ADEQ
OPERATING
AIR PERMIT

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

Permit #: 224-AOP-R2

IS ISSUED TO:

Green Bay Packaging Inc.
Arkansas Kraft Division
338 Highway 113 South
Morrilton, AR 72110
Conway County
CSN: 15-0001

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:

August 6, 1997 and August 5, 2002

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date Modified

SECTION I: FACILITY INFORMATION

PERMITTEE:	Green Bay Packaging Inc. Arkansas Kraft Division
CSN:	15-0001
PERMIT NUMBER:	224-AOP-R2
FACILITY ADDRESS:	338 Highway 113 South Morrilton, AR 72110
COUNTY:	Conway
CONTACT POSITION:	John Allen Lee
TELEPHONE NUMBER:	(501) 354-9289
REVIEWING ENGINEER:	Michael H. Watt
UTM North-South (Y):	Zone 15 3884 km
UTM East-West (X):	Zone 15 524 km

SECTION II: INTRODUCTION

Summary of Permit Activity

Green Bay Packaging, Inc.-Arkansas Kraft Division of 338 Highway 113, Morrilton, Conway County, Arkansas 72110 has owned and operated a fully integrated kraft pulp and paper mill in Oppelo, near Morrilton, since 1965.

The AKD Mill is located approximately 106 km south of the Upper Buffalo Area (Upper Buffalo). This sparsely populated area of Arkansas is classified as a mandatory Federal Class I area by the U.S. EPA.

This modification defines averaging times for monitoring requirements, lowers permitted annual emissions on most equipment by removing the unneeded safety factors the facility requested in previous applications, allows wood waste to be burned in the existing #1 Wood Waste Boiler (SN-02) during part of the year, changes control equipment on the Smelt Dissolving Tank Vent (SN-07) from demister pads to a scrubber, and separates the emissions of the #1 and #2 Paper Machines (SN-25A and SN-25B) to prevent future PSD issues.

In the original Title V permit application, Green Bay requested a grouping of the paper machines to provide for ease of record keeping. The potential limit was based on the sum of the very best operating day achieved on each machine extrapolated to a year of operation with a safety factor added. This resulted in a very high level of potential emissions for the source. Any modification to the machines would result in an emissions increase of over 40 tons per year of VOC when calculated by subtracting actual emissions from potential emissions. This modification establishes a Federally enforceable production limit on each paper machine that is closer to actual production rates. This will allow for a future modification to replace the headbox on the #1 Paper Machine (SN-25A).

Process Description

Chip Handling System

Wood chips are brought into the mill and unloaded by hydraulic dump. The chips are then conveyed to the chip piles. The wood chips are then moved onto a chip reclaim to be conveyed to the batch digesters.

Digesting and Washing

Wood chips and sawdust are loaded into one of five batch digesters, along with an aqueous solution of sodium hydroxide and sodium sulfide (white liquor). Each loaded digester is then placed under high temperature and pressure using steam. The chipped wood is cooked to separate the wood fibers from the lignin that binds the fibers together. The cycle time for each batch is one to two hours.

Once the cooking time is complete, the resulting mixture is released (blown) to atmospheric pressure in blow tanks. The pressure reduction helps to separate the wood materials. Vent gases from the digesters and blow tanks are fed to the blow heat recovery system. The pulp and liquor mixture is then processed through fibrilizers to break up large particles. After passing through the fibrilizers, the pulp is refined and screened. Rejects from the screening operation are returned to the rejects tanks and then to the blow tanks and the remaining pulp is fed to the pulp washers.
The pulp is washed using counter current drum washers to remove organic and inorganic chemicals (black liquor) and defoamers are added. This is accomplished by introducing shower water in the last stage of washing. Filtrate from each drum gravity flows to a tank and is used on the prior stage as shower liquid. The recovered chemicals are pumped from the #1 seal tanks, filtered to remove fiber, and sent to weak liquor storage. Washed pulp is stored in the base Hi-D and top Hi-D tanks for use in the paper machine area.

Non-condensable gases are passed through the two control systems, LVHC (Low Volume High Concentration) and HVLC (High Volume Low Concentration). Pulping wood releases numerous HAP compounds that do not condense out in other processes. In the LVHC system, the non-condensable gases are collected and sent to the #2 Lime Kiln (SN-09) or to the NCG Incinerator (SN-22) for incineration.

The HVLC Collection System collects vapors from the brownstock washers, all of the tanks associated with the washers, and the Condensate Collection Tank. It consists of hoods that cover the drums of the washers, lines from the hoods and tanks, a condenser to reduce moisture, a fan and a line into the incineration control device. The incineration occurs at the #3 Wood Waste Boiler (SN-04) and the #1 Package Boiler (SN-14) as a backup.

Blow Heat Recovery

Gases from the blow tanks pass to the primary separator to remove any entrained black liquor. The gases then enter the accumulator where they are cooled by recirculating water. The uncondensed vapor is passed to the secondary condenser. The remaining non-condensable gases (NCGs) are transported to the lime kiln for incineration. In the event that the NCGs can not be

burned in the lime kiln, they are routed to the NCG flare for destruction.

The water in the accumulator is cooled by heat exchangers and returned to the accumulator. The cooling water for the heat exchangers is circulated through a cooling tower and then sent to the recycle fiber system or returned to the heat exchangers.

Black Liquor and Chemical Recovery

Black liquor containing sodium sulfite, organic and inorganic sulfur compounds, sodium hydroxide and lignin is pumped from weak black liquor storage to the evaporator train where the excess water is removed to increase the black liquor solids content. Black liquor entering the chemical recovery area contains approximately 13 percent solids and is evaporated to between 65 and 80 percent solids in a multiple effect evaporator train.

At the optimum point, tall oil soap is removed from the black liquor by a skimmer and pumped to the tall oil plant. A vacuum is created on the evaporators by surface condensers and the resulting warm water is sent to various areas throughout the plant. Under upset conditions, hogging jets are used to pull vacuum for the evaporators. The concentrated black liquor is stored in tanks and used as fuel for the recovery boiler.

In the recovery boiler, the concentrated black liquor is burned to create heat and steam for various plant processes. Inorganic salts fall to the floor of the furnace as a molten smelt. This smelt flows from the furnace and is combined with weak wash from the recausticizing area to form a mixture of sodium carbonate and sodium sulfide known as green liquor. The green liquor is pumped back to the recausticizing area.

Recausticizing and Lime Recovery

Green liquor from the chemical recovery operation is pumped to a blend tank and then to green liquor clarifiers. The clarifiers remove dregs from the green liquor. The dregs are stored in a storage tank before being washed and removed from the system. The green liquor is stored in green liquor storage tanks before being pumped to the slaker.

In the slaker, the green liquor is combined with fresh lime and/or reburned lime from the lime kiln to form a sodium hydroxide and calcium carbonate mixture. The mixture is transferred to the white liquor clarifiers where the lime mud precipitates. The white liquor is then stored in the white liquor storage tanks before being added to the digesters for the chip cooking process. Rejects from the system are washed and removed from the system.

The lime mud is removed from the white liquor clarifiers by underflow and sent to the mud

washers. In the mud washers, the lime mud is washed with water and the resulting filtrate (weak wash) is sent to the weak wash storage tanks to be used for dissolving smelt to form green liquor. The washed lime mud is pumped to the lime mud storage tanks to be fed to the lime mud filter. After passing over the lime mud filter, the lime mud is conveyed into the lime kiln to be calcined to form quick lime. Lime from the lime kiln is stored in silos before being combined with green liquor in the slaker to form white liquor.

Turpentine Recovery Plant

Vent gases from the digesters enter a separator to remove entrained black liquor and moisture. Removed liquid is returned to the blow tanks and the gases pass to a condenser. From the condenser the turpentine/water mixture flows to the turpentine decanter and any non-condensable gases are transported to the lime kiln or flare for incineration. The turpentine/water mixture in the decanter separates, and the turpentine is removed for storage. The turpentine is loaded for shipment and the water is sent to the accumulator in the blow heat recovery system.

Tall Oil Plant

Tall oil soap from the black liquor recovery cycle is stored in soap storage tanks. The soap is then transferred to the reactor with water and mixed with acid and steam. The mixture is transferred to the decanters and tall oil and brine are allowed to separate. After separation, tall oil is stored in the crude tall oil storage tanks. The brine solution is pumped from the decanters to the #1 Brine Storage for pH adjustment, passed to the #2 Brine Storage, and pumped to the black liquor recovery system. The tall oil is pumped from the storage for shipment.

Boiler Complex

Steam is generated using several boilers. The recovery boiler has already been described as using spent cooking liquor as its primary fuel source and natural gas for backup fuel. The power boilers use natural gas as their primary fuel with fuel oil for backup fuel. The wood waste boilers use wood waste as the primary fuel and natural gas as the backup fuel. Wood waste is delivered by truck to the mill and unloaded by hydraulic dump. The wood waste is then transferred onto a reclaim conveyor system and transported to the wood waste boilers.

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Paper Machines

Virgin pulp fiber that has been pulped and washed to remove cooking liquors, is stored. Pulp is transferred from storage to the level chest. The first stage of refining takes place between the level chest and the machine chest. In the machine chest, fan pump, or head box, the pulp may be mixed with various recycled fibers and additives that aid in the manufacture of paper, to form the furnish for the paper machine. The resulting furnish is pumped from the machine chest, through a second stage of refining and to the head box. The head box delivers the dilute furnish on to an endless moving mesh fabric. Excess water is removed from the furnish as it travels with the moving fabric.

A second furnish is created by using either virgin or recycled pulp. Either virgin pulp from storage or recycled pulp is transferred to the level chest. After the level chest, the pulp is refined and conveyed to the machine chest. From the machine chest the furnish is refined a second time and transferred into the secondary head box. Final dilution of the furnish is applied prior to delivery by the secondary head box onto the traveling mesh fabric. Excess water is removed.

As the water is removed from the traveling fabric, the fibers of the furnish are formed into a cohesive web. The web is pressed between rollers. Following the pressing operation, the web is dried by passing over metal vessels heated with steam. After drying is complete, the dry web of paper is wound into a large parent roll, cut to order, and shipped. The paper mill generates several grades of paper from the two paper machines.

Water that has been removed from the furnish is recycled into the process for reuse on the paper machine, sent to the recycling area, or sewered. Excess water from the paper mill is discharged to the wastewater treatment system.

Recycling Area

Post consumer recycle material in the form of cardboard, newspaper, printers waste, and office waste are mixed with water to produce a slurry of paper fiber, contaminants, and water in the pulpers of the recycling plants. After slurrying, the pulp is diluted prior to the screening and cleaning operations. Cleaned pulp is thickened prior to storage. Water removed from the pulp during thickening is cleaned and recycled into the process or sewered to the wastewater treatment system. Thickened pulp is stored in one of the two high density storage chests for transport to the paper machines. Contaminants removed from the pulp stream are thickened separate from the pulp and disposed of in a landfill. The recycling area generates several types of pulp furnish for the paper machines.

Water Treatment

Water from the Arkansas River is used for mill water supply. Water purchased from Conway County Regional Water Distribution District is used for steam generation in the boilers. The river water is placed in a settling clarifier with lime, polymers, and other water clarification aids to assist in settling solids. Disinfection is controlled by the addition of sodium hypochlorite or other disinfectants to the water. The purchased water is processed through demineralizer units.

Liquid urea and phosphoric acid are added to the waste water to increase the biological development in the aerated settling basin and the post aerated basin.

Regulations

Green Bay Packaging is subject to the requirements of the Arkansas Operating Air Permit Program (Regulation #26). Also, Green Bay is subject to the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) and the Arkansas Air Pollution Control Code (Regulation #18). Due to the operation of the #3 Wood Waste Boiler (SN-04) and the #2 Package Boiler (SN-15), Green Bay is subject to Subpart Db of the New Source Performance Standards (NSPS). Due to operation of the #5 Digester, Green Bay is also subject to NSPS Subpart BB for Kraft Pulp Mills and Subpart S of the National Emission Standards for Hazardous Air Pollutants (NESHAP) which specifically addresses the pulp and paper industry.

