day, 30 day rolling average, from the Board Machine No. 3.

139. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limits listed in Specific Condition #138. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

Tissue Machines No. 4 through No. 9

Source Description

There are currently five tissue machines (Tissue Machines No. 4 through No. 8) at the Georgia-Pacific Crossett Paper Mill which manufacture tissue for conversion into bathroom tissue, towel, facial tissues, and napkins. In addition, the Mill also has an additional three machines that produce communications papers and bleached paperboard.

Pulp is supplied to the five tissue machines in varying proportions depending upon the desired product. The tissue papermaking process involves stock preparation, wet end - fourdrinier, press sections mix tanks and blend tanks, dry end - dryer sections with air hoods, reel and winder, and broke system finishing operations. Pulp stock is made into paper by forming a sheet on a continuously moving wire screen (the fourdrinier); removing water by gravity, vacuum and pressing, and drying with heated rolls. The water removed from the stock is called white water. The white water is collected for reuse in stock preparation or sewered as wastewater.

The TAD technology is a new technology. The difference between the TAD technology and the conventual technology involves not only the drying section of the paper machine, but covers almost the entire machine. The TAD allows the evaporation of large quantities of water and it imparts optimum quality with high bulk and great softness. In addition, the essential advantage of soft tissue production as compared to the conventional method is that a high bulk tissue quality can be produced with less fiber. The newly installed No. 9 Paper Machine will employ this technique.

The TAD process has an incoming sheet of paper to TAD #1 at 75% wet, being dried by hot air traveling through the sheet, TAD fabric, and TAD dryer. Approximately 80% of the air is recirculated back into the burner chamber for reuse. The TAD #2 units air system operates like TAD #1, exiting at 15% wet. The sheet of paper leaves the TAD fabric at the pressure roll. The TAD fabric is washed and cleaned with water showers and vacuum in a closed loop recirculation system, removing loose fiber particles of various sizes. The sheet of paper leaving the pressure roll nip attaches to the yankee surface which is similar to existing tissue machines in Crossett.

Tissue converting includes the operations involved in converting large parent rolls of tissue from the tissue machines into finished products. This includes rewinding into smaller sized rolls, folding, printing, cutting, packaging and shipping.

Dust in the tissue converting area is controlled using filters with the exhaust air being recycled back into the building. Trim from the converting operations is sent to the repulpers

by pneumatic systems. A cyclone removes the trim from the air stream prior to discharging the air through the roof. Minimal amounts of VOCs may be emitted from the glue that is used to seal boxes, the lubricants used on the machines and the dye used for printing patterns on the material.

SN-#46, #66 and #67
Tissue Machine No. 4

Emissions from the wet end and dry end of Tissue Machine No. 4 (SN-66) have been bubbled together. The Tissue Machine No. 4 Burners (SN-46) combust natural gas at a total heating rate of 20 million Btu per hour. Tissue Machine No. 4 Dust System (SN-67) uses a 20,000 cfm scrubber to control particulate matter emissions.

Specific Conditions

140. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #143 and #144.

SN	Description	Pollutant	lb/hr	ton/yr
46	Tissue Machine No. 4 Burners	PM_{10} SO_2 VOC CO NO_X	0.2 0.1 0.2 0.2 2.4	0.8 0.1 0.6 8.7 10.3
66	Tissue Machine No. 4	VOC TRS	0.4 0.1	1.4 0.2
67	Tissue Machine No. 4 Dust System	PM_{10}	0.3	1.1

141. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Conditions #143 and #144.

SN	Description	Pollutant	lb/hr	ton/yr
46	Tissue Machine No. 4 Burners	PM Formaldehyde	0.1 0.01	0.8 0.01

SN	Description	Pollutant	lb/hr	ton/yr
		Hexane	0.05	0.19
66	Tissue Machine No. 4	Acetaldehyde	0.29	1.23
		Acrolein	0.02	0.06
		Benzene	0.01	0.02
		1,2-Dichlorobenzene	0.02	0.09
		Formaldehyde	0.05	0.18
		Methanol	0.61	2.67
		Methyl Ethyl Ketone	0.03	0.10
		Styrene	0.03	0.10
		Tetrachloroethylene	0.04	0.15
		1,2,4-Trichlorobenzene	0.10	0.44
		Xylene	0.02	0.08
67	Tissue Machine No. 4 Dust System	PM	0.3	1.1

142. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from SN-46 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

The permittee shall not cause to be discharged to the atmosphere from SN-67 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #146.

The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Appendix A.

143. Pursuant to §18.1004 of Regulation #18, §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 for Tissue Machine No. 4 Burners (SN-46).

144. Pursuant to §18.1004 of Regulation #18, §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 produce in excess of 173 machine dried tons of paper per day, 30 day rolling average, from the Tissue Machine No. 4.

145. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limits listed in Specific Condition #144. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

146. Pursuant to §18.1104 of Regulation #18, §19.303 of Regulation #19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the scrubber shall be kept in good working condition at all times and shall meet the conditions shown in the following table. The scrubber liquid flow rate shall be measured daily. The results shall be kept on site and be available to Department personnel upon request.

SN	Control Equipment	Parameter	Units	Minimum Operating Limits
67	scrubber	liquid flow rate	gal/min	70

SN-#47, #54 and #68
Tissue Machine No. 5

Emissions from the wet end and dry end of Tissue Machine No. 5 (SN-68) have been bubbled together. The Tissue Machine No. 5 Burners (SN-47) are rated at 21 million Btu per hour. The burners are low NO_X burners. The Tissue Machine No. 5 Dust System (SN-54) uses a 20,000 cfm scrubber to control particulate matter emissions.

BACT Summary for Tissue Machine No. 5 Burners

Emission Unit	Pollutant	BACT Determination
No. 5 Tissue Machine Natural Gas Fired Burners (SN-47)	PM_{10} CO NO_X SO_2 VOC	Clean Fuel Good Combustion Practice Low NO_X Burners Clean Fuel No Control

Specific Conditions

147. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #155.

SN	Description	Pollutant	lb/hr	ton/yr
54	Tissue Machine No. 5 Dust System	PM_{10}	0.3	1.1
68	Tissue Machine No. 5	VOC TRS	0.2 0.1	2.8 0.2

148. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #154, #155, and #157.

SN	Description	Pollutant	lb/hr	ton/yr
47	Tissue Machine No. 5 Burners (21 MMBtu/hr)	PM PM_{10}	0.2	0.9
			0.0089 lb/MMBtu	
		SO_2	0.1	0.1
			0.0007 lb/MMBtu	
		VOC	1.2	5.2
			0.0564 lb/MMBtu	
		CO	4.5	19.7
			0.2142 lb/MMBtu	
		NO_X	1.2	5.0
			0.0539 lb/MMBtu	

149. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Condition #154 and #155.

SN	Description	Pollutant	lb/hr	ton/yr
47	Tissue Machine No. 5 Burners	PM Formaldehyde Hexane	0.2 0.01 0.05	0.9 0.01 0.20
54	Tissue Machine No. 5 Dust System	PM	0.3	1.1

SN	Description	Pollutant	lb/hr	ton/yr
68	Tissue Machine No. 5	Acetaldehyde	0.16	0.69
		Acrolein	0.01	0.04
		Benzene	0.01	0.01
		1,2-Dichlorobenzene	0.02	0.05
		Formaldehyde	0.03	0.11
		Methanol	0.35	1.50
		Methyl Ethyl Ketone	0.02	0.06
		Styrene	0.02	0.06
		Tetrachloroethylene	0.02	0.09
		1,2,4-Trichlorbeneze	0.10	0.44
		Xylene	0.02	0.08

150. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from SN-54 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #151. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

151. **Pursuant to §18.1104 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the scrubber shall be kept in good working condition at all times and shall meet the conditions shown in the following table. The scrubber liquid flow rate and the gas pressure drop across the unit shall be measured daily. The results shall be kept on site and be available to the Department personnel upon request.**

SN	Control Equipment	Parameter	Units	Minimum Operating Limits
54	scrubber	liquid flow rate	gal/min	70
		gas pressure drop across unit	inches, H_20	8

152. **Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311,** the permittee may, in the event of emergency maintenance on SN-54, shut down the dust collection system and contain the tissue dust within the building during the continued operation of the paper machine. Good housekeeping practices shall

be used to control tissue dust and prevent visible emissions to the atmosphere. In the event that repairs on a scrubber extend beyond 12 hours, then a 6-minute observation for visible emissions shall be conducted once per 12-hour shift. The observation shall be a yes/no check and shall be conducted at the outside corners of the affected Tissue Machine building. If visible tissue dust emissions are detected for more than 6 minutes per hour, then corrective action shall be taken to reduce emissions and document that visible emissions do not appear after corrective action is taken.

153. Pursuant to §19.503 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from SN-47 gases which exhibit an opacity greater than 5%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

154. 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 for the Tissue Machine No. 5 Burners (SN-47).

155. Pursuant to §18.1004 of Regulation #18, §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 produce in excess of 97 machine dried tons of paper per day, 30 day rolling average, from the Tissue Machine No. 5.

156. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limits listed in Specific Condition #155. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

157. **Pursuant to §19.702 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall test SN-47 for CO and NO_X to verify compliance with the BACT emission limits specified in Specific Condition #148 initially and once every three years thereafter. The first test shall be conducted within 60 days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the modified permitted source. Testing shall be performed in accordance with Plantwide Condition #3. Testing for CO and NO_X shall also be performed in accordance with EPA Reference Methods 10 and 7E respectively.**

During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

SN-#48, #51, #52 and #69
Tissue Machine No. 6

Emissions from the wet end and dry end of Tissue Machine No. 6 (SN-69) have been bubbled together. The Tissue Machine No. 6 Burners (SN-48) are rated at 58.4 million Btu per hour. The burners are low NO_X burners. Tissue Machine No. 6 Dust System (SN-52) uses a 47,000 cfm scrubber to control particulate matter emissions. A 47,000 cfm scrubber is used to control particulate emissions from the rewinder (SN-51) near Tissue Machine No. 6.

BACT Summary for Tissue Machine No. 6 Burners

Emission Unit	Pollutant	BACT Determination
No. 6 Tissue Machine Natural Gas Fired Burners (SN-48)	PM_{10} CO NO_X SO_2 VOC	Clean Fuel Good Combustion Practice Low NO_X Burners Clean Fuel No Control

Specific Conditions

158. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #166 and #168.

SN	Description	Pollutant	lb/hr	ton/yr
51	Tissue Machine No. 6 Rewinder	PM_{10}	0.5	1.9
52	Tissue Machine No. 6 Dust System	PM_{10}	0.5	1.9
69	Tissue Machine No. 6	VOC TRS	0.6 0.1	2.2 0.3

159. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #167.

SN	Description	Pollutant	lb/hr	ton/yr
48	Tissue Machine No. 6 Burners (58.4 MMBtu/hr)	PM PM_{10}	0.6	2.3
			0.0089 lb/MMBtu	
		SO_2	0.1	0.2
			0.0007 lb/MMBtu	
		VOC	1.2	4.9
			0.0192 lb/MMBtu	
		CO	6.7	29.1
			0.1139 lb/MMBtu	
		NO_X	3.2	13.8
			0.0539 lb/MMBtu	

160. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Condition #166 and #168.

SN	Description	Pollutant	lb/hr	ton/yr
48	Tissue Machine No. 6 Burners	PM Formaldehyde Hexane	0.6 0.01 0.05	2.3 0.03 0.20
51	Tissue Machine No. 6 Rewinder	PM	0.5	1.9
52	Tissue Machine No. 6 Dust System	PM	0.5	1.9
69	Tissue Machine No. 6	Acetaldehyde Acrolein Benzene	0.44 0.03 0.01	1.92 0.10 0.03

SN	Description	Pollutant	lb/hr	ton/yr
		1,2-Dichlorobenzene	0.03	0.13
		Formaldehyde	0.07	0.29
		Methanol	0.96	4.17
		Methyl Ethyl Ketone	0.03	0.15
		Styrene	0.04	0.16
		Tetrachloroethylene	0.06	0.24
		1,2,4-Trichlorobenzene	0.16	0.68
		Xylene	0.03	0.12

161. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from SN-51 or SN-52 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #165. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

162. 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 conduct weekly observations of the opacity from SN-51 and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. The results of these observations shall be kept on site and shall be made available to Department personnel upon request.

163. Pursuant to §18.1104 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, **the permittee shall keep the scrubber on SN-52 in good working condition at all times and shall meet the conditions shown in the following table. The scrubber liquid flow rate and the gas pressure drop across the unit shall be measured daily. The results shall be kept on site and be available to the Department personnel upon request.**

SN	Control Equipment	Parameter	Units	Minimum Operating Limits

SN	Control Equipment	Parameter	Units	Minimum Operating Limits
52	scrubber	liquid flow rate	gal/min	300
		gas pressure drop acrosse unit	inches, H_20	8

164. **Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311**, the permittee may, in the event of emergency maintenance on SN-52, shut down the dust collection system and contain the tissue dust within the building during the continued operation of the paper machine. Good housekeeping practices shall be used to control tissue dust and prevent visible emissions to the atmosphere. In the event that repairs on a scrubber extend beyond 12 hours, then a 6-minute observation for visible emissions shall be conducted once per 12-hour shift. The observation shall be a yes/no check and shall be conducted at the outside corners of the affected Tissue Machine building. If visible tissue dust emissions are detected for more than 6 minutes per hour, then corrective action shall be taken to reduce emissions and document that visible emissions do not appear after corrective action is taken.

165. Pursuant to §19.503 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from SN-48 gases which exhibit an opacity greater than 5%. The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

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, natural gas shall be the only fuel used for the Tissue Machine No. 6 Burners (SN-48).

167. Pursuant to §19.702 and §19.901 of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall test SN-48 for CO and NO_X to verify compliance with the BACT emission limits specified in Specific Condition #159 initially and once every three years thereafter. The first test shall be conducted within 60 days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the modified permitted source. Testing shall be performed in accordance with Plantwide Condition #3. Testing for CO and NO_X shall also be performed in accordance with EPA Reference Methods 10 and 7E respectively. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout

capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

168. Pursuant to §18.1004 of Regulation #18, §19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR §70.6, the permittee shall not produce in excess of 270 machine dried tons of paper per day, 30 day rolling average, from the Tissue Machine No. 6.

169. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limits listed in Specific Condition #168. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

SN-#49, #50 and #70
Tissue Machine No. 7

Emissions from the wet end and dry end of Tissue Machine No. 7 (SN-70) have been bubbled together. The Tissue Machine No. 7 Burners (SN-49) combust natural gas at a total heating rate of 41 million Btu per hour. The burners are low NO_X burners. Tissue Machine No. 7 Dust System (SN-50) uses a 44,000 cfm scrubber to control particulate matter emissions.

Specific Conditions

170. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #173 and #174.

SN	Description	Pollutant	lb/hr	ton/yr
49	Tissue Machine No. 7 Burners	PM_{10} SO_2 VOC CO NO_X	0.4 0.1 0.8 4.7 2.3	1.6 0.1 3.4 20.4 9.7
50	Tissue Machine No. 7 Dust System	PM_{10}	0.5	2.1
70	Tissue Machine No. 7	VOC TRS	0.4 0.1	1.5 0.3

171. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Conditions #173 and #174.

SN	Description	Pollutant	lb/hr	ton/yr
49	Tissue Machine	PM	0.4	1.6

SN	Description	Pollutant	lb/hr	ton/yr
	No. 7 Burners	Formaldehyde Hexane	0.01 0.09	0.02 0.38
50	Tissue Machine No. 7 Dust System	PM	0.5	2.0
70	Tissue Machine No. 7	Acetaldehyde Acetone Acrolein Benzene 1,2-Dichlorobenzene Formaldehyde Methyl Ethyl Ketone Methanol Styrene Tetrachloroethylene 1,2,4-Trichlorobenzene Xylene	0.41 0.4 0.02 0.01 0.03 0.06 0.03 0.89 0.04 0.05 0.15 0.03	1.78 1.7 0.09 0.03 0.12 0.26 0.14 3.86 0.15 0.22 0.63 0.11

172. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from SN-49 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

The permittee shall not cause to be discharged to the atmosphere from SN-50 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by compliance with Specific Condition #176.