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 Allowable Emissions		PM	1088.3	1,720.9	
		PM_{10}	567.3	1,112.7	
		SO_2	1,062.6	647.3	
		VOC	2,250.1	2,572.5	
		CO	1,874.1	1,721.6	
		NO_X	548.4	972.8	
		Lead	0.14	0.7	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
HAPs* ***= Not included in VOC total		Acetaldehyde	12.80	44.00	
		Acrolein	0.62	2.00	
		***Arsenic	0.06	0.50	
		Benzene	0.48	1.45	
		***Beryllium	0.02	0.20	
		***Cadmium	0.05	0.50	
		***Chromium +6	0.30	0.30	
		1,2 Dichloro-ethylene	0.50	1.30	
		Formaldehyde	1.88	6.50	
		***Hydrochloric-Acid	5.10	20.40	
		***Manganese	1.33	5.80	
		***Mercury	0.03	0.30	
		Methanol	104.40	288.10	
		Methyl Ethyl-Ketone	1.00	3.30	
		Methyl- Isobutyl-Ketone	0.30	0.90	
		Phenol	0.03	0.20	
		***Selenium	0.10	0.10	
		Styrene	0.50	0.60	
		***Sulfuric Acid	2.80	11.00	
		Terpenes	346.6	481.90	
		TRS	215.8	251.90	
		Toluene	0.20	0.50	
		1,2,4-Trichloro-benzene	0.70	2.60	
		Trichloro-ethylene	0.50	1.40	
		m,p Xylene	0.20	0.70	
		o Xylene	0.20	0.60	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
Air Contaminants ** ***= Not included in VOC total		***Acetone Ammonia Benzo(b)-fluoranthene 3-Carene p-Cymene Ethanol Isopropanol ***Methane a-Pinene b-Pinene 2-Propanol	5.57 7.40 0.02 0.90 1.30 1.33 3.63 497.4 13.70 4.10 0.10	15.18 31.90 0.20 3.50 5.30 2.23 16.00 2178.5 42.00 11.60 0.10	
01	Wood Waste Dryer	Removed From Service			26
02	#1 Wood Waste Boiler	PM_{10} PM SO_2 VOC CO NO_X Lead Isopropanol Benzene Benzo(b)-fluoranthene Formaldehyde Phenol Arsenic Cadmium Chromium +6 Manganese Mercury	191.0 382.0 3.6 116.0 956.5 57.0 0.02 1.05 0.08 <0.01 0.18 0.01 <0.01 <0.01 <0.01 1.03 <0.01	215.0 420.0 15.6 39.0 326.0 39.0 0.10 4.70 0.35 <0.10 0.80 <0.10 <0.10 <0.10 <0.10 4.50 <0.10	27

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
03	#2 Wood Waste Boiler	Removed From Service			30
04	#3 Wood Waste Boiler	PM_{10}	39.7	145.0	31
		PM	39.7	145.0	
		SO_2	9.6	42.0	
		VOC	22.5	98.7	
		CO	119.0	300.0	
		NO_X	119.0	521.0	
		Lead	<0.01	<0.10	
		Benzene	0.20	0.80	
		Benzo(b)-fluoranthene	<0.01	<0.10	
		Formaldehyde	0.35	1.50	
		Phenol	0.02	<0.10	
		Arsenic	0.02	<0.10	
		Cadmium	<0.01	<0.10	
		Chromium +6	<0.01	<0.10	
		Manganese	0.23	1.0	
		Mercury	<0.01	<0.10	
		Acrolein	<0.01	<0.10	
		Acetone	0.07	0.28	
		Methanol	1.80	7.40	
		Ethanol	0.03	0.13	
		Isopropanol	2.58	11.3	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
05 and 06	Recovery Boiler (2 Stacks)	PM_{10}	200.0	520.0	37
		PM	539.3	910.0	
		SO_2	560.0	494.0	
		VOC	19.8	61.0	
		CO	200.0	665.0	
		NO_X	200.0	206.0	
		Lead	<0.01	<0.1	
		Acetone	1.0	4.0	
		Terpenes	6.0	24.1	
		TRS	33.2	145.4	
		Hydrochloric-Acid	5.1	20.4	
		Sulfuric Acid	2.8	11.0	
		Methanol	12.4	49.9	
		Methyl Ethyl-Ketone	0.3	1.0	
		Arsenic	<0.01	<0.1	
		Cadmium	<0.01	<0.1	

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
07	Smelt Dissolving Tank Vent	PM_{10}	25.0	85.0	41
		PM	25.0	85.0	
		SO_2	1.4	5.6	
		VOC	16.1	64.1	
		NO_X	2.2	8.7	
		TRS	3.9	17.1	
		3-Carene	0.9	3.5	
		p-Cymene	1.3	5.3	
		Ethanol	0.1	0.4	
		alpha-Pinene	10.5	41.7	
		beta-Pinene	2.8	11.4	
		Formaldehyde	0.45	1.80	
		Arsenic	<0.01	<0.1	
		Beryllium	<0.01	<0.1	
		Cadmium	<0.01	<0.1	
		Chromium +6	<0.01	<0.1	
		Mercury	<0.01	<0.1	
		Selenium	<0.01	<0.1	
		Ammonia	2.5	10.7	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
08, 09, and 10	#2 Lime Kiln, #1 Lime Kiln, and NCG Emergency Vent	PM_{10}	28.4	124.4	44
		PM	28.4	124.4	
		SO_2	9.0	39.4	
		VOC	26.0	113.9	
		CO	4.9	21.3	
		NO_X	21.6	94.6	
		Lead	0.1	0.4	
		TRS	9.8	42.9	
		Acetone	0.3	1.2	
		Ethanol	0.4	1.4	
		2-Propanol	0.1	0.1	
		Terpenes	1.4	5.5	
		Formaldehyde	0.6	2.3	
		Methanol	1.9	7.7	
		1,2,4- Trichloro-benzene	0.7	2.6	
		Arsenic	<0.01	<0.1	
		Beryllium	<0.01	<0.1	
		Cadmium	<0.01	<0.1	
		Manganese	0.07	0.3	
11	Brownstock Washers	Emissions Routed to SN-04			51
12	Wastewater Treatment	VOC	7.6	33.3	54
13	#1 Slaker	Used Only When #1 Lime Kiln is Operating			

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
14	#1 Package Boiler	PM_{10} PM SO_2 VOC CO NO_X Acrolein Methanol	25.0 25.0 6.2 70.6 560.0 40.0 <0.01 1.0	14.0 24.0 3.2 39.0 305.0 39.0 <0.10 0.5	55
14	#1 Package Boiler (Alternate Operating Scenario)	PM_{10} PM SO_2 VOC CO NO_X	28.8 28.8 418.3 1.1 6.7 89.3	1.0 1.0 14.2 0.1 0.3 3.1	55
15	#2 Package Boiler	PM_{10} PM SO_2 VOC CO NO_X	1.1 1.8 1.5 0.9 22.5 13.8	4.6 7.8 6.6 3.8 98.6 39.0	59
16	Blow Heat Emergency Vent	Emergency Use Only. Not a Source.			
17	Tall Oil Plant Reactor	VOC TRS Acetone Terpenes	5.9 4.1 0.1 0.9	21.9 18.0 0.1 1.3	63
18	#1 Lime Silo (Sodium Carbonate)	PM_{10} PM	7.2 7.2	0.2 0.2	65

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
19	#2 Lime Silo	PM_{10} PM	7.2 7.2	0.2 0.2	65
20	Starch Silo	PM_{10} PM	5.6 5.6	0.6 0.6	67
21	Lime Silo-Water Plant	PM_{10} PM	7.2 7.2	0.2 0.2	68
22	NCG Incinerator	PM_{10} PM SO_2 VOC CO NO_X	0.5 0.5 52.6 0.1 0.4 0.3	0.3 0.3 26.3 0.1 0.2 0.2	44
23	Batch Digestors	VOC TRS Acetone 1,2-Dichloro-ethylene Terpenes	11.5 3.5 0.1 0.1 11.4	29.0 9.0 0.3 0.1 28.9	69
24	Wood Yard Fugitives	VOC	1481.8	1290.6	72

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
25A	#1 Paper Machine	VOC	99.5	339.8	73
		Acetone	1.3	4.4	
		Acetaldehyde	6.8	23.1	
		Acrolein	0.3	0.9	
		Benzene	0.1	0.2	
		1,2 Dichloro-ethylene	0.2	0.7	
		Methanol	34.5	118.2	
		Methyl Ethyl-Ketone	0.4	1.3	
		Methyl- Isobutyl-Ketone	0.2	0.5	
		Styrene	0.1	0.3	
		Terpenes	56.3	192.8	
		Toluene	0.1	0.3	
		Trichloro-ethylene	0.3	0.8	
		m,p Xylene	0.1	0.4	
		o Xylene	0.1	0.3	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
25B	#2 Paper Machine	VOC	80.0	270.1	75
		Acetone	1.0	3.5	
		Acetaldehyde	5.4	18.4	
		Acrolein	0.2	0.8	
		Benzene	0.1	0.1	
		1,2 Dichloro-ethylene	0.2	0.5	
		Methanol	27.8	94.0	
		Methyl Ethyl-Ketone	0.3	1.0	
		Methyl- Isobutyl-Ketone	0.1	0.4	
		Styrene	0.1	0.2	
		Terpenes	45.3	153.3	
		Toluene	0.1	0.2	
		Trichloro-ethylene	0.2	0.6	
		m,p Xylene	0.1	0.3	
		o Xylene	0.1	0.3	
26	Basement Air Make-up Heater #1	PM_{10}	0.2	0.7	77
		PM	0.2	0.7	
		SO_2	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.5	1.8	
		NO_X	1.7	7.4	
27	Basement Air Make-up Heater #2	PM_{10}	0.2	0.7	77
		PM	0.2	0.7	
		SO_2	0.1	0.1	
		VOC	0.1	0.1	
		CO	0.5	1.8	
		NO_X	1.7	7.4	

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
28	Pocket Vent System Heater #1	PM_{10} PM SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2 0.9	0.4 0.4 0.1 0.2 0.8 3.7	79
29	Pocket Vent System Heater #2	PM_{10} PM SO_2 VOC CO NO_X	0.1 0.1 0.1 0.1 0.2 0.9	0.4 0.4 0.1 0.2 0.8 3.7	79
30	Landfill	VOC Methane	6.6 497.4	28.9 2178.5	81
31	Weak Black Liquor Tanks	VOC	7.5	28.6	83
32	Green Liquor Tanks	VOC	4.4	18.1	85
33	Small Fuel Oil Storage Tanks	VOC	5.2	0.1	86
34	Turpentine Storage Tank	VOC	15.9	0.6	87
35	Turpentine Loading Operation	VOC	4.9	0.3	88

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
36	Slaker/ Causticizers	VOC Acetaldehyde Methanol Acetone Ammonia	1.7 0.6 0.6 0.2 4.9	7.0 2.5 2.5 0.9 21.2	89
37	LVHC Collection System	TRS Terpenes alpha-Pinene beta-Pinene Formaldehyde Methanol Styrene	140.9 6.8 3.2 1.3 0.3 2.0 0.3	12.4 0.6 0.3 0.2 0.1 0.2 0.1	91
38	HVLC Collection System	VOC TRS Acetone Ethanol Terpenes Acrolein Methanol	244.1 20.4 1.5 0.8 218.5 <0.01 22.4	83.9 7.1 0.5 0.3 75.4 <0.10 7.7	98
39	Pulping Process Condensate Collection	Recycled To SN-11 As Shower Water			105

* 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.

*** Not included in VOC total

SECTION III: PERMIT HISTORY

Arkansas Kraft began operations in October 1966, producing 230 tons of linerboard a day.

Air Permit #147-A was issued to Arkansas Kraft Corporation on March 28, 1973. It was issued to replace two existing boilers with a power boiler. The input of fossil fuel was limited to 249 million Btu/hr.

Air Permit #224-A was issued to Arkansas Kraft Corporation in 1973. It was issued to increase pulp capacity from 360 tons per day to 720 tons per day. New equipment added was: two digesters, additional vacuum filters for pulp washing, additional evaporators, a low-odor recovery boiler, a bark boiler, and a lime kiln. The recovery boiler was added to replace the existing unit. Existing control equipment was: an electrostatic precipitator to control recovery boiler emissions, two flyash arresters to control bark boiler emissions, and a wet scrubber to control lime kiln emissions. A new thermal combustion system to control sulfur gas emissions from evaporator NCGs and Turpentine condenser vents.