The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Appendix A.

173. Pursuant to §18.1004 of Regulation #18, §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 for Tissue Machine No. 7 Burners (SN-49).

174. Pursuant to §18.1004 of Regulation #18, §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 produce in excess of 250 machine dried tons of paper per day, 30 day rolling average, from the Tissue Machine No. 7.

175. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limits listed in Specific Condition #176. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

176. The Tissue Machine No. 7 Dust System (SN-50) is subject to and shall comply with all applicable provisions of §18.801 of Regulation 18, §19.501 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring

A. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a scrubber liquid flowrate of at least 300 gallons per minute

B. Pursuant to 40 CFR Part §64.6(c)(3), the permittee shall monitor and maintain daily records to demonstrate compliance with Specific Condition #176 (a). Records shall be kept onsite and made available to the Department upon request.

C. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain the scrubber in good working condition at all times so that pollutant removal is maintained.

177. The Tissue Machine No. 7 Dust System (SN-50) is subject to and shall comply with all applicable provisions of §18.801 of Regulation 18, §19.501 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring. The following information pertaining to exceedances or excursions from permitted values shall be submitted in semi-annual reports in accordance with General Provision #7 as outlined in 40 CFR §70.69.

A. Pursuant to 40 CFR §64.9(a)(2)(i) and §64.9(b), the permittee shall maintain records for SN-50 that summarize the number, duration, and cause of excursions or exceedances of emission limits as well as corrective action taken.

B. Pursuant to 40 CFR §64.9(a)(2)(ii) and §64.9(b), the permittee shall maintain records for SN-50 that summarize the number, duration, and cause of monitoring equipment downtime incidents, other than routine downtime for calibration checks.

C. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain a quality improvement plan (QIP) threshold for each indicator of no more than nine excursions or 5% of the daily averages in a six-month period.

D. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall develop and implement a new QIP if the threshold is exceeded during any six-month period.

E. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain records for SN-50 that describe the actions taken to implement the QIP. Upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances.

178. **Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311**, the permittee may, in the event of emergency maintenance on SN-50, shut down the dust collection system and contain the tissue dust within the building during the continued operation of the paper machine. Good housekeeping practices shall be used to control tissue dust and prevent visible emissions to the atmosphere. In the event that repairs on a scrubber extend beyond 12 hours, then a 6-minute observation for visible emissions shall be conducted once per 12-hour shift. The observation shall be a yes/no check and shall be conducted at the outside corners of the affected Tissue Machine building. If visible tissue dust emissions are detected for more than 6 minutes per hour, then corrective action shall be taken to reduce emissions and document that visible emissions do not appear after corrective action is taken.

SN-79, 80 and 81
Tissue Machine No. 8

Proposed emissions from the wet end and dry end of Tissue Machine No. 8 (SN-80) have been bubbled together. The Tissue Machine No. 8 Burners (SN-79) combust natural gas at a total heating rate of 50 million Btu per hour. The burners will be low NO_X burners. Tissue Machine No. 8 Dust System (SN-81) is equipped with a 55,000 cfm wet venturi scrubber dust system to control particulate matter emissions.

BACT Summary for Tissue Machine No. 8

Emission Unit	Pollutant	BACT Determination
No. 8 Tissue Machine Natural Gas Fired Burners (SN-79)	PM_{10} CO NO_X SO_2 VOC	Clean Fuel Good Combustion Practice Low NO_X Burners Clean Fuel No Control
No. 8 Tissue Machine (SN-80)	VOC	No Control
No. 8 Tissue Machine Dust System (SN-81)	PM_{10}	Wet Scrubber

Specific Conditions

179. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #182, #187, #189, and #190.

SN	Description	Pollutant	lb/hr	ton/yr
79	Tissue Machine No. 8 Burners	PM	0.9	3.6
		PM_{10}	0.0164 lb/MMBtu	

SN	Description	Pollutant	lb/hr	ton/yr
	(50 MMBtu/hr)	SO_2	0.1	0.2
			0.0007 lb/MMBtu	
79	Tissue Machine No. 8 Burners (50 MMBtu/hr)	VOC	1.0	4.2
			0.0192 lb/MMBtu	
		CO	5.7	24.9
			0.1139 lb/MMBtu	
		NO_X	4.6	20.0
			0.0913 lb/MMBtu	
80	Tissue Machine No. 8	VOC	0.5	1.8
			0.045 lb/MDT	
		TRS	0.1	0.3
81	Tissue Machine No. 8 Dust System	PM PM_{10}	1.7	7.2
			0.0035 gr/dscf	

180. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates are effectively limited by Specific Condition #182 and #187.

SN	Description	Pollutant	lb/hr	ton/yr
79	Tissue Machine No. 8 Burners	PM Formaldehyde Hexane	0.9 0.01 0.11	3.6 0.02 0.47
80	Tissue Machine No. 8	Acetaldehyde Acetone Acrolein	0.35 0.4 0.02	1.51 1.4 0.08

SN	Description	Pollutant	lb/hr	ton/yr
		Benzene	0.01	0.02
		1,2-Dichlorobenzene	0.03	0.11
		Formaldehyde	0.06	0.23
		Methanol	0.75	3.27
		Methyl Ethyl Ketone	0.03	0.12
		Styrene	0.03	0.13
		Tetrachloroethylene	0.05	0.19
		1,2,4-Trichlorobenzene	0.13	0.55
		Xylene	0.03	0.10

181. Pursuant to §19.503 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from SN-79 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

The permittee shall not cause to be discharged to the atmosphere from SN-81 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated Specific Condition #184.

The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

182. 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 for Tissue Machine No. 8 Burners (SN-79).

183. Pursuant to §19.703 and §19.901 et seq 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 operate and maintain a device to measure the pressure drop across the wet venturi scrubber on the Tissue Machine No. 8 Dust System (SN-81).

184. The Tissue Machine No. 8 Dust System (SN-81) is subject to and shall comply with all applicable provisions of §18.801 of Regulation 18, §19.501 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring

A. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a scrubber liquid pressure of at least 8 inches of water.

B. Pursuant to 40 CFR Part §64.6(c)(3), the permittee shall monitor and maintain daily records to demonstrate compliance with Specific Condition #184 (a). Records shall be kept onsite and made available to the Department upon request.

C. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain the scrubber in good working condition at all times so that pollutant removal is maintained.

185. The Tissue Machine No. 8 Dust System (SN-81) is subject to and shall comply with all applicable provisions of §18.801 of Regulation 18, §19.501 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring. The following information pertaining to exceedances or excursions from permitted values shall be submitted in semi-annual reports in accordance with General Provision 7 as outlined in 40 CFR §70.69.

A. Pursuant to 40 CFR §64.9(a)(2)(i) and §64.9(b), the permittee shall maintain records for SN-81 that summarize the number, duration, and cause of excursions or exceedances of emission limits as well as corrective action taken.

B. Pursuant to 40 CFR §64.9(a)(2)(ii) and §64.9(b), the permittee shall maintain records for SN-81 that summarize the number, duration, and cause of monitoring equipment downtime incidents, other than routine downtime for calibration checks.

C. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain a quality improvement plan (QIP) threshold for each indicator of no more than nine excursions or 5% of the daily averages in a six-month period.

D. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall develop and implement a new QIP if the threshold is exceeded during any six-month period.

E. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain records for SN-81 that describe the actions taken to implement the QIP. Upon

completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances.

186. Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee may, in the event of emergency maintenance on SN-81-52, shut down the dust collection system and contain the tissue dust within the building during the continued operation of the paper machine. Good housekeeping practices shall be used to control tissue dust and prevent visible emissions to the atmosphere. In the event that repairs on a scrubber extend beyond 12 hours, then a 6-minute observation for visible emissions shall be conducted once per 12-hour shift. The observation shall be a yes/no check and shall be conducted at the outside corners of the affected Tissue Machine building. If visible tissue dust emissions are detected for more than 6 minutes per hour, then corrective action shall be taken to reduce emissions and document that visible emissions do not appear after corrective action is taken.

187. Pursuant to §18.1004 of Regulation #18, §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 produce in excess of 212 machine dried tons of paper per day, 30 day rolling average, from the Tissue Machine No. 8.

188. Pursuant to §18.1004 of Regulation #18, §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 maintain records which demonstrate compliance with the limits listed in Specific Condition #187. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

189. Pursuant to §19.702 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall test SN-79 for CO and NO_X to verify compliance with the BACT emission limits specified in Specific Condition #179 initially and once every three years thereafter. The first test shall be conducted within 60 days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. Testing for CO and NO_X shall be performed in accordance with Plantwide Condition #3 and EPA Reference Methods 10 and 7E respectively. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If

90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

190. Pursuant to §19.702 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall test SN-81 for PM/PM_{10} to verify compliance with the BACT emission limit specified in Specific Conditions #179 initially and once every three years thereafter. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 with inclusion of back half sampling train particulate. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughout capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

SN-84,85,86,87,88,89,90,91,92
No. 9 Tissue Machine

The new No. 9 Tissue Machine (SN-90) will incorporate TAD technology, which is vastly different than conventional paper machines. With the machine installation, several associated sources will be installed as well: Vacuum Pump Exhaust (SN-84), TAD Exhaust No. 1 (SN-85A), TAD Exhaust No.2 (SN-85B), Mist Elimination System (SN-86), Dust Collection System (SN-87), Converting Repulper "A" (SN88), Yankee Aircap Exhaust, 21 MMBTU/hr, and Emergency Exhaust (SN-89 and SN-89A), Converting Equipment Emissions (SN-91), and a Fan Pump Silo Vent (SN-92). SN-85A and SN-85B are rated at 50 MMBTU/hr and 90 MMBTU/hr, respectively. SN-89 is composed of two burners, rated combined at 21 MMBTU/hr. All burners will be natural gas-fired. **The Yankee Aircap Emergency Exhaust is not a separate stack from the Yankee Aircap Exhaust and is only used as an emergency damper.**

Specific Conditions

191. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #193 and #199 through #204.

SN	Description	Pollutant	lb/hr	ton/yr
84	Vacuum Pump Exhaust	PM_{10}	0.2	0.6
			0.0002 gr/ft^3	
		VOC	0.2	0.7
85A	TAD Exhaust No. 1	PM_{10}	0.9	3.9
			0.0217 lb/MMBTU	
		SO_2	0.1	0.3
		VOC	4.1	17.7
		NO_X	8.2	36.0
			0.0913 lb/MMBTU	
		CO	16.2	71.0

			0.18 lb/MMBTU

SN	Description	Pollutant	lb/hr	ton/yr
85B	TAD Exhaust No. 2	PM_{10}	1.8	7.8
			0.0217 lb/MMBTU	
		SO_2	0.1	0.2
		VOC	2.3	9.9
		NO_X	4.6	24.0
			0.0913 lb/MMBTU	
		CO	9.0	20.0
			0.18 lb/MMBTU	
86	Mist Elimination System	PM_{10}	0.2	0.7
			0.0002 gr/ft^3	
		VOC	0.6	2.6
87	Dust Collection System	PM_{10}	1.1	4.7
			0.001 gr/ft^3	
		VOC	0.1	0.2
88	Converting Repulper "A"	PM_{10}	0.1	0.4
			0.001 gr/ft^3	
		VOC	0.1	0.3
89	Yankee AirCap Exhaust	PM_{10}	0.4	1.5
			0.0164 lb/MMBTU	
		SO_2	0.1	0.2

		VOC	0.4	1.8
		NO_X	1.9	8.4
			0.0913 lb MMBTU/hr	
		CO	3.8	16.6
			0.18 lb/MMBTU	

SN	Description	Pollutant	lb/hr	ton/yr
90	No. 9 Paper Machine Non-Stack*	PM_{10}	1.0	4.2
		VOC	66.2	289.8
			6.8 lb/ton of MDT	
91	Converting Equipment Non-Stack*	PM_{10}	0.2	0.8
		VOC	66.2	289.8
			6.8 lb/ton of MDT	
92	Fan Pump Silo Vent	VOC	0.1	0.2

*The emission rates listed for each source (SN-90 and SN-91) represent the combined totals for VOC.

192. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #193, #200, #203, and #204.

SN	Description	Pollutant	lb/hr	ton/yr
84	Vacuum Pump	PM	0.2	0.6
		Acetaldehyde	0.01	0.04
		Biphenyl	0.02	0.08
		Chloroform	0.02	0.08
		Methanol	0.03	0.10
		Toluene	0.02	0.07

85A	TAD Exhaust 1	PM	0.9	3.9
		Acetaldehyde	0.05	0.23
		Biphenyl	0.24	1.17
		Formaldehyde	0.01	0.03
		Hexane	0.17	0.72
85B	TAD Exhaust 2	PM	1.8	7.8
		Acetaldehyde	0.03	0.12
		Biphenyl	0.16	0.63
		Formaldehyde	0.01	0.02
		Hexane	0.08	0.38
86	Mist Elimination System	PM	0.2	0.7
		Acetaldehyde	0.02	0.09
		Biphenyl	0.17	0.74

SN	Description	Pollutant	lb/hr	ton/yr
86	Mist Elimination System (Continued)	Methylene Chloride	0.01	0.05
		Phenol	0.20	0.86
87	Dust Collection System	PM	1.1	4.7
		Chloroform	0.10	0.12
88	Converting Repulper "A"	PM	0.1	0.4
		Chloroform	0.10	0.23
89	Yankee Aircap Exhaust	PM	0.4	1.5
		Acetaldehyde	0.08	0.35
		Biphenyl	0.40	1.80
		Hexane	0.04	0.17
90	No. 9 Paper Machine Non-Stack	PM		
		Acetaldehyde	1.2	5.0
91	Converting Equipment Non-Stack	Biphenyl	0.02	0.09
		Methylene Chloride	0.17	0.74
		Phenol	0.01	0.05
		Epichlorohydrin	0.20	0.86
			0.08	0.33

193. 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 for Tissue Machine No. 9 Burners, SN-85A, SN-85B, and SN-89.

194. Pursuant to §19.503 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from SN-85A, SN-85B, and SN-89 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by the use of natural gas.

The permittee shall not cause to be discharged to the atmosphere from SN-84 and SN-88 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by initial testing requirements for particulate for both sources and the use of the fan for SN-88.

The permittee shall not cause to be discharged to the atmosphere from SN-86 and SN-87 gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by proper operation and monitoring period of water sprays in SN-86 and the flow rate of water through the scrubber for SN-87.

The opacity shall be measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.

195. Pursuant to §§19.503 and §§19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from SN-90 and SN-91 gases which exhibit any visible emissions for any duration exceeding 6 minutes per 60-minute period. This test will not be a EPA Method 9 test, only a yes/no check for visible emissions. The permittee shall check for the presence of visible emissions from each corner of the No. 9 Paper Machine Building. If visible emissions are detected for more than 6 minutes per hour, then the permittee shall determine the source of the visible emissions. Once the source is identified, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated weekly, kept on site, and made available to Department personnel upon request.

a. The date and time of the observation
b. If visible emissions were detected

c. If visible emissions were detected, the source number causing the visible emissions, the cause of the visible emissions, the corrective action taken, and whether any visible emissions appeared after the corrective action was taken.
d. The name of the person conducting the observation.

196. Pursuant to §19.703 and §19.901 et seq 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 fan associated with SN-88 shall be in use during that source's operation.

197. Pursuant to §19.703 and §19.901 et seq 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 daily monitor and record the usage period of the water spray for SN-86.

198. Pursuant to §19.703 and §19.901 et seq 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 operate and maintain a device to measure the flow rate across the scrubber of SN-87.

199. Pursuant to §19.303 of Regulation #19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the scrubbers and spray systems shall be kept in good working condition at all times and shall meet the conditions shown in the following table. The flowrate shall be measured daily. The results shall be kept on site and be made available to Department personnel upon request.

SN	Control Equipment	Parameter	Units	Minimum Operating Limits
SN-87	scrubber	liquid flow rate	gal/min	250

200. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall initially test PM/PM_{10} emissions from SN-87 to verify compliance with the BACT emission limits, both mass emission rates (lb/hr) and performance limits (gr/ft^3, lb/MMBTU), specified in Specific Condition #191. The test shall be conducted within 60 days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 with inclusion of back half sampling train particulate. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

201. Pursuant to §19.702 and §19.901 et seq of Regulation #19, and 40 CFR Part 52 Subpart E, the permittee shall initially test SN-87 and SN-88 for VOC to verify compliance with the BACT emission limits specified in Specific Condition #191. The test shall be conducted within 60 days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the modified permitted source. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 25A. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

202. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall test CO and NO_x emissions from SN-85A, SN-85B, and SN-89 to verify compliance with the BACT emission limits, both mass emission rates (lb/hr) and performance limits (lb/MMBTU), specified in Specific Condition #191. The first test shall be conducted within 60 days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. Subsequent testing shall be repeated once every three years. Testing for CO and NO_X shall be performed in accordance with Plantwide Condition #3 and EPA Reference Methods 10 and 7E respectively. During the test the permittee shall operate the source within 10 percent of the rated throughput capacity. If 90 percent of the rated throughput capacity can not be achieved, the permittee shall be limited to 11 percent above the actual tested throughput.

203. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain monthly records of additive usage for SN-90 and SN-91 to verify compliance with the VOC BACT emission limits, specifically performance limits (lb/MDT), specified in Specific Condition #191. Records shall also indicate HAPs content and emissions. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

204. Pursuant to §18.1004 of Regulation #18, §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 produce in excess of 250 machine dried tons of paper per day, 30 day rolling average, from the Tissue Machine No. 9. Included in the general throughput limit of 250 MDT per day, 30 day rolling average, the permittee shall not process more than 82,125 air-dried tons of finished paper associated with sources SN-84, SN-86, and SN-92 per rolling 12 month period.

205. Pursuant to §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #204. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

SN-71 and SN-72
No. 8 and No. 9 Extruder Machines

Source Description

The extrusion plant includes the No. 8 and No. 9 extruder machines which polycoat board. The extrusion plant receives board from the board machine and outside board customers and applies a polymer coating. Rolls of board are loaded onto an unwind stand. The board passes through a calender stack and is subjected to a burner which flame seals the board. A n extruded poly sheet is then pressed together with the board. The combined product is then passed through an electrostatic treater (SN-71 for No. 8 Extruder and SN-72 for No. 9 Extruder) which enhances the surface quality of the product. Each extruder has two electrostatic treaters which emit ozone.

Both extrusion lines also include rewinding facilities which can be used to cut the extruded product to size and rewind the material so poly can be applied to the opposite side. The extrusion plant also performs shredding, trim chopping and spool cutting. Particulate matter emissions from these activities are controlled by cyclones.

Specific Conditions

206. Pursuant to §19.501 et seq 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Conditions #208.

SN	Description	Pollutant	lb/hr	ton/yr
71	No. 8 Extruder Electrostatic Treaters (A&B)	PM_{10}	0.4	1.4
72	No. 9 Extruder Electrostatic Treater	PM_{10}	0.6	2.5

207. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced as §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #208.

SN	Description	Pollutant	lb/hr	ton/yr
71	No. 8 Extruder Electrostatic Treaters (A&B)	PM Ozone	0.4 1.8	1.4 7.9
72	No. 9 Extruder Electrostatic Treater	PM Ozone	0.6 1.5	2.5 6.3

208. Pursuant to §18.1004 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not produce in excess of 750 machine dried tons of coated paper per day, 30 day rolling average, from the No. 8 and No. 9 Extruder Machines combined.

209. Pursuant to §18.1004 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #208. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

SN-35F
Aeration Stabilization Basin

Source Description

Wastewater is treated by the Crossett Paper Operations treatment plant. The wastewater is gathered in two open sewers, a bleach plant/utilities sewer and a process sewer. Wastewater Treatment System nutrients are added to the bleach plant/utilities sewer to enhance biological activity. After primary clarification, the process sewer and the bleach plant/utilities sewer combine and flow into one of two settling basins. The effluent travels through a surge basin and is combined with the City of Crossett's treated effluent as it enters a 265 acre extended aeration stabilization basin (ASB, SN-35F). The effluent from the ASB is sent to a holding basin called Mossy Lake, which has a surface area that varies from 200 to 600 acres. Treated effluent is discharged from Mossy Lake to the Ouachita River via Coffee Creek.

Air emissions result from the biological wastewater treatment processes. The air emissions are a factor of such things as the flow to the secondary treatment, the volume of the aeration stabilization basin, the temperature of the aeration stabilization basin and the surface area of the aeration stabilization basin. Also included in the estimation, are contributions from the wastewater clarifier, settling ponds, and sludge dewatering. These potential emissions were not accounted for in the initial permit.

Specific Conditions

210. 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. The emissions from this source are limited by the production levels of the mill.

Pollutant	lb/hr	ton/yr
VOC	16.5	70.8

211. 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. The emissions from this source are limited by the production levels of the mill.

Pollutant	lb/hr	ton/yr
Chloroform Methanol	1.53 0.08	6.69 0.36

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

Pollutant	lb/hr	ton/yr
Methyl Ethyl Ketone	0.02	0.06
Napthalene	0.01	0.05

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

SN-40, 75, 76F, 78F, 82F, and SN-97
Tanks and Miscellaneous Activities

Source Description

There are nine large pulp storage tanks located at Crossett Paper Operations (SN-75). An open storage basin (SN-76F) at the facility stores black liquor. The front black liquor storage basin at the facility was closed in 1996.

Fugitive emissions from unpaved roads (SN-78F) are generated by vehicle traffic. Unpaved roads are located in the utilities area, woodyard, laydown area, contractors area and around the wastewater treatment system.

The Methanol Tank (SN-40) is subject to regulation under NSPS Subpart Kb. The emissions are due to the working and standing losses from the tank.

There are two landfills at Crossett Paper Operations, the East Landfill and the North Landfill. The East Landfill is permitted to operate as a Class IV Landfill and accepts only woodwaste and concrete debris. The North Landfill is an industrial landfill which accepts general waste from the mill. No municipal waste is disposed in either landfill. The only significant source of emissions expected from these landfills is VOC emissions from the North Landfill. The North Landfill was permitted by the Department and began operation on September 1, 1998. The North Landfill is located approximately two miles north of the mill. The West Landfill ceased operation on September 1, 1998. The West Landfill is currently undergoing closure activities.

Specific Conditions

212. 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. Compliance with the pollutant emission rates associated with the Methanol Tank are demonstrated by compliance with Specific Condition #215. The emissions from the other sources are limited by the production levels of the mill.

SN	Description	Pollutant	lb/hr	ton/yr
40	Methanol Storage Tank	VOC	37.5	1.2
75	Pulp Storage Chests	VOC	9.3	40.7
97	Storage Tanks	VOC	33.0	6.8
	Black Liquor Storage Basin No.			

SN	Description	Pollutant	lb/hr	ton/yr
76F	1	VOC	28.1	122.8
78F	Road Emissions	PM_{10}	15.3	67.1
82F	Landfill Operations	PM_{10} VOC	1.3 4.3	0.3 18.7

213. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. The pollutant emission rates associated with the Methanol Tank are effectively limited by Specific Condition #215. The emissions from the other sources are limited by the production levels of the mill.