Air Permit #443-A was issued to Arkansas Kraft, Inc. on November 18, 1977. It was issued to rerate the existing #1 bark boiler from 55,000 to 86,000 lbs/hr steam to utilize more wood waste as fuel and to reduce fossil fuel requirements.

Air Permit #224-A (Modification) was issued to Arkansas Kraft Corporation on October 13, 1978. It was issued to allow the facility to place the #1 Recovery boiler back into service.

Air Permit #224-A (Modification) was issued to Arkansas Kraft Corporation on November 29, 1979. It was issued to permit the installation and operation of a wood waste fuel drying system.

Air Permit #224-A (Modification) was issued to Arkansas Kraft Corporation on October 31, 1980. It was issued to allow the facility to vent the flue gas from the #1 and #2 bark boilers through the bark boilers and a bark dryer.

Air Permit #224-AR-4 was issued to Arkansas Kraft Corporation in 1983. It was issued to permit the burning of fines in the #3 Wood Waste Boiler and to place the emissions under the existing "bubble" for the #3 Wood Waste Boiler, the #1 and #2 Bark Boilers, and the Wood Waste Dryer. The emission limit was 285 lbs PM/hr.

Air Permit #224-AR-5 was issued to Arkansas Kraft Corporation in 1984. It was issued to permit a gas fired turbine generator. The emission limit for this permit was 130 lbs NO_X/hr. The gas fired turbine generator was never constructed.

Green Bay Packaging Inc., Arkansas Kraft Division
Permit #: 224-AOP-R2
CSN #: 15-0001

Consolidated Air Permit #224-AR-5 was issued to Green Bay Packaging, Inc.-Arkansas Kraft Division on June 8, 1994. It was issued to consolidate air permits #147-A, #224-AR-4, and #443-A into a single permit and to permit existing sources which were omitted from previous air permits. Modifications permitted were: the installation of a #2 Package Boiler, rebuilding of the #3 Wood Waste Boiler, replacement of the #1 and #2 Wood Waste Boilers with a new #4 Wood Waste Boiler, installation of a condensate stripper, installation of a coloring and bleaching system, installation of a tall oil plant scrubber, rebuilding of electrostatic precipitator, installation of a paper coating process, installation of a distributive control system, and rebuilding of the #2 Digestor. Emission limits for this permit were: 2,893.8 tpy PM_{10}, 2,496.5 tpy SO_2, 1,861.1 tpy VOC, 11,852.2 tpy CO, 1,660.1 tpy NO_X, and 223.4 tpy TRS.

Of the permitted modifications at the facility under the June 8, 1994 permit, only the installation of the #2 Package Boiler, rebuilding of the #2 Digestor, and partial installation of the Distributive Control System occurred.

Air Permit #224-AOP-R0 was the first operating air permit issued to Green Bay Packaging, Inc., Arkansas Kraft Division under Regulation #26. This permit was also the first Prevention of Significant Deterioration (PSD) permit for Green Bay Packaging. In a previous permit, Permit #224-AR-5, the facility was permitted to install a #2 Package Boiler at a maximum rate of 202 MMBtu/hr. A PSD permit was not required at that time because the emissions increase for the boiler were to be offset by the decreases from the rebuilding the #3 Wood Waste Boiler and the replacement of the #1 and #2 Wood Waste Boilers with a new boiler (#4 Wood Waste Boiler). The facility had accepted federally enforceable permit conditions to stay out of PSD requirements.

The facility is considered a major stationary source under the Prevention of Significant Review Deterioration (PSD) regulations as found in 40 CFR 52.21. As described below and throughout the permit, the facility is subject to PSD requirements. The facility triggered PSD for NO_X only.

As the facility installed a 205 MMBtu/hr #2 Package Boiler and the removal of the #1 and #2 Wood Waste Boilers, the addition of the #4 Wood Waste Boiler, and the rebuilding of the #3 Wood Waste Boiler did not take place as previously permitted, the addition of the #2 Package Boiler has retroactively triggered PSD for NO_X.

This PSD issue was reviewed in the last permitting action, Permit #224-AOP-R0. BACT for the #2 Package Boiler was determined to be low NO_X burners in conjunction with flue gas recirculation at 0.067 lb NO_X/MMBtu. The facility did not remove the #2 Wood Waste Boiler as permitted in Permit #224-AR-5; therefore, these emissions decreases were available to be used in permit #224-AOP-R0. For this permitting action, the facility chose to take a federally enforceable limit on SO_2 in order to avoid further PSD requirements.

Green Bay Packaging Inc., Arkansas Kraft Division
Permit #: 224-AOP-R2
CSN #: 15-0001

An air dispersion modeling analysis has been performed to determine if the modification at the AKD Mill will impact ambient air quality in the vicinity of the Upper Buffalo. The U.S. EPA has established special PSD increment values for Class I areas for three of the criteria pollutants (PM_{10}, SO_2, and NO_x). Prior to completing a PSD increment analysis; however, impacts due to increased emissions from the AKD Mill were assessed against a modeling significance level established by the U. S. EPA for Class I Areas (1.0 $\mu g/m^3$, 24-hour average concentration for all pollutants). Under U. S. EPA guidance, if the results of the initial modeling analysis predict an increase in the 24-hour average pollutant concentration that exceed the 1.0 $\mu g/m^3$ significance level, further analysis is warranted.

The Industrial Source Complex Short-Term Version 3 (ISCST3) model was utilized to estimate pollutant concentrations in the Upper Buffalo area. The modeling methodologies employed conform to those used in the PSD Air Quality Analysis.

A discrete receptor is placed at UMT coordinates 460.935 km East and 3919.979 km North in order to conservatively estimate pollutant concentrations throughout the area. (At the time it was thought that these coordinates were at the center of the Upper Buffalo Wilderness Area. In fact the Upper Buffalo is 34 km further away.) The receptor elevation is estimated to be 350 feet, based on a United States Geological Survey (USGS) topographical map (Russellville, Arkansas quadrangle).

The incremental 24-hour average impact is less than the 1.0 $\mu g/m^3$ Class I Modeling Significance Level. Thus, no further dispersion modeling analysis to evaluate impacts in the Upper Buffalo area is warranted.

Currently, there are no PSD increment consuming sources located within the AKD Mill's ROI. Therefore, there are no sources other than those at the AKD Mill to be included in the PSD increment analysis. Because only sources at the AKD Mill are considered in the increment analysis, the methodology and results are identical to those of the significance analysis. All annual average concentrations are below the annual PSD Increment. Thus, compliance with this requirement is demonstrated.

This artificial limit allowed individual pieces of equipment to be run at differing capacities depending upon the needs of the facility. Emission increases at individual pieces of equipment were to be offset elsewhere in the complex by decreasing emissions at a different piece of equipment. As the complex was created for the purpose of keeping the #3 Wood Waste Boiler and #2 Package Boiler below the significance level in the previous permit and these boilers underwent PSD review in this permit, the significance of the Complex was discounted and then removed in this permitting action.

Green Bay Packaging Inc., Arkansas Kraft Division
Permit #: 224-AOP-R2
CSN #: 15-0001

The combined net emissions NO_X increase for the #3 Wood Waste Boiler and the #2 Package Boiler is 71.6 tpy. BACT for the #2 Package Boiler was determined to be low NO_X burners in conjunction with flue gas recirculation. BACT for the #3 Wood Waste Boiler was determined to be low NO_X burners in conjunction with flue gas recirculation. For this permitting action, the facility has taken a limit on SO_2 emissions for the two boilers in order to avoid further PSD applicability.

The PSD analysis for SO_2 based upon the following.

Proposed Modification Increases:

SN-04	#3 Wood Waste Boiler	+27.0 tpy SO_2
SN-15	#2 Package Boiler	+ 0.6 tpy SO_2
		+27.6 tpy SO_2

PSD permits require an ambient impact analysis. Results of the analysis indicate that increased emissions of NOx result in ambient concentrations that exceed the applicable Modeling Significance Level. Therefore, a full impact analysis consisting of a NAAQS analysis and a PSD increment analysis was performed for NOx. The NOx significance output data files were examined to determine the furthest receptor from the AKD Mill with a modeled concentration greater than the 1.0 ug/m3 NOx MSL. This receptor is located 8.18 km from the center of the AKD Mill. Thus, the NOx radius of impact (ROI) is 8.18 km.

Permit #224-AOP-R1 is a modification to the first Title V operating permit. In this permitting action, as required by 40 CFR Part 63, Subpart S, a Low Volume High Concentration System (SN-37) and a High Volume Low Concentration System (SN-38) were installed. The increases in facility-wide particulate, sulfur dioxide, and VOC limits were due to calculation error in the last permit. Additionally, a requirement is being added to the #1 Wood Waste Boiler (SN-02) that requires Green Bay Packaging to only burn natural gas at this source until a wet scrubber is installed to control particulate emissions. An administrative amendment was submitted on October 12, 2000 that added the Large Fuel Oil Tank to the list of insignificant activities. The tank was installed prior to 1979 so is not subject to NSPS Subpart Kb and emits only 0.23 tons per year so it meets the 5 ton per year requirement under Group A, Number 13 in the activities list.

SECTION IV: EMISSION UNIT INFORMATION

SN-01
Wood Waste Dryer:

The Wood Waste or Bark Dryer (SN-01) was installed in 1980. This source was removed from service in 1997.

Specific Conditions

1. Pursuant to 40 CFR Part 52.21 (b)(3)(viii), the Wood Waste Dryer (SN-01) was removed from service. The Dryer shall not be placed back into service without undergoing appropriate permitting procedures.

SN-02
#1 Wood Waste Boiler

Source Description

The #1 Wood Waste Boiler (SN-02) has a maximum heat input capacity of 162 MMBTU/hr. Wood waste and natural gas are fired in this boiler. The boiler produces a maximum of 100,000 pounds of 600 psi steam hourly. The boiler was constructed in 1968 and has not been modified since that time.

Specific Conditions

2. Pursuant to §19.501 et seq of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation #19) effective February 15, 1999 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #5 through #8.

Pollutant	lb/hr	tpy
PM_{10}	191.0	215.0
SO_2	3.6	15.6
VOC	116.0	39.0
CO	956.5	326.0
NO_X	57.0	39.0
Lead	0.02	0.10

3. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation #18) effective February 15, 1999, 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 condition will be demonstrated by complying with Specific Conditions #5 through #8.

Pollutant	lb/hr	tpy
PM	372.0	420.0
Isopropanol	1.05	4.70
Benzene	0.08	0.35
Benzo(b)fluoranthene	<0.01	<0.10
Formaldehyde	0.18	0.80
Phenol	<0.01	<0.10
Arsenic	<0.01	<0.10
Cadmium	<0.01	<0.10
Chromium +6	<0.01	<0.10
Manganese	1.03	4.50
Mercury	<0.01	<0.10

4. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from SN-02 shall not exceed 40% opacity as measured by EPA Reference Method 9.

5. 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, steam generation in the #1 Wood Waste Boiler (SN-02) shall not exceed 100,000 pounds of steam per hour during boiler operation based on a 24 hour rolling average. Maximum annual steam production will not exceed 225,000,000 pounds, determined on a 12 month rolling total. Untreated wood waste, scrap materials from mill processes, agricultural residues, furniture manufacturing waste, natural gas, and/or other approved fuels shall be used to fire this boiler during the months of November through March. Natural gas will be the only fuel allowed at other times. Usage of furniture manufacturing waste shall be limited to 3% of total fuel consumption on a monthly average. When wood waste is used as fuel, the multiclones and wet

scrubber shall be used at all times when the boiler is operating.

6. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition #5. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. A twelve month overall rolling average, monthly averages during November through March, and each individual month's data shall be kept on site, and shall be made available to Department personnel upon request.

7. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the #1 Wood Waste Boiler (SN-02) shall be tested for PM_{10}, VOC, CO, and NO_X emissions using EPA Reference Method 201A or 201 for PM_{10}, Method 25A for VOC, Method 10 for CO, and Method 7E for NO_X. Each test shall consist of at least 3 sampling periods at a minimum of 1 hour each. This testing is to be completed annually, on or before October 30 of every year.

8. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. This test data shall be used for determination of compliance with the conditions set forth in this permit.

9. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily 6-minute opacity readings on SN-02 in accordance with EPA Reference Method #9 whenever wood waste is being used as fuel. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

SN-03
#2 Wood Waste Boiler

The #2 Wood Waste Boiler (SN-03) has a maximum heat input capacity of 162 MMBTU/hr. Wood waste and natural gas are fired in this boiler. The boiler produces a maximum of 100,000 pounds of 600 psi steam hourly. The boiler was constructed in 1974 and has not been modified since that time.

Specific Conditions

10. Pursuant to 40 CFR Part 52.21 (b)(3)(viii), the #2 Wood Waste Boiler (SN-03) was removed from service. The boiler shall not be placed back into service without undergoing appropriate permitting procedures.

SN-04
#3 Wood Waste Boiler

Source Description

The #3 Wood Waste Boiler was originally installed as a recovery boiler in 1965. It was shut down in 1975. In 1979, the recovery boiler was refurbished and became the #3 Wood Waste Boiler.

The #3 Wood Waste Boiler (SN-04) has a maximum heat input capacity of 396.5 MMBTU/hr. Wood waste and natural gas are fired in this boiler. The boiler produces a maximum of 270,000 pounds of 600 psi steam hourly. The boiler is equipped with a venturi scrubber to control particulate emissions. The steam rate was increased from a steam rate of 165,000 pounds of steam per hour to 270,000 pounds per hour in permit #224-AR-5. BACT for this piece of equipment was determined to be low NO_X burners in conjunction with flue gas recirculation. In permit # 224-AOP-R0, the facility chose to take a limit on SO_2 emissions from the #3 Wood Waste and #2 Package boilers in order to avoid further PSD requirements.

The #3 Wood Waste Boiler is also a control device to reduce total HAP emissions from the HVLC system (SN-38). The routing of HAPs from SN-38 to the #3 Wood Waste boiler causes the boiler to be included in the NESHAP requirements under 40 CFR Part 63, Subpart S. These requirements are covered within the Specific Conditions for the HVLC system (Specific Condition #152 through #161). Emissions listed here reflect the incineration of the vapors that are routed from the HVLC system.

Specific Conditions

11. 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 condition will be demonstrated by complying with Specific Conditions #14 through #19.

Pollutant	lb/hr	tpy
PM_{10}	39.7	145.0
SO_2	9.6	42.0
VOC	22.5	98.7
CO	119.0	300.0

Pollutant	lb/hr	tpy
Lead	<0.01	<0.10

12. Pursuant to §19.901 of Regulation #19 et seq and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #14 through #19.

Pollutant	lb/hr	tpy
NO_X	119.0	521.0

13. 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 condition will be demonstrated by complying with Specific Conditions #15 through #19.

Pollutant	lb/hr	tpy
PM	39.7	145.0
Benzene	0.20	0.80
Benzo(b)fluoranthene	<0.01	<0.10
Formaldehyde	0.35	1.50
Phenol	0.02	<0.10
Arsenic	0.02	<0.10
Cadmium	<0.01	<0.10
Chromium +6	<0.01	<0.10
Manganese	0.23	1.0
Mercury	<0.01	<0.10
Acrolein	0.01	<0.10

Pollutant	lb/hr	tpy
Acetone	0.07	0.28
Methanol	1.80	7.40
Ethanol	0.03	0.13
Isopropanol	2.58	11.3

14. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the #3 Wood Waste Boiler (SN-04) shall be tested for PM_{10}, SO_2, VOC, CO, and NO_X emissions using EPA Reference Method 5 with inclusion of back half sampling train particulate, 201A, or 201 for PM_{10}, Method 6 for SO_2, Method 25A for VOC, Method 10 for CO, and Method 7E for NO_X. Each test shall consist of at least 3 sampling periods at a minimum of 1 hour each. Since Method 5 measures total particulate matter emissions and not just PM_{10} emissions, the facility may report all emissions measured using Method 5, including back half sampling train particulate, as PM_{10} or they may conduct separate PM and PM_{10} testing using EPA Reference Method 5 for PM and Method 201 or 201A for PM_{10}. This testing is to be completed annually, on or before October 30 of every year.

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, steam generation in the #3 Wood Waste Boiler (SN-04) shall not exceed 270,000 pounds per hour of steam during boiler operation based on a 24 hour rolling average. Maximum annual steam production shall not exceed 2,100,000,000 pounds, determined on a 12 month rolling total. The only fuel sources for this unit shall be wood waste, scrap materials from mill processes, agricultural residues, furniture manufacturing waste, natural gas, and/or other approved fuels. Usage of furniture manufacturing waste shall be limited to 3% of total fuel consumption on a 12 month rolling average. The control equipment consisting of multiclones in series with a venturi scrubber shall be used at all times when this unit is operating.

16. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition #15. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. A twelve month rolling average and each individual month's data shall be kept on site, and shall be made available to Department personnel upon request.

17. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the liquid flow to the scrubber for the #3 Wood Waste Boiler shall be maintained at or above the flow rate

measured during the last successful stack test. The facility shall continuously monitor and record once per hour or continuously (by strip chart) the pressure drop across the scrubber and the liquid flow to the scrubber. The flow rate and pressure drop compliance demonstration measurements are based on a 3 hour rolling average. Scrubber flow and pressure drop do not have to be measured when SN-04 is not producing steam or steaming only with natural gas as fuel. These records shall be kept on site and shown to Department personnel upon request.

18. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. This test data shall be used for determination of compliance with the conditions set forth in this permit.

19. Pursuant to §19.304 of Regulation #19 and 40 CFR 60, Subpart Db, the #3 Wood Waste Boiler is an affected facility.

    A. Pursuant to §60.46b(b) and (d), within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup of the reworked #3 Wood Waste Boiler, the facility shall determine compliance with the particulate matter emission standards as required in §60.43b.

    B. Pursuant to §60.43b(c)(1), after the initial performance test for particulate matter for the #3 Wood Waste boiler is completed or required to be completed, whichever date comes first, the facility shall not emit particulate matter in excess of 0.10 lb/MMBtu.

    C. Pursuant to §60.43b(f), after the initial performance test for particulate matter for the #3 Wood Waste Boiler is completed or is required to be completed, whichever date comes first, the facility shall not emit any gases that exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

    D. Pursuant to §60.44b(d), after the initial performance test for NO_X for the #3 Wood Waste Boiler is completed or is required to be completed, whichever date comes first, the facility shall not emit any gases that contain NO_X in excess of 0.30 lb/MMBtu.

    E. Pursuant to §60.43b(g) and §60.46b(a), the particulate matter and opacity standards of §60.43b(c)(1) and §60.43b(f) apply for the #3 Wood Waste Boiler at all times, except during periods of startup, shutdown, or malfunction. Compliance with these requirements shall be determined as specified in §60.46b(d).

    F. Pursuant to §60.46b(a), the NO_X emission standards under §60.44b apply at all times. Compliance with these requirements shall be determined as specified in §60.46b(e).

G. Pursuant to §60.48b (a) and (e)(1), the facility is required to install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere from the #3 Wood Waste Boiler and record the output of the system. As per 40 CFR 60.13(b), the installation date of the CEM shall be no later than thirty days from the date of start-up of the source. The facility has requested a variance to this NSPS requirement. Consent Administrative Order LIS: 99-030, signed February 5, 1999, authorizes the use of alternative parameters for monitoring opacity until such time as EPA authorizes the requested variance.

H. Pursuant to §60.48b(b), the facility shall install, calibrate, maintain, and operate a continuous monitoring system for measuring NO_X emissions to the atmosphere and record the output of the system as per the requirements of §60.48b(c), (d), and (f).

I. Pursuant to §60.49b, the facility is required to notify the Department of the initial startup of the reworked #3 Wood Waste Boiler. As per §60.49b(a)(1), the facility has notified the Department that the design heat input capacity of the boiler is to be 396.5 MMBTU/hr. The fuels to be combusted are wood waste and natural gas. As per §60.49b(a)(3), the facility is also to notify the Department of the annual capacity factor at which the facility anticipates operating the boiler based upon all the fuels fired and each individual fuel fired.

J. Pursuant to §60.49b(b), the facility shall submit the performance test data for particulate matter from the initial performance test and performance evaluation of the CEMs for the #3 Wood Waste Boiler to the Department. The applicable performance specifications in 40 CFR Part 60, Appendix B shall be used.

K. Pursuant to §60.49b(d), the facility shall record and maintain records of the amounts of each fuel combusted during each day for the #3 Wood Waste Boiler and calculate the annual capacity factor individually for natural gas and wood for each calendar quarter. The annual capacity factor is to be determined on a twelve month rolling average basis with a new capacity factor calculated at the end of each calendar month.

L. Pursuant to §60.49b(f), the facility shall maintain records of opacity for the #3 Wood Waste Boiler as required under the opacity standard of §60.43b or a federally approved variance.

M. Pursuant to §60.49b(g), the facility shall maintain records for the #3 Wood Waste boiler for each steam generating unit operating day. As per §60.48b(i), the facility shall submit a quarterly report containing a summary of these records. These records shall be submitted to the Department and shall be postmarked by the 30th day following the end of each calendar quarter.

N. Pursuant to §60.49b(h) (1) and (3), the facility is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the #3 Wood Waste Boiler. If there are no excess emissions during the calendar quarter, the facility shall submit a semiannual report stating that no excess emissions occurred during the semiannual reporting period. Excess emissions are defined as all 6 minute periods during which the average opacity exceeds the opacity standards of §60.43b(f).

O. Pursuant to 60.49b(o), the facility shall retain all required records for a period of two years following the date of such record.

20. Pursuant to §19.304 of Regulation #19 and 40 CFR 60, Subpart S §63.443(d)(4), the #3 Wood Waste Boiler will be the control device for reducing the HAP emissions from the HVLC system (SN-38). The HAP emission stream shall be introduced into the combustion air going to the boiler. This requirement will not come into effect until April 16, 2001 or when HVLC gases are routed to the boiler, whichever comes first.

SN-05 and SN-06
Recovery Boiler (2 Stacks)

Source Description

The Recovery Boiler has two stacks (SN-05 and SN-06) and can fire up to 525 MMBTU/hr of black liquor. An electrostatic precipitator is used to control emissions from the stacks. The boiler was installed in 1975 and has not been modified since that time.

Specific Conditions

21. 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 condition will be demonstrated by complying with Specific Conditions #26, #28 through #31, and #33.

Pollutant	lb/hr	tpy
PM_{10}	200.0	520.0
SO_2	560.0	494.0
VOC	19.8	61.0
CO	200.0	665.0
NO_X	200.0	206.0
Lead	<0.01	<0.10

22. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #27, #32 and #33.

Pollutant	lb/hr	tpy
TRS	33.2	145.4

23. 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 condition will be demonstrated by complying with Specific Conditions #26, #28 through #30, and #33.

Pollutant	lb/hr	tpy
PM	539.9	910.0
Terpenes	6.0	24.1
Hydrochloric Acid	5.1	20.4
Sulfuric Acid	2.8	11.0
Methanol	12.4	49.9
Methyl Ethyl Ketone	0.3	1.0
Arsenic	<0.01	<0.10
Cadmium	<0.01	<0.10
Acetone	1.0	4.0

24. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from SN-05 and SN-06 shall not exceed 20% opacity as measured by EPA Reference Method 9.

25. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily 6-minute opacity readings on SN-05 and SN-06 in accordance with EPA Reference Method #9. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

26. 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, steam generation in the recovery boiler shall be limited to 438,000 pounds of steam per hour during boiler operation based on a 24 hour rolling average. Maximum annual steam production shall not exceed 2,600,000,000 pounds, determined on a 12 month rolling total. The only fuels to be used shall be black liquor solids and natural gas.

27. Pursuant to §19.804 of Regulation #19 and §111d of the Clean Air Act, the TRS concentration at the recovery boiler shall be limited to 40 ppm. This limit shall be measured as H_2S on a dry basis and on a 12 hour average, corrected to 8% volume oxygen. During periods when the recovery boiler is down and the oxygen content is greater than 19%, the TRS concentration shall not be corrected for oxygen.