SN	Description	Pollutant	lb/hr	ton/yr
40	Methanol Storage Tank	Methanol	37.50	1.20
97	Storage Tanks	Methanol	1.5	6.0
75	Pulp Storage Chests	Methanol	2.16	9.47
76F	Black Liquor Storage Basin No. 1	Acetaldehyde Acetone Methanol Methyl Ethyl Ketone	1.31 2.3 16.07 4.10	5.72 9.9 70.38 17.94
78F	Road Emissions	PM	44.7	15.3
82F	Landfill Operations	PM	2.7	0.5

214. The Methanol Tank is subject to and shall comply with all applicable provisions of 40 CFR Part 60 Subpart A General Provisions and Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels due to the fact that the tank was constructed after July 23, 1984 and has a capacity greater than 40 cubic meters. A copy of Subpart Kb is provided in Appendix D. Applicable provisions include, but are not limited to, maintaining records showing the dimension of the storage vessel and an analysis showing the design capacity of the storage vessel in accordance with 60.116b(a) and (b).

215. 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 methanol shall not exceed 40,000 barrels per twelve consecutive months.

216. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific Condition #215. These records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

217. Pursuant to §19.705 of Regulation #19, the permittee shall maintain sufficient records to demonstrate compliance with the throughput limits listed in the Tanks Table. These records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. An annual total and each individual month's data shall be submitted in accordance with General Provision #7.

Contents	Capacity (bbl)	Throughput (bbl/yr)
Gasoline	71	857

SN-#93
Repulpers A, B, and C

Source Description

Three repulpers are used to reprocess broke. These are identified as Repulpers A, B, and C. Each repulper is identical. The repulpers operate without any hoods or fans. The repulpers apply a sodium hypochlorite pulping aid which is added subsurface. All VOC emissions are non-stack in nature. The broke that is repulped is stored in the existing broke stock chests. As part of the permit renewal, the repulpers were added as permitted sources. A minor modification (which is included in this permit revision) allowed the reconstruction of Repulper A which was damaged in a recent fire.

Specific Conditions

218. 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. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #220.

Pollutant	lb/hr	ton/yr
VOC	0.6	2.3

219. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table will not be exceeded. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #220.

Pollutant	lb/hr	ton/yr
Chloroform	0.60	2.30

220. Pursuant to §18.1004 of Regulation #18, §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 1,971,000 pounds per year of hypochlorite at SN-93. This limit is based on a 12-month rolling total.

221. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with the limits listed in Specific

Condition #220. These records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

Georgia-Pacific Corporation - Crossett Paper Operations
Permit #: 597-AOP-R4
AFIN #: 02-00013

CLUSTER RULE PULPING REQUIREMENTS

The Cluster Rule imposes HAP control on the pulping system, which is comprised of all pulping process equipment beginning with the digester system, up to and including the last piece of pulp conditioning equipment prior to the bleaching system. Total HAP control (as methanol) is divided into three source groups: the low volume – high concentration (LVHC) system, the high volume – low concentration (HVLC) system, and the pulping process condensates.

The incinerator (SN-83) is the only source of additional emissions. The incinerator is collecting emissions from other sources for combustion. The emissions from the new Incinerator will be an increase to actual emissions. The Incinerator will be combusting new (natural gas, SOGs, and HVLC NCGs) and existing (LVHC NCGs) fuels. The additional equipment will not increase the emissions or the pulp throughput limits.

Low Volume – High Concentration (LVHC) Collection System

Crossett Paper Operations has an existing LVHC Collection System that routes HAP emissions from the Digester, Turpentine Recovery, and the Evaporator System to the No. 4 Lime Kiln (SN-25) for control. Per the requirements of the Cluster Rule, the only additional LVHC sources that need to be added to the collection system are the Turpentine Decanter and the Foul Condensate Collection Tank.

At Crossett Paper Operations, the digestion of wood chips occurs in a batch operation rather than on a continuous basis. In batch digesters, NCGs, along with steam and HAPs, are removed from the digesters while the chips "cook" – convert to pulp. This stream is cooled to produce batch digester relief steam condensate. When Crossett Paper Operations pulps softwood, especially pine, the resulting condensates contain turpentine. These condensates are sent to the Turpentine Recovery System for extraction of the turpentine. The foul condensates will leave the turpentine recovery area as turpentine decanter underflow. In the Turpentine Recovery System, underflow from both the decanter and storage tanks are considered Kraft pulping condensates.

At the end of the cook, the pulp, cooking chemicals, and gases from the digesters are sent to the Blow Tank where large quantities of steam and some HAPs are released. This steam is condensed to form batch digester blow steam condensate. The fraction of HAPs that do not leave with the relief and blow steam continue with the pulp and weak black liquor to be collected by the HVLC Collection System and Evaporator Liquor Feed Stages described below.

Weak black liquor is fed to multiple effects in the evaporator. When the liquor is initially subjected to evaporation, the majority of the HAPs are removed from the liquor along with water vapor. The HAPs and water vapor are then condensed, thereby producing evaporator foul condensate which is routed along with the rest of the pulp process condensates to the LEEPS System described below.

The LVHC gas sources that will be collected and routed to the Incinerator (SN-83) are as follows. Crossett Paper Operations will design and operate this equipment as a closed-vent system that will have no detectable leaks. These sources have a Cluster Rule compliance deadline of April 16, 2001.

Turpentine decanter
Turpentine underflow tank
Foul condensate storage tank
NCG condensate seal tank

High Volume – Low Concentration (HVLC) Collection System

The HVLC System will be constructed as a closed-vent system. The intent is to control HAP emissions from the Pulp Washing Systems, Knotter Systems, Screening Systems, and Decker Systems. The emissions will be controlled as outlined in 40 CFR §63.443. HVLC sources are required to be controlled within eight years from the publication date of the Cluster Rule in the Federal Register – i.e. April 17, 2006.

The following sources are planned to be collected and controlled as part of the HVLC Collection System. Pursuant to 40 CFR §63.455, the permittee shall update the Department with a Non-Binding Strategy Report, which identifies the sources to be collected and the scheduled compliance date. The table below contains the current list of sources planned for collection and their associated dates.

The Line 1 weak black liquor tank and the Line 1 Decker/Decker seal tank emissions are required to be collected by April 16, 2006. However, these two sources have been collected and routed to the NCG collection system by the voluntary April 16, 2001 deadline.

HVLC Gas Source	Compliance Due Date
Line 2 Washing System	
Vibrating drainer	April 17, 2006
Knotter surge tank	April 17, 2006
Separator Drain Tank	April 17, 2006
Line 1 Washing System	
Pressate tank	April 17, 2006 (Completed)
Weak black liquor tank *	April 16, 2001 (Completed)
Separator drain tank	April 17, 2006 (Completed)
Washer stock chest	April 17, 2006 (Completed)
Decker and decker seal tank *	April 16, 2001 (Completed)
No. 2 Screening System	
Secondary screen supply tank	April 17, 2006
Tertiary screen supply tank	April 17, 2006
Quaternary screen supply tank	April 17, 2006

* Compliance date voluntarily moved to April 16, 2001.

Small amounts of HVLC condensates form in the HVLC Collection System. The condensates will be removed at low points in the system. Although this condensate has a low volume, it is usually foul with TRS compounds. The collected HVLC condensates will be routed to the LEEPS System.

Low Energy Environmental Pre-Evaporator & Stripper (LEEPS) System

In order to meet the Cluster Rule condensate standards, Crossett Paper Operations will install a LEEPS System that will be comprised of pre-evaporators, a concentrator, and a steam stripper. Pulping condensates from the Digester System, Turpentine Recovery System, Evaporator

Liquor Feed Stages, and The LVHC and HVLC Collection Systems are sent directly to the steam stripper. At the same time, condensates from the new pre-evaporators/ concentrator are also routed to the steam stripper. Steam from the stripper drives off the HAPs and TRS from the condensate. The clean condensates are then recycled to various processes in the Mill. The liquid and gaseous (SOGs) phases of the stripped portion are segregated. The liquid portion is routed to a storage tank from which it is routed to the Incinerator for destruction. Meanwhile, the SOGs are routed to the Incinerator (SN-83) for control. The No. 4 Lime Kiln or the 9A Boiler serve as backup destruction devices for the SOGs.