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 throughput of black liquor solids in the recovery boiler shall be limited to 54.2 tons per hour, based on a 24 hour rolling average, for a maximum limit of 438,000 tons per consecutive twelve month period. The black liquor solid firing rate shall be calculated by measuring the flow of strong black liquor and multiplying this flow by the measured weight concentration of solids in the liquor. Records for these annual rates are to be maintained on a twelve month rolling average, updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emission limit.

29. 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 flow of strong black liquor shall be measured with a flow meter and shall be recorded at least once per hour. The weight concentrations of solids in the liquor shall be measured and recorded at least once per 8 hour period. The facility shall maintain a monthly log of the flow meter readings and the black liquor solids weight concentrations.

30. 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 electrostatic precipitator (ESP) shall not be bypassed during required ESP maintenance; gases from the recovery boiler shall not be vented to the atmosphere.

31. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the Recovery Boiler (SN-05 and SN-06) shall be tested for PM_{10}, SO_2, VOC, CO, and NO_X emissions using EPA Reference Method 201A or 201 for PM_{10}, Method 6 for SO_2, Method 25A for VOC, Method 10 for CO, and Method 7E for NO_X. Each test shall consist of at least 3 sampling periods at a minimum of 1 hour each. This testing is to be completed annually, on or before October 30 of every year.

32. 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 facility shall continue to calibrate, maintain, and operate a monitoring device (CEMS) that continuously monitors and records the total reduced sulfur (TRS) and O_2 concentration of gases leaving the recovery boiler through both the east and west stacks. The TRS monitor shall be operated in accordance with Performance Specification #5. The O_2 monitor shall be operated in accordance with Performance Specification #3. Both Performance Specifications may be found in 40 CFR Part 60, Appendix B.

33. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. This test data shall be used for determination of compliance with the conditions set forth in this permit.

SN-07
Smelt Dissolving Tank Vent

Source Description

Two smelt dissolving tanks are located on the east and west side of the Recovery Boiler. Emissions from these tanks are emitted through a single vent (SN-07). A venturi scrubber is used for the control of particulate matter. This source was installed in 1975.

Specific Conditions

34. 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 condition will be demonstrated by complying with Specific Conditions #37, #40, and #41.

Pollutant	lb/hr	tpy
PM_{10}	25.0	85.0
SO_2	1.4	5.6
VOC	16.1	64.1
NO_X	2.2	8.7

35. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #40.

Pollutant	lb/hr	tpy
TRS	3.9	17.1
		0.0168 g/kg

The TRS limit shall be measured as grams of H_2S per kg black liquor solids.

36. 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 condition will be demonstrated by complying with Specific Conditions #37, #40 and #41.

Pollutant	lb/hr	tpy
PM	25.0	85.0
3-Carene	0.9	3.5
P-Cymene	1.3	5.3
Ethanol	0.1	0.4
alpha-Pinene	10.5	41.7
beta-Pinene	2.8	11.4
Formaldehyde	0.45	1.8
Arsenic	<0.01	<0.10
Beryllium	<0.01	<0.10
Cadmium	<0.01	<0.10
Chromium +6	<0.01	<0.10
Mercury	<0.01	<0.10
Selenium	<0.01	<0.10
Ammonia	2.5	10.7

37. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the facility shall measure the particulate emissions from the smelt dissolving tank using EPA Reference Method 5 with inclusion of back half sampling train particulate. This test shall consist of at least 3 sampling periods at a minimum of 1 hour each. Since Method 5 measures total particulate matter emissions and not just PM_{10} emissions, the facility may report all emissions measured using Method 5, including back half sampling train particulate, as PM_{10} or they may conduct separate PM and PM_{10} testing using EPA Reference Method 5 for PM and Method 201 or 201A for PM_{10}.

38. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from the smelt dissolving tank vent shall not exceed 20% opacity as measured by EPA Reference Method 9.

39. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily 6-minute opacity readings on SN-07 in accordance with EPA Reference Method #9. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

40. 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, operation of the smelt dissolving tank shall be limited by the firing of black liquor solids in the Recovery Boiler. Black liquor solids firing in the boiler are limited to 54.2 tons per hour, based on a 24 hour rolling average, for a maximum limit of 438,000 tons per consecutive twelve month period. Records for the annual rates are to be maintained on a 12 month rolling average, updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emission limit.

41. Pursuant to Section 19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, the scrubber shall be operated at or above the minimum flow rate and at or above the minimum pressure differential as determined during the compliance test.

42. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall maintain continuous records which demonstrate compliance with Specific Condition #41. Readings will be recorded every 15 minutes and averaged over three hours. Records shall clearly indicate when smelt is being dissolved in the Smelt Dissolving Tank. Measurement of liquid flow and pressure drop is not required when smelt from the Recovery Boiler is not being dissolved in the Smelt Dissolving Tank. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

Green Bay Packaging Inc., Arkansas Kraft Division
Permit #: 224-AOP-R2
CSN #: 15-0001

SN-08, SN-09, SN-10, and SN-22
#2 & #1 Lime Kilns, NCG Emergency Vent, and NCG Incinerator

Source Description

The maximum firing rate of Lime Kiln #1 (SN-09) is 38 MMBTU/hr: the maximum firing rate of #2 Lime Kiln (SN-08) is 75 MMBTU/hr. #1 Lime Kiln is only used as a backup kiln when #2 Lime Kiln is out of service except that both kilns may be operated simultaneously during a maximum 24 hour period for startup and shutdown. NCGs are combusted in the #2 Lime Kiln. NCGs are not combusted in the #1 Lime Kiln, but are, instead, routed to the NCG Incinerator (SN-22) when the #2 Lime Kiln is not operating. #1 Lime Kiln was constructed in 1965 and has not been modified since that time. #2 Lime Kiln was constructed in 1975 and has not been modified since that time. The #1 and #2 Lime Kilns use only natural gas as fuel. Both lime kilns are equipped with wet venturi scrubbers.

The NCG Emergency Vent (SN-10) was a previous source of emissions for the facility. Under the provisions of §19.804 of Regulation #19 and the 111(d) plan of the Clean Air Act, NCG gases from the digestors and evaporators are to be incinerated; therefore, this source is no longer a legal point for emissions.

Permit #224-AR-5 required the installation of a back-up incineration unit for the purpose of incinerating NCGs. In accordance with this provision, an NCG flare (SN-22) was installed in December 1994. This flare did not perform reliably. The facility constructed a new flare that was started up in May 1996.

The NCG flare serves to incinerate NCGs when the #2 Lime Kiln is not operating. The flare is supplemented with natural gas and has a firing rate of 4.5 MMBTU/hr.

The #2 Lime Kiln and the NGC Incinerator are subject to 40 CFR Part 63, Subpart S-National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. They will be used as control devices to reduce total HAP emissions for the LVHC system (SN-37). Emissions that are listed for SN-09 and SN-22 reflect the incineration of gases that are routed from the LVHC system.

Specific Conditions

43. 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 condition will be demonstrated by complying with Specific Conditions #52 through #61. Emissions for SN-08 and SN-09 are for the total of the two sources.

SN	Pollutant	lb/hr	tpy
08 09	PM_{10}	28.4	124.4
	SO_2	9.0	39.4
	VOC	26.0	113.9
	CO	4.9	21.3
	NO_X	21.6	94.6
	Lead	0.1	0.4
22	PM_{10}	0.5	0.3
	SO_2	52.6	26.3
	VOC	0.1	0.1
	CO	0.4	0.2
	NO_X	0.3	0.2

44. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #46, #50, and #52 through #61.

SN	Pollutant	lb/hr	tpy
08 09 22	TRS	9.8	42.9

45. 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 condition will be demonstrated by complying with Specific Conditions #52 through #61.

SN	Pollutant	lb/hr	tpy
08 09 22	PM	28.4	124.4
	Acetone	0.3	1.2
	Ethanol	0.4	1.4
	2-Propanol	0.1	0.1
	Terpenes	1.4	5.5
	Formaldehyde	0.6	2.3
	Methanol	1.9	7.7
	1,2,4-Trichlorobenzene	0.7	2.6
	Arsenic	<0.01	<0.10
	Beryllium	<0.01	<0.10
	Cadmium	<0.01	<0.10
	Manganese	0.07	0.3

46. Pursuant to §19.804 of Regulation #19 and §111d of the Clean Air Act, the TRS emission rates shall not exceed 40 ppm. This limit shall be measured as H_2S on a dry basis and on a 12 hour average, corrected to 10% volume oxygen. During periods when the #2 Lime Kiln is down and the oxygen content is greater than 19%, the TRS concentration shall not be corrected for oxygen.

47. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from SN-08 and SN-09 shall not exceed 20% opacity as measured by EPA Reference Method 9.

48. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, weekly observations of the opacity from SN-08 and SN-09 shall be conducted by personnel familiar with the permittee's visible emissions. The permittee shall maintain personnel trained in EPA Reference Method 9. If visible emissions which appear to be in excess of the permitted opacity are detected, the permittee shall immediately take action to identify the cause of the visible emissions, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated daily, kept on site, and made available to Department personnel upon request.

    A. The date and time of the observation.

    B. If visible emissions which appeared to be above the permitted limit were detected.

    C. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.

    D. The name of the person conducting the opacity observations

49. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from SN-22 shall not exceed 20% opacity as measured by EPA Reference Method 9.

50. Pursuant to §19.804 of Regulation #19 and 111(d) of the Clean Air Act, the Emergency Vent (SN-10) shall not be used. All non-condensable gases (NCG) shall be routed through the #2 Lime Kiln or the NCG Flare. There shall be no NCGs directly emitted to the atmosphere.

51. Pursuant to §19.804 of Regulation #19 and 111(d) of the Clean Air Act, NCGs shall not be exhausted to the #1 Lime Kiln at any time.

52. 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 #1 Lime Kiln shall not exceed 2,880 hours of operation per consecutive twelve month period. The facility shall maintain records of all hours of operation for the #1 Lime Kiln and for all hours which the #1 Lime Kiln and the #2 Lime Kiln are operated simultaneously. The records required by this condition shall be maintained each day that the #1 Lime Kiln is operated. These records shall be kept on site and provided to Department personnel upon request.

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 total throughput of lime through the #1 and #2 Lime Kilns shall be limited to 91,250 tons per consecutive twelve month period (11.0 TcaO/hr based on a 24 hour rolling average). Records of these annual rates are to be maintained on a twelve month rolling average, updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

54. Pursuant to §19.804 of Regulation #19 and 111(d) of the Clean Air Act, the NCG Incinerator (SN-22) shall be used at all times when NCGs are not incinerated in the #2 Lime Kiln. The facility shall maintain effective incineration of NCGs at a minimum temperature of 1200EF for at least 0.5 second.

55. 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, operation of the NCG Incinerator shall not exceed 1000 hours on a consecutive 12 month basis. The facility shall maintain records updated daily of all hours of operation for the incinerator. These records shall be kept on site and shall be provided to Department personnel on request.

56. 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 #1 Lime Kiln shall use only natural gas as fuel.

57. Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, all exhaust gases from the #1 Lime Kiln shall be controlled by a wet scrubber.

58. 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, for the #1 Lime Kiln, pressure drop across the scrubber throat shall be maintained at or above 6 inches of water based on a 3 hour rolling average; the liquid flow to the scrubber shall be maintained at or above 500 gallons per minute based on a 3 hour rolling average. The facility shall continuously monitor and record once per hour or continuously (by strip chart) the pressure drop across the scrubber throat and the liquid flow to the scrubber. Measurement of liquid flow and pressure drop is not required when lime is not being processed in the kiln.

59. 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 #2 Lime Kiln shall use only natural gas as fuel.

60. Pursuant to §19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304

and §8-4-311, all exhaust gases from the #2 Lime Kiln shall be controlled by a wet scrubber. The wet scrubber shall be used at all times when the #2 Lime Kiln is operating.

61. 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, for the #2 Lime Kiln pressure drop across the scrubber throat shall be maintained at or above 10 inches of water based on a 3 hour rolling average; the liquid flow to the scrubber shall be maintained at or above 550 gallons per minute based on a 3 hour rolling average. The facility shall continuously monitor and record once per hour or continuously (by strip chart) the pressure drop across the scrubber throat and the liquid flow to the scrubber. Measurement of liquid flow and pressure drop is not required when lime is not being processed in the kiln. These records shall be maintained on site and provided to Department personnel upon request.

62. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(a)(1)(i) and §63.440(d), the total HAP emissions routed from the LVHC system shall be controlled no later than April 16, 2001.

63. Pursuant to §19.304 of Regulation #19 and 40 CFR 60, Subpart S §63.443(d)(3) and (4), the #2 Lime Kiln and the NCG Incinerator will be the control devices for reducing the HAP emissions from the LVHC system (SN-37).

    A. Pursuant to §63.443(d)(4), the HAP emission stream shall be introduced into the flame zone of the lime kiln.

    B. Pursuant to §63.443(d)(3), the NCG Incinerator shall be operated at a minimum of 871 ^{o}C (1600 ^{o}F) and a minimum residence time of 0.75 seconds.

    C. Pursuant to §63.453(b), a continuous monitoring device shall be installed in the NCG Incinerator to continuously measure and record the temperature in the firebox or in the ductwork immediately downstream of the firebox while HAPs are being burned.

        1. Pursuant to §63.10(b)(2)(vii), a record of NCG Incinerator temperature will be kept in a form suitable for inspection upon request for a period of at least five years.

        2. Pursuant to §63.10(b)(2)(vi), a record of each period during which the temperature probe is malfunctioning or inoperative shall be kept.

        3. Pursuant to §63.10(b)(2)(x) and (xi), a record shall be kept of all calibration checks, maintenance, and adjustments of the temperature probe.

D. Pursuant to §63.453(o), except as provided in §63.443(e), operation of the NCG Incinerator below 871 ºC (1600 ºF) while burning HAPs shall constitute a violation of the emissions standard of Subpart S and shall be reported as a period of excess emissions as outlined in Specific Condition #154.

SN-11
Brownstock Washers

Source Description

Three sets of rotary-drum vacuum type Brownstock Washer Systems are used to separate pulp from spent black liquor. There are a total of eight individual Brownstock washer units. The A-Line and C-Line washers consist of three washers in series. The B-washers consist of two washers in series. Previously, open hoods captured emissions generated by each washing unit and vented through individual exhaust stacks. Pursuant to 40 CFR Part 63, Subpart S, the emissions from the washers are collected and passed to the HVLC system (SN-38) and taken to the #3 Wood Waste Boiler (SN-04) or #1 Package Boiler (SN-14) for control. Hoods are not required on the Brownstock Washers to collect and treat the HAP emissions until April 16, 2001. Until the hoods are installed and the collected emissions are routed to the boilers, Specific Condition #66 (A-E) should apply to this source. When the HVLC system is operational, then Specific Condition #64 will become effective and Specific Condition #66 (A-E) will no longer apply.

Specific Conditions

64. Pursuant to 40 CFR Part 52.21 (b)(3)(viii), the Brownstock Washer emissions (SN-11) are to be routed to the HVLC system (SN-38) thus eliminating emissions from SN-11. The washers shall not be vented into the atmosphere.

65. 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 annual production rate of pulp from the Brownstock Washer System is limited to 310,333 air dried tons of pulp per consecutive twelve month period. Records for these rates are to be maintained on a twelve month rolling total, updated monthly. Such records shall be maintained on site and made available to the Department upon request.

66. The following Specific Conditions are in effect until April 16, 2001 or the HVLC system is operational.

A. Pursuant to §19.501 of Regulation #19 et seq, and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with the emission limits below is established by compliance with the throughput limitations of Specific Condition D below.

SN	Pollutant	lb/hr	tpy
11	VOC TRS	244.1 20.4	932.2 78.2

B. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from the Brownstock Washers shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance with this opacity limit will be demonstrated by compliance with the throughput limitations in Specific Condition D below.

C. Pursuant to NSPS Subpart BB - Standards of Performance for Kraft Pulp Mills, the Brownstock Washer System is not an effected facility because it was constructed before September 24, 1976.

D. 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 annual production rate of pulp from the Brownstock Washer System is limited to 310,333 air dried tons of pulp per consecutive twelve month period. Records for these rates are to be maintained on a twelve month rolling average, updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emission limit.

E. 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 condition will be demonstrated by complying with Specific Condition D.

SN	Pollutant	lb/hr	tpy
11	Acetone	1.5	5.5
	Benzaldehyde	0.1	0.2
	Cyclohexanone	0.9	0.2
	1,1-Dichloroethylene	0.1	0.1
	Ethanol	0.8	2.5
	Terpenes	218.5	837.9
	Acetaldehyde	0.97	3.8
	Acrolein	0.01	0.1
	Carbon Tetrachloride	0.15	0.6
	Chloroform	0.12	0.5
	1,2-Dichloroethane	0.03	0.2
	Methanol	22.33	85.7
	Styrene	0.03	0.2
	1,1,2-Trichloroethane	0.04	0.2

SN-12
Wastewater Treatment

Source Description

The Aerated Settling Basin and Post Aerated Stabilization Basin are part of the wastewater treatment for this facility. This source was introduced in 1965.

Specific Conditions

67. 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 condition will be demonstrated by complying with Specific Condition #68.

Pollutant	lb/hr	tpy
VOC	7.6	33.3

68. Pursuant to §19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed 493,000 air dried tons of finished product at this source during any consecutive twelve month period. Records for these annual rates are to be maintained on a twelve month rolling average, updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

SN-14
#1 Package Boiler

Source Description

The #1 Package Boiler (SN-14) has a heat input capacity limited to 250 MMBTU/hr. Natural gas is fired in this boiler. Fuel oil is fired in the boiler under emergency situations such as natural gas curtailment. This boiler produces a maximum of 199,000 pounds of 600 psi steam hourly. The boiler was constructed in 1973 and has not been modified since that time.

The #1 Package Boiler will be used as a backup control device to reduce the total HAP emissions for the HVLC Collection system (SN-38). The #3 Wood Waste Boiler (SN-04) is the primary control device. The package boiler will not be used more than 1,000 hours in any 12 month period to incinerate emissions collected in the HVLC system. Emissions listed here reflect the incineration of gases routed from the HVLC system.

Specific Conditions

69. 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 condition will be demonstrated by complying with Specific Conditions #73 through #75.

Pollutant	lb/hr	tpy
PM_{10}	25.0	14.0
SO_2	6.2	3.2
VOC	70.6	39.0
CO	560.0	305.0
NO_X	40.0	39.0

70. 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 condition will be demonstrated by complying with Specific Conditions #73 through #75.

Pollutant	lb/hr	tpy
PM	25.0	24.0
Acrolein	<0.01	<0.10
Methanol	1.0	0.5

71. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from SN-14 shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance with this opacity limit shall be demonstrated by complying with Specific Condition #72.

72. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily 6-minute opacity readings on SN-14 in accordance with EPA Reference Method #9, each day the boiler burns oil. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

73. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the #1 Package Boiler (SN-14) shall be tested for PM_{10}, SO_2, VOC, CO, and NO_X emissions using EPA Reference Method 201A or 201 for PM_{10}, Method 6 for SO_2, Method 25A for VOC, Method 10 for CO, and Method 7E for NO_X. Each test shall consist of at least 3 sampling periods at a minimum of 1 hour each. This testing is to be completed annually, on or before October 30 of every year.

74. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 60, Subpart D-Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, the #1 Package Boiler would be an affected facility if it were capable of firing fossil fuel at a heat input rate greater than 250 MMBTU/hr. It has been the policy of this facility to re-rate the capacity of the boilers each year after testing. Capacity rating was determined by dividing the maximum tested steaming rate by 90%. Under this permit, the heat input rating of the #1 Package Boiler is 250 MMBTU/hr. Pursuant to §60.40, the boiler must be operated below this limit in order to not be subject to the NSPS requirements.

75. 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 #1 Package Boiler shall only burn natural gas as fuel. Fuel oil shall only be burned in the event of natural gas curtailment or as detailed in the alternate operating scenario. Sulfur content in the fuel shall be no greater than 2% by weight. The permittee shall obtain and maintain the fuel receipts from the fuel supplier which certify that the oil contains no more than 2% sulfur by weight. Steam generation in the boiler shall not exceed 199,000 pounds of steam per hour based on a 24 hour rolling average. Maximum annual steam production shall not exceed 308,080,000 pounds, determined on a 12 month rolling total.

76. 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 condition will be demonstrated by complying with Specific Condition #77 through #79.

SN	Pollutant	lb/hr	tpy
Alternate Operating Scenario			
14	PM/PM_{10}	28.8	1.0
	SO_2	418.3	14.2
	VOC	1.1	0.1
	CO	6.7	0.3
	NO_X	89.3	3.1

77. 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 throughput limits of the alternate operating scenario are not to exceed 90,000 gallons of fuel oil during the period from April 1 to June 30 of each year. This limit is to allow the facility the opportunity to dispose of the fuel oil not used during periods of natural gas curtailment. Also, upon notification of the Department, portions of this 90,000 gallons may be burned to test boiler fuel oil combustion controls prior to the annual gas curtailment season. Except for this 90,000 gallons of fuel oil to be fired annually, the facility shall not fire fuel oil except during periods of natural gas curtailment.

78. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, the facility shall maintain daily records of fuel oil usage and of all hours of operation when fuel oil is used. These records shall be kept on site and shall be provided to Department personnel upon request.

79. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. This test data shall be used for determination of compliance with the conditions set forth in this permit.

80. Pursuant to §19.304 of Regulation #19 and 40 CFR 60, Subpart S §63.443(d)(4), the #1 Package Boiler will be the backup control device for reducing the HAP emissions from the HVLC system (SN-38). The HAP emission stream shall be introduced into the combustion air going to the boiler. This requirement will not come into effect until April 16, 2001 or when HVLC gases are routed to the boiler, whichever comes first.

SN-15
#2 Package Boiler

Source Description

The #2 Package Boiler (SN-15) has a maximum heat input capacity of 205 MMBTU/hr. Natural gas is fired in the boiler. Fuel oil is fired in the boiler under emergency situations such as natural gas curtailment. This boiler produces a maximum of 199,000 pounds of 600 psi steam hourly. The boiler was constructed in 1996 and began operation in February 1997.

Specific Conditions

81. 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 condition will be demonstrated by complying with Specific Conditions #85 through #89.

Pollutant	lb/hr	tpy
PM_{10}	1.1	4.6
SO_2	1.5	6.6
VOC	0.9	3.8
CO	22.5	98.6
NO_X	13.8	39.0

82. 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 condition will be demonstrated by complying with Specific Condition #85.

Pollutant	lb/hr	tpy
PM	1.8	7.8

83. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from SN-15 shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance shall be demonstrated by complying with Specific Condition #84.

84. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily 6-minute opacity readings on SN-15 in accordance with EPA Reference Method #9 each day the boiler burns oil. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

85. 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 #2 Package Boiler shall only burn natural gas as fuel. Fuel oil shall only be burned in the event of natural gas curtailment and, upon notification of the Department, for short periods to test boiler fuel oil combustion controls. Steam generation in the boiler shall not exceed 199,000 pounds of steam per hour based on a 24 hour rolling average. Maximum annual steam production shall not exceed 1,700,000,000 pounds, determined on a 12 month rolling total.

86. Pursuant to §19.901 of Regulation #19 et seq, and 40 CFR Part 52, Subpart E, the facility accepted limits on SO_2 in order to avoid further PSD requirements in permit #224-AOP-R0. Within 60 days after the date of issuance of this permit, the #2 Package Boiler (SN-15) shall be tested for SO_2 using EPA Reference Method 6. A written report of the results of the completed tests shall be furnished to the Compliance Section of the Department within 30 days of test completion.

87. Pursuant to §19.901 of Regulation #19 et seq, and 40 CFR Part 52, Subpart E, the facility accepted limits on SO_2 in order to avoid further PSD requirements in permit #224-AOP-R0.

    The facility has stated that it will take a limit on SO_2 in order to stay below PSD significance levels. Within thirty days of completion of the required SO_2 testing, the facility shall submit to the attention of the Engineering Section of the Department the tested actual emissions of the #2 Package Boiler so that a PSD analysis can be performed.

    In the event that the facility triggers the 40 tpy significance level for SO_2 after the issuance of this permit, the facility shall have 60 days from the completion of the testing to submit lower SO_2 limits for modification of the permit limits. If the facility does not take a lower limit, a new PSD application shall be submitted to the Department. If the facility has physically emitted more than the allowable increase, the facility shall become subject to enforcement action.

88. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, compliance testing shall be conducted while the equipment being tested is operating within 90% of its

permitted capacity. This test data shall be used for determination of compliance with the conditions set forth in this permit.

89. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 60, Subpart Db-Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the #2 Package Boiler is an affected facility.

A. Pursuant to §60.44b(a), the facility shall not emit any gases from the #2 Package Boiler that contain NO_X in excess of 0.20 lb/MMBTU based on a 30 day rolling average.

B. Pursuant to §60.46b(a), the NO_X emission standards under §60.44b for the #2 Package Boiler apply at all times. Compliance with these requirements shall be determined as specified in §60.46b(c) and (e).

C. Pursuant to §60.48b(b), the facility shall install, calibrate, maintain, and operate a continuous monitoring system for measuring NO_X emissions from the #2 Package Boiler to the atmosphere and record the output of the system as per the requirements of §60.48b(c), (d), (e), (f), and (g).

D. Pursuant to §60.49b, the facility has notified the Department of the February 15, 1997, initial startup of the #2 Package Boiler. As per §60.49b(a)(1), the facility has notified the Department that the design heat input capacity of the boiler is to be 205 MMBTU/hr. The fuel to be combusted is natural gas. Fuel Oil will be used in the event of natural gas curtailment. As per §60.49b(a)(3), the facility has notified the Department of the annual capacity factor at which the facility anticipates operating the boiler based upon all the fuels fired and each individual fuel fired.

E. Pursuant to §60.49b(b), the facility shall submit the performance test data for NO_x from the initial performance test and performance evaluation of the CEMs for the #2 Package Boiler to the Air Division Compliance Section. The applicable performance specifications in 40 CFR Part 60, Appendix B shall be used.

F. Pursuant to §60.49b(d), the facility shall record and maintain records of the amounts of each fuel combusted during each day for the #2 Package Boiler and calculate the annual capacity factor individually for natural gas and oil for each calendar quarter. The annual capacity factor is to be determined on a 12 month rolling average basis with a new capacity factor calculated at the end of each calendar month.

G. Pursuant to §60.49b(g), the facility shall maintain records for the #2 Package Boiler for each steam generating unit operating day. As per §60.48b(i), the facility shall submit a quarterly report containing these records. These records shall be submitted to the Air Division Compliance Section and shall be postmarked by the 30th day following the end of each calendar quarter.

H. Pursuant to §60.49b(h)(2), the facility is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the #2 Package Boiler. If there are no excess emissions during the calendar quarter, the facility shall submit a semiannual report stating that no excess emissions occurred during the semiannual reporting period.

I. Pursuant to 60.49b(o), the facility shall retain all required records for the #2 Package Boiler for a period of 2 years following the date of such record.

SN-17
Tall Oil Plant Reactor

Source Description

The tall oil reactor operates on a batch basis. Each batch takes about 1 hour to cook and 3 hours to transfer. Maximum tall oil production is 5 tons/hr. This source was installed in 1982.

Specific Conditions

90. 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 condition will be demonstrated by complying with Specific Condition #94.

Pollutant	lb/hr	tpy
VOC	5.9	21.9

91. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Condition #94.

Pollutant	lb/hr	tpy
TRS	4.1	18.0

92. 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 condition will be demonstrated by complying with Specific Condition #94.

Pollutant	lb/hr	tpy
Acetone	0.1	0.1
Terpenes	0.9	1.3

93. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from this source shall not exceed 20% opacity as measured by EPA Reference Method 9.

94. 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 production or processing of soap shall be limited to 18,900,000 gallons per consecutive twelve month period. Records for these annual rates are to be maintained on a twelve month rolling total and updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emission limit.

SN-18 and SN-19
#1 and #2 Lime Silos (Sodium Carbonate)

Source Description

The #1 Lime Silo was installed in 1965 and is used to store sodium carbonate. The #2 Lime Silo was installed in 1991 and is used to store lime. Vent filters are used for the control of emissions from these sources. They are located in the causticizing area.

Specific Conditions

95. 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 emission limits below shall be demonstrated by compliance with the throughput limits of Specific Condition #53.

SN	Pollutant	lb/hr	tpy
18	PM_{10}	7.2	0.2
19	PM_{10}	7.2	0.2

96. 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 the emission limits below shall be demonstrated by compliance with the throughput limits of Specific Condition #53.

SN	Pollutant	lb/hr	tpy
18	PM	7.2	0.2
19	PM	7.2	0.2

97. Pursuant to §18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions from these sources shall not exceed 5% opacity as measured by EPA Reference Method 9. Compliance with the opacity limit shall be demonstrated by complying with Specific Condition #98.

98. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily observations of the opacity from SN-18 and SN-19, 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 or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

SN-20
Starch Silo

Source Description

The starch silo was installed in 1991. It is used for the storage of starch in the paper machine area.

Specific Conditions

99. 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 emission limits below shall be demonstrated by compliance with Plantwide Condition #5.

Pollutant	lb/hr	tpy
PM_{10}	5.6	0.6

100. 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 the emission limits below shall be demonstrated by compliance with Plantwide Condition #5.

Pollutant	lb/hr	tpy
PM	5.6	0.6

101. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from this source shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance with the opacity limit shall be demonstrated by complying with Specific Condition #102.

102. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily observations of the opacity from SN-20, 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 or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

SN-21
Lime Silo - Water Plant

Source Description

Lime stored in the Lime Silo is used to clarify the water from the facility.

Specific Conditions

103. 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 emission limits below shall be demonstrated by compliance with Plantwide Condition #5.

Pollutant	lb/hr	tpy
PM_{10}	7.2	0.2

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 the emission limits below shall be demonstrated by compliance with Plantwide Condition #5.

Pollutant	lb/hr	tpy
PM	7.2	0.2

105. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from this source shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance with the opacity limit shall be demonstrated by complying with Specific Condition #106.

106. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily observations of the opacity from SN-21, 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 or readings shall be recorded in a log which shall be kept on site and made available for inspection upon request.

SN-23
Batch Digestors

Source Description

Product and pressured gases from the digestors are released to atmospheric pressure in the blow tanks. The emergency vent was previously permitted as SN-16; however, as releases from this source are made only in emergency situations, it is not a normal source of emissions.

There are five Batch Digestors located at the facility. Batch Digestors #1 and #2 were installed in 1965, #3 and #4 in 1974, and #5 in 1987. Batch Digestor #2 was repaired in 1996. In the Batch Digestors, wood chips and sawdust are cooked to separate the wood fiber from the lignin that binds the fibers together.

Specific Conditions

107. 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 condition will be demonstrated by complying with Specific Conditions #111 and #112.

Pollutant	lb/hr	tpy
VOC	11.5	29.0

108. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Condition #112.

Pollutant	lb/hr	tpy
TRS	3.5	9.0

109. 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 condition will be demonstrated by complying with Specific Conditions #111 and #112.

Pollutant	lb/hr	tpy
Acetone	0.1	0.3
1,2-Dichloroethylene	0.1	0.1
Terpenes	11.4	28.9

110. Pursuant to §19.503 of Regulation #19 and 40 CFR Part 52, Subpart E, visible emissions from this source shall not exceed 20% opacity as measured by EPA Reference Method 9.

111. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 60, Subpart BB-Standards of Performance for Kraft Pulp Mills, Batch Digestor #5 is an affected facility.

A. Pursuant to §60.283(a)(1)(iii), the gases from the #5 Batch Digestor shall be combusted with other waste gases in the incinerator, lime kiln, or recovery furnace. They shall be incinerated at a minimum temperature of 1200EF for a minimum of 0.5 seconds.

B. Pursuant to §60.284(b)(1), the facility shall install, calibrate, maintain and operate a continuous monitoring device for the incinerator (SN-22) which measures and records the combustion temperature at the point of incineration of effluent gases which are emitted from the digestor system. The monitoring device is to be certified by the manufacturer to be accurate within ±1 percent of the temperature being measured.

C. Pursuant to §60.284(d)(3)(ii), the facility shall report semiannually periods of excess emissions. For the digestor system, periods of excess emissions are all periods in excess of 5 minutes and their duration during which the combustion temperature at the point of incineration is less than 1200EF. As in §60.284(e)(2), excess emissions reported shall not be a violation of § 60.11(d) provided that the affected facility, including air pollution control equipment, is maintained and operated in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions.

112. Pursuant to §19.8 of Regulation #19 and §111d of the Clean Air Act, non-condensable gases from the digestors and evaporators shall be routed to efficient incineration at the #2 Lime Kiln. The NCG Incinerator may be used as a backup to the #2 Lime Kiln. Incineration shall occur at a minimum temperature of 1200EF for at least 0.5 seconds.

SN-24
Wood Yard Fugitives

Source Description

Fugitive woodyard emissions at the mill are classified as the unloading of wood chips and wood waste. Chips are sent to the semicircular chip pile by means of a belt conveyor without the use of blowers. Then, chips are recovered with a reclaim conveyor that follows the contour of the pile. The chips will go through a chip thickness screening system which consists of a scalping screen, a primary screen, an air density separator, chip conditioner, and a fines screen. After the screening system, the chips will be conveyed to a chip silo, to the digester, or to the chip pad.

Specific Conditions

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

Pollutant	lb/hr	tpy
VOC	1481.8	1290.6

SN-25A
#1 Paper Machine

Source Description

The #1 Paper Machine was installed in 1965. At the paper machine, pulp is formed into a sheet, drained and pressed for dewatering, and then dried with steam heated dryers.

Specific Conditions

114. 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 condition will be demonstrated by complying with Specific Condition #116.

Pollutant	lb/hr	tpy
VOC	99.5	339.8

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 condition will be demonstrated by complying with Specific Condition #116.

Pollutant	lb/hr	tpy
Acetone	1.3	4.4
Acetaldehyde	6.8	23.1
Acrolein	0.3	0.9
Benzene	0.1	0.2
1,2 Dichloroethylene	0.2	0.7
Methanol	34.5	118.2
Methyl Ethyl Ketone	0.4	1.3
Methyl Isobutyl Ketone	0.2	0.5

Pollutant	lb/hr	tpy
Styrene	0.1	0.3
Terpenes	56.3	192.8
Toluene	0.1	0.3
Trichloroethylene	0.3	0.8
m, p Xylene	0.1	0.4
o Xylene	0.1	0.3

116. 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 yearly production rate of the #1 Paper Machine shall be limited to 257,000 air dried tons of finished paper per consecutive twelve month period. The permittee shall maintain records which demonstrate compliance with the above limit. These records shall be updated at least monthly, shall be kept on site, and shall be provided to Department personnel upon request.

SN-25B
#2 Paper Machine

Source Description

The #2 Paper Machine was installed in 1979. At the paper machine, pulp is formed into a sheet, drained and pressed for dewatering, and then dried with steam heated dryers.

Specific Conditions

117. 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 condition will be demonstrated by complying with Specific Condition #119.

Pollutant	lb/hr	tpy
VOC	80.0	270.1

118. 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 condition will be demonstrated by complying with Specific Condition #119.

Pollutant	lb/hr	tpy
Acetone	1.0	3.5
Acetaldehyde	5.4	18.4
Acrolein	0.2	0.8
Benzene	0.1	0.1
1,2 Dichloroethylene	0.2	0.5
Methanol	27.8	94.0
Methyl Ethyl Ketone	0.3	1.0
Methyl Isobutyl Ketone	0.1	0.4

Pollutant	lb/hr	tpy
Styrene	0.1	0.2
Terpenes	45.3	153.3
Toluene	0.1	0.2
Trichloroethylene	0.2	0.6
m, p Xylene	0.1	0.3
o Xylene	0.1	0.3

119. 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 yearly production rate of the #2 Paper Machine shall be limited to 204,400 air dried tons of finished paper per consecutive twelve month period. The permittee shall maintain records which demonstrate compliance with the above limit. These records shall be updated at least monthly, shall be kept on site, and shall be provided to Department personnel upon request.

SN-26 and SN-27
Basement Air Make-up Heaters #1 and #2

Source Description

SN-26 and SN-27 are both 10 MMBTU/hr natural gas fired heaters. They were installed in 1967.