Incinerator (SN-83)

Gas streams from the LVHC Collection System, the HVLC Collection System, and SOGs from the LEEPS System are fed into the Incinerator via a common burner. The HVLC system is diluted with combustion air before being fed to the combustion chamber. The Incinerator consists of a horizontal combustion chamber followed by a vertical SO_2 caustic packed-tower scrubber which, in turn, is followed by several mist eliminators.

Minimum incineration temperature in the primary combustion zone is required for efficient oxidation. For this Kraft mill application, combustion requirements dictate a minimum temperature of 1,600EF with a 0.75 second retention time (*see* 40 CFR §63.443(d)(3)).

Since the Incinerator combusts NCGs from both LVHC and HVLC Collection Systems, it has to meet a 96% uptime requirement. Crossett Paper Operations complies by using the Incinerator as the primary combustion device with the No. 4 Lime Kiln (SN-25) and the 9A Boiler (SN-22) as backup combustion devices for the LVHC NCGs and SOGs only. The HVLC gases, which by definition have lower concentrations of NCGs, are vented to the atmosphere when the Incinerator is down. In the event that downtime occurs, excess emissions will be reported as required by 40 CFR §63.455.

Under normal operation, the fuel flow is controlled by the operating temperature in the Incinerator. The fuel requirements will vary with the amount of waste gases introduced into the collection system. Maximum fuel consumption will be required to bring the system up to temperature, but the consumption will be greatly reduced during normal incineration of the NCGs and SOGs. The NCGs have some heat content which reduces fuel consumption once normal incineration begins.

The Incinerator system consists of a refractory lined Incinerator, a waste heat boiler, a cooler section, an SO_2 scrubber, a sulfuric acid removal system, and a discharge stack.

The waste heat boiler is located between the Incinerator outlet and the scrubber inlet. This boiler is a fire-tube type boiler with three passes. The boiler does not combust fuels, rather it scavenges the waste heat from the Incinerator to produce steam.

The gases exiting the Incinerator are in excess of 1,600^{o}F. In order to scrub the SO_2 from these gases, the temperature is lowered. The gases pass through a waste heat boiler. The boiler is followed by a vertical SO_2 scrubber that continues to lower the temperature as it removes most of the sulfur gases from the combustion exhaust.

The adsorption tower is followed by a sulfuric acid removal system that uses a caustic solution. A recirculation loop is used to minimize caustic use. The makeup caustic is controlled by scrubber pH to maintain scrubbing effectiveness and efficiency.

The primary fuels for the Incinerator are methanol recovered from the foul condensates via the steam stripper and the LVHC gases. Natural gas is used as a backup fuel. For a given pollutant, the combustion of methanol produces the highest emission rates. The Incinerator is equipped with low-NO_x burners to control NO_x emissions and a scrubber to control PM/PM_{10} and SO_2 emissions.

Specific Conditions

The Incinerator (SN-83)

222. 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 for the Incinerator (SN-83). Emissions are based on maximum capacity. Initial compliance with the PM_{10} and VOC emission rates shall be demonstrated by Specific Conditions #231 and #233, respectively. Annual compliance with the SO_2, CO, NO_x, and TRS emission rates shall be demonstrated by Specific Conditions #232, 234, #235, #236 respectively.

Pollutant	lb/hr	ton/yr
PM_{10}	2.7	11.8
SO_2	9.1	39.9
VOC	0.8	3.5
CO	6.0	26.3
NO_x	23.0	100.7
TRS	0.9	3.8

223. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee estimates the emission rates set forth in the following table for the Incinerator (SN-83) will not be exceeded. Emissions are based on maximum capacity. Initial compliance with the PM and Methanol emissions shall be demonstrated by Specific Conditions #231 and #237, respectively.

Pollutant	lb/hr	ton/yr
PM	2.7	11.8
Methanol	0.80	3.50

224. Pursuant to §19.503 of Regulation #19 and 40 C.F.R. Part 52 Subpart E, the permittee shall not cause to be discharged to the atmosphere from the Incinerator gases which exhibit an opacity greater than 20% as measured by EPA Reference Method 9. Compliance shall be demonstrated by the proper operation of the scrubber per Specific Condition #225.

225. 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 may be used as a backup fuel for the Incinerator.

226. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Condition #225. These records shall be updated on a monthly basis and shall include periods of usage of natural gas, (not quantities) of fuel used. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each individual month's data shall be submitted in accordance with General Provision #7.

227. Incinerator (SN-83) is subject to and shall comply with all applicable provisions §19.501 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.6 for Compliance Assurance Monitoring. Future compliance tests may be used to establish the daily average pressure drop and flowrate values that are contained in the permit. The pressure drop and flow rate values recorded during a compliant test event may be used as subsequent minimum values.

A. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain a scrubber liquid flowrate of at least 768 gallons per minute.

B. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain pH of at least 7.6.

C. Pursuant to 40 CFR Part §64.6(c)(3), the permittee shall monitor and maintain daily records to demonstrate compliance with Specific Condition #227 (a) and (b). Records shall be kept onsite and made available to the Department upon request.

D. Pursuant to 40 CFR Part §64.6(c)(1), the permittee shall maintain the caustic scrubber in good working condition at all times so that SO_2 removal is maintained.

228. The Incinerator (SN-83) is subject to and shall comply with all applicable provisions §19.501 of Regulation 19, 40 CFR Part 52 Subpart E, and Part §64.9 for Compliance Assurance Monitoring. The following information pertaining to exceedances or excursions from permitted values shall be submitted in semi-annual reports in accordance with General Provision 7 as outlined in 40 CFR §70.69.

A. Pursuant to 40 CFR §64.9(a)(2)(i) and §64.9(b), the permittee shall maintain records for SN-83 that summarize the number, duration, and cause of excursions or exceedances of emission limits as well as corrective action taken.

B. Pursuant to 40 CFR §64.9(a)(2)(ii) and §64.9(b), the permittee shall maintain records for SN-83 that summarize the number, duration, and cause of monitoring equipment downtime incidents, other than routine downtime for calibration checks.

C. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain a quality improvement plan (QIP) threshold for each indicator of no more than nine excursions or 5% of the total daily averages in a six-month period.

D. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall develop and implement a new QIP if the threshold is exceeded during any six-month period.

E. Pursuant to 40 CFR §64.9(a)(2)(iii) and §64.9(b), the permittee shall maintain records for SN-83 that describe the actions taken to implement the QIP. Upon completion of the QIP, documentation shall be maintained to confirm that the plan was completed and reduced the likelihood of similar excursions or exceedances.

229. The Incinerator (SN-83) is subject to and shall comply with applicable provisions of §19.804 of Regulation #19, NSPS Subpart BB, and NESHAP Subpart S. Section 19.804 of Regulation #19 and NSPS Subpart BB both require incineration of NCGs at a minimum temperature of 1200EF for at least 0.5 seconds. NESHAP Subpart S requires incineration at a minimum temperature of 1600EF for at least 0.75 seconds.

230. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall maintain records which demonstrate compliance with Specific Condition #229. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes.

231. Pursuant to §18.1002 of Regulation #18, §19.702 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 initially test particulate matter emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 5 as found in 40 CFR Part 60 Appendix A.

232. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test sulfur dioxide emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 6C as found in 40 CFR Part 60 Appendix A.

233. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall initially test volatile organic compound emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 25A as found in 40 CFR Part 60 Appendix A. This initial test was completed in September 2001.

234. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test carbon monoxide emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 10 as found in 40 CFR Part 60 Appendix A.

235. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test nitrogen oxides emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E as found in 40 CFR Part 60 Appendix A.

236. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall annually test total reduced sulfur emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 16 as found in 40 CFR Part 60 Appendix A.

237. Pursuant to §18.1002 of Regulation #18 and A.C.A. §8-4-203 ad referenced by §8-4-304 and §8-4-311, the permittee shall initially test methanol emissions from the Incinerator. Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 18 as found in 40 CFR Part 60 Appendix A. This initial test was completed in September 2001.

The Pulping System

238. The pulping system (which is comprised of all pulping process equipment beginning with the digester system, up to and including the last piece of pulp conditioning equipment prior to the bleaching system) is subject to and shall comply with applicable 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 Subpart S is provided in Appendix F. Applicable provisions include, but are not limited to, the following:

Standards for the Kraft pulping systems.

A. Pursuant to 40 CFR §63.443(a), the permittee shall control the total HAP emissions from the equipment systems listed in 40 CFR §63.443(a), as specified in paragraphs (c) and (d) of 40 CFR §63.443.

B. Pursuant to 40 CFR §63.443(c), the equipment systems listed in paragraphs (a) and (b) of 40 CFR §63.443 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 40 CFR §63.443. The enclosure and closed-vent system shall meet the requirements specified in 40 CFR §63.450.

C. Pursuant to 40 CFR §63.443(d)(3), the control device used to reduce total HAP emissions from each equipment system listed in paragraphs (a) and (b) of 40 CFR §63.443 shall reduce total HAP emissions using a thermal oxidizer designed and operated at a minimum temperature of 871EC (1600EF) and a minimum residence time of 0.75 seconds.

D. Pursuant to 40 CFR §63.443(e), periods of excess emissions reported under 40 CFR §63.455 shall not be a violation of 40 CFR §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 period does not exceed the following levels: (1) one percent for control devices used to reduce the total HAP emissions from the LVHC system; and (2) four percent for control devices used to reduce the total HAP emissions from the HVLC system; and (3) four percent for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

Standards for kraft pulping process condensates.

E. Pursuant to 40 CFR §63.446(b), the pulping process condensates from the equipment systems listed in 40 CFR §63.446(b) shall be treated to meet the requirements specified in paragraphs (c), (d), and (e) of 40 CFR §63.446.

F. Pursuant to 40 CFR §63.446(c), one of the combinations of HAP-containing pulping process condensates listed in 40 CFR §63.446(c) which is generated, produced, or associated with the equipment systems listed in paragraph (b) of 40 CFR §63.446 shall be subject to the requirements of paragraph (d) and (e) of 40 CFR §63.446.

G. Pursuant to 40 CFR §63.446(d), the pulping process condensates from the equipment systems listed in paragraph (b) of 40 CFR §63.446 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 40 CFR §63.446.

H. Pursuant to 40 CFR §63.446(e)(5), each pulping process condensate from the equipment systems listed in paragraph (b) of 40 CFR §63.446 shall be treated according to the following option: 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 (bleached), or achieve a total HAP concentration of 330 parts per million or less by weight at the outlet of the control device.

I. Pursuant to 40 CFR §63.446(f), each HAP removed from a pulping process condensate stream during treatment and handling under paragraph (d) or (e) of 40 CFR §63.446 shall be controlled as specified in 40 CFR §43.443(c) and (d).

J. Pursuant to 40 CFR §63.446(h), the permittee shall evaluate all new or modified pulping process condensates or changes in the annual bleached or non-bleached ODP used to comply with paragraph (i) of 40 CFR §63.446, to determine if they meet the applicable requirements of 40 CFR §63.446.

K. Pursuant to 40 CFR §63.446(i), for the purposes of meeting the requirements in paragraphs (c)(2), (e)(4), or (e)(5) of 40 CFR §63.446 at mills producing both bleached and unbleached pulp products, the permittee may meet a prorated mass standard that is calculated by prorating the applicable mass standards (kilograms of total HAP per megagram of ODP) for bleached and unbleached specified in paragraphs (c)(2), (e)(4), or (e)(5) of 40 CFR §63.446 by the ratio of annual megagrams of bleached and unbleached ODP.

Monitoring Requirements

L. The Incinerator shall meet the monitoring requirements set forth in 40 CFR §63.453(b). The Steam Stripper shall meet the monitoring requirements set forth in 40 CFR §63.453(g). The LVHC collection system, the HVLC collection system, and the SOGs collection system all route to the Incinerator via a closed vent system. The Closed Vent System shall meet the monitoring requirements set forth in 40 CFR §63.453(k).

Recordkeeping and Reporting Requirements

M. Pursuant to 40 CFR §63.454(b), the permittee shall prepare and maintain a site-specific inspection plan for the closed vent LVHC, HVLC, and SOG collection systems.

N. Excess emissions shall be reported as required by 40 CFR §63.455.

239. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee may allow emissions from the incinerator and associated scrubber to be released to the atmosphere bypassing the associated candle filter sulfuric acid mist eliminator. Bypass shall only be allowed during periods of emergency maintenance to the sulfuric acid mist eliminator system.

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Georgia-Pacific Corporation - Crossett Paper Operations is in compliance with the applicable regulations cited in the permit application and 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.

The following is a list of the Cluster Rule compliance dates that must be met by the permittee.

Pursuant to 40 CFR §63.455, the permittee shall update the Department with a Non-Binding Strategy Report, which identifies the sources to be collected and the scheduled compliance date. The table below contains the current list of sources planned for collection and their associated dates (updated May 9, 2003).

HVLC Gas Source	Compliance Due Date
Line 2 Washing System	
Knotter surge chest	April 17, 2006
Vibrating drainer	April 17, 2006
Separator Drain Tank	April 17, 2006
Line 1 Washing System	
Pressate tank	April 17, 2006
Separator drain tank	April 17, 2006
Washer stock chest	April 17, 2006
No. 1 Screening System	
Secondary screen supply tank	April 17, 2006
Tertiary screen supply tank	April 17, 2006
Quaternary screen supply tank	April 17, 2006

SECTION VI: PLANTWIDE CONDITIONS

1. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.

2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance or if the work involved in the construction or modification is suspended for a total of 18 months or more.

3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.

4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:

    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

5. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

6. 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.

Chemical Accident Prevention Provisions

7. Pursuant to 40 CFR Part 68, the permittee shall comply with all applicable provisions of 40 CFR §68.1 through §68.220.

Acid Rain (Title IV)

8. Pursuant to §26.701 of Regulation #26 and 40 CFR 70.6(a)(4), the permittee is prohibited from causing any emissions which exceed any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement of this permit or the Act. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.

Title VI Provisions

9. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:

    1. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
    2. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
    3. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
    4. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

10. 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:

    1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
    2. 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.
    3. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
    4. 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.)
    5. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
    6. 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.

11. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

12. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

    The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

13. 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.

SECTION VI: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated August 20, 2001.

Description	Category
9A Cyclone	A-13
Trim Paper Cyclone	A-13
Diesel Fuel Tank	A-3
Xylene Tank	A-3
Turpentine Tank	A-3
No. 8 Extruder Burner, 1.55 MMBTU/hr	A-1
No. 8 Extruder Burner, 0.85 MMBTU/hr	A-1
No. 9 Extruder Burners, 1.0 MMBTU/hr (total)	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.

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:
    1. The date, place as defined in this permit, and time of sampling or measurements;
    2. The date(s) analyses were performed;
    3. The company or entity that performed the analyses;

4. The analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions existing at the time of sampling or measurement.

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:
    1. The facility name and location,
    2. The process unit or emission source which is deviating from the permit limit,
    3. The permit limit, including the identification of pollutants, from which deviation occurs,

4. The date and time the deviation started,
5. The duration of the deviation,
6. The average emissions during the deviation,
7. The probable cause of such deviations,
8. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
9. The name of the person submitting the report.

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

9. Pursuant to 40 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.

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:

    1. 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;
    2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    4. 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 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:

    1. The identification of each term or condition of the permit that is the basis of the certification;
    2. The compliance status;
    3. Whether compliance was continuous or intermittent;
    4. 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
    5. 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:

1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
2. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
4. 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.