Specific Conditions

120. 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 emission limits below shall be demonstrated by complying with the throughput limits of Specific Conditions #116 and #123.

SN	Pollutant	lb/hr	tpy
26	PM_{10}	0.2	0.7
	SO_2	0.1	0.1
	VOC	0.1	0.1
	CO	0.5	1.8
	NO_x	1.7	7.4
27	PM_{10}	0.2	0.7
	SO_2	0.1	0.1
	VOC	0.1	0.1
	CO	0.5	1.8
	NO_x	1.7	7.4

121. 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 the emission limits below shall be demonstrated by complying with the throughput limits of Specific Conditions #116 and #123.

SN	Pollutant	lb/hr	tpy
26	PM	0.2	0.7
27	PM	0.2	0.7

122. Pursuant to §18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E, visible emissions from these sources shall not exceed 5% opacity as measured by EPA Reference Method 9. Compliance with the opacity limit shall be demonstrated by complying with Specific Condition #116 and #123.

123. 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 #1 and #2 Basement Air Make-Up Heaters shall only use natural gas as a fuel source.

SN-28 and SN-29
Pocket Vent System Heaters #1 and #2

Source Description

Both pocket vent system heaters have a heating value of 7 MMBTU/hr. They are fired with natural gas. There is no emission control equipment on the heaters. The heaters were installed in 1967.

Specific Conditions

124. 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 condition will be demonstrated by complying with Specific Conditions #127.

SN	Pollutant	lb/hr	tpy
28	PM_{10}	0.1	0.4
	SO_2	0.1	0.1
	VOC	0.1	0.2
	CO	0.2	0.8
	NO_x	0.9	3.7
29	PM_{10}	0.1	0.4
	SO_2	0.1	0.1
	VOC	0.1	0.2
	CO	0.2	0.8
	NO_x	0.9	3.7

125. 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 condition will be demonstrated by complying with Specific Conditions #127.

SN	Pollutant	lb/hr	tpy
28	PM	0.1	0.4
29	PM	0.1	0.4

126. Pursuant to §18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions from these sources shall not exceed 5% opacity as measured by EPA Reference Method 9. Compliance with the opacity limit shall be demonstrated by complying with Specific Condition #127.

127. 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 #1 and #2 Basement Air Make-Up Heaters shall only use natural gas as a fuel source.

SN-30
Landfill

Source Description

The landfill at Green Bay is separated into two areas. Area I, which operated from 1981 to 1995, has a design capacity of 672,750 yd^3. Area II is a currently active area with a design capacity of 449,000 yd^3. The material stored in the landfill is about 80% sludge and 20% miscellaneous waste. Emission limits are based upon the emissions generated from both areas of the landfill. The decomposing waste encapsulated within the landfill produces a gas that is approximately 50 percent methane and 50 percent carbon dioxide, with other non-methane organic compounds including volatile organic compounds.

Specific Conditions

128. 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 condition will be demonstrated by complying with Specific Conditions #130 through #132.

Pollutant	lb/hr	tpy
VOC	6.6	28.9

129. 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 condition will be demonstrated by complying with Specific Conditions #130 through #132.

Pollutant	lb/hr	tpy
Methane	497.4	2178.5

130. 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, annual waste acceptance rate for the landfill shall not exceed 489,000 cubic yards per year as calculated on a twelve month rolling total.

131. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, the facility shall record the amounts of waste received in the landfill.

132. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR Part 52, Subpart E, Area I of the landfill is closed and shall no longer accept waste.

133. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 60, Subpart WWW-Standards of Performance for Municipal Solid Waste Landfills, the landfill is not an affected facility because it does not contain household waste.

SN-31
Weak Black Liquor Tanks

Source Description

Weak Black Liquor is a product of the pulping process. It consists of compounds of dissolved and reacted lignin, organic and inorganic compounds that contain sulfur, and unreacted sodium hydroxide and sodium sulfide. Weak Black Liquor is contained in the vessels listed in the table below.

Equipment Number	Vessel	Capacity (gallon)
0311	Hot Water Accumulator	75,206
0365	Accumulator Tank	---
0426	Rejects Surge Tank	16,907
0467	Weak Black Liquor Boil Out Tank	251,885
0470	Blend Tank	18,426
0472	Screen Accepts Tank	18,426
0474	Weak Black Liquor Storage Tank	1,055,016
0912	Dirty Condensate Tank	2,992
0429	1st Stage A&B-Line Seal Tank	172,744
0430	2nd Stage A&B-Line Seal Tank	126,848
0431	3rd Stage A&B-Line Seal Tank	56,407
0432	1st Stage C-Line Tank	172,744
0433	2nd Stage C-Line Tank	126,915
0434	3rd Stage C-Line Tank	88,134
0435A	A&B-Line Foam Tank	42,305
0435B	C-Line Foam Tank	42,305

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 condition will be demonstrated by complying with Specific Condition #135.

Pollutant	lb/hr	tpy
VOC	7.5	28.6

135. 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, a throughput limit of 310,333 air dried tons of pulp at the facility per consecutive twelve month period shall be considered compliance with VOC emission limits for this source. Records of these annual rates are to be updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

SN-32
Green Liquor Tanks

Source Description

Green Liquor is formed from the dissolved molten salts or smelt from the recovery boiler. It is contained in the vessels listed in the table below.

Equipment Number	Vessel	Capacity (gallons)
0786	#1 Green Liquor Clarfier (North)	47,377
0724	#2 Green Liquor Clarifier (South)	47,377
0729A	#1 Green Liquor Storage Tank (North)	54,147
0729B	#2 Green Liquor Storage Tank (South)	54,147
0709	Green Liquor Blend Tank	26,632
0743	Extra Clarfier/Washer Tank	69,177

Specific Conditions

136. 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 condition will be demonstrated by complying with Specific Condition #137.

Pollutant	lb/hr	tpy
VOC	4.4	18.1

137. 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, a throughput limit of 310,333 air dried tons of pulp at the facility per consecutive twelve month period shall be considered compliance with VOC emission limits for this source. Records of these annual rates are to be updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

SN-33
Small Fuel Oil Storage Tank

Source Description

The Small Fuel Oil Storage Tank (Equipment # 1813) has a capacity of 88,128 gallons. It is used to store the fuel oil needed for the boilers in the event of natural gas curtailment.

Specific Conditions

138. 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 condition will be demonstrated by complying with Specific Condition #139.

Pollutant	lb/hr	tpy
VOC	5.2	0.1

139. 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 throughput limit of 1,050,000 gallons of fuel oil as described in the alternate operating scenario for the #1 Package Boiler shall be considered compliance with VOC emission limits for this source. Records of these annual rates are to be updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

SN-34
Turpentine Storage Tank

Source Description

The Turpentine Storage Tank (Equipment #0316C) has a capacity of 11,655 gallons. It is used to store the turpentine manufactured in the digesting process.

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 condition will be demonstrated by complying with Specific Condition #141.

Pollutant	lb/hr	tpy
VOC	15.9	0.6

141. 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 throughput limit of 438,364 gallons of turpentine as recorded in the turpentine loading operation shall be considered compliance with VOC emission limits for this source. Records of these annual rates are to be updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

SN-35
Turpentine Loading Operation

Source Description

In the Turpentine Loading Operation, turpentine is loaded into trucks and railcars for transportation off-site.

Specific Conditions

142. 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 condition will be demonstrated by complying with Specific Condition #143.

Pollutant	lb/hr	tpy
VOC	4.9	0.3

143. 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 throughput of turpentine through the turpentine loading operation shall be limited to 438,364 gallons during any consecutive twelve month period. Records for these annual rates are to be maintained on a twelve month rolling basis, updated monthly. Such records shall be maintained on site and made available to the Department upon request. Failure to comply with these conditions shall be considered a violation of the mass emissions limit.

SN-36
Slaker/Causticizers

Source Description

Green liquor from the Green Liquor Clarifier and lime from the Lime Silos are mixed together in the Slaker. The solution of lime and green liquor overflows into two causticizers in series. In these causticizers, calcium hydroxide reacts with sodium carbonate to form sodium hydroxide and calcium carbonate. These components are pumped onto the white liquor clarifier. The insoluble calcium carbonate settles out and is sent back to the lime kilns for conversion to calcium oxide. The liquid portion in the clarifier is white liquor that goes to the digesters to digest wood chips. The steam quench tank removes steam from the Slaker and creates a slight negative pressure. The overflow from the causticizers into the standpipe allows the release of emissions to atmosphere. Process rate is limited by the lime processing rate of the lime kilns at a rate of 91,250 tons per year.

Specific Conditions

144. 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 condition will be demonstrated by complying with Specific Conditions #146 and #147.

Pollutant	lb/hr	tpy
VOC	1.2	5.0

145. Pursuant to §18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #146 and #147.

Pollutant	lb/hr	tpy
Acetaldehyde	0.6	2.5
Acetone	0.2	0.9
Ammonia	4.9	21.2
Methanol	0.6	2.5

146. 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 throughput of lime through the Slaker system shall not exceed 91,250 tons during any consecutive twelve month period. Compliance for this condition is shown by maintaining records of lime usage outlined in Specific Condition #53.

147. Pursuant to §19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall maintain monthly records which demonstrate compliance with Specific Condition #146. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. A twelve month rolling total and each individual month's data shall be kept on site, and shall be made available to Department personnel upon request.

SN-37
LVHC Collection System

Source Description

Pulping wood releases numerous HAP compounds that do not condense out in other processes. The non-condensable gases are collected and sent to the #2 Lime Kiln (SN-09) or to the NCG Incinerator (SN-22) for incineration. The LVHC system collects HAPs from the Turpentine Recovery process, the Digester Blow System, and the Evaporator System. Emissions listed for this source are from releases due to the opening of the bypass vent. Emissions listed for this system include releases from the system due to startup, shutdown and malfunction conditions in the LVHC System, from the LVHC Collection System and from the control equipment used to reduce total HAP emissions, and 1% of process time as provided at §63.443(e)(1). The remaining emissions are sent to the control devices and incinerated.

Specific Conditions

148. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act and 40 CFR Part 63, Subpart S, §63.443(e)(1), the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Condition #152.

Pollutant	lb/hr	tpy
TRS	140.9	12.4

149. Pursuant to §18.801 of Regulation #18 A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 63, Subpart S, §63.443(e)(1), the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #150 through #152.

Pollutant	lb/hr	tpy
Formaldehyde	0.3	<0.1
Methanol	2.0	0.2
alpha-Pinene	3.2	0.3
beta-Pinene	1.3	0.2
Terpenes	6.8	0.6
Styrene	0.3	<0.1

150. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(a)(1)(i) and §63.440(d), the total HAP emissions from this source shall be controlled no later than April 16, 2001.

151. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c) and §63.443(d)(4), the LVHC System sources shall be enclosed and vented into a closed-vent system and routed to a control device that reduces total HAP emissions using the #2 Lime Kiln (SN-08) and/or the NCG Incinerator (SN-22). Pursuant to §63.10(b)(2)(iii), a record will be kept of all maintenance activities performed on the LVHC System control devices.

152. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c), the enclosures and closed-vent system shall meet the requirements specified in §63.450-Standards For Enclosures and Closed-Vent Systems; §63.453(k)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements.

A. Pursuant to §63.450(b), each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

B. Pursuant to §63.450(c), each component of the closed-vent system that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d).

C. Pursuant to §63.450(d), each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations shall comply with either of the following requirements:

1. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. In loop seals, temperature measurement is an acceptable method of demonstrating gas flow.

2. For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

D. Pursuant to §63.453(k), the closed-vent LVHC system shall comply with the following requirements:

1. Pursuant to §63.453(k)(1), for each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

2. Pursuant to §63.453(k)(2), each closed-vent system shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

3. Pursuant to §63.453(k)(3), for positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks measured initially and annually by complying with the following procedures found in §63.457(d):

    a. Method 21, of Part 60, appendix A;

    b. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used;

        1. Zero air (less than 10 parts per million by volume of hydrocarbon in air) and;

        2. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

4. Pursuant to §63.453(k)(4), demonstrate initially and annually that each enclosure opening is maintained at negative pressure by using one of the following procedures found in §63.457(e):

    a. An anemometer to demonstrate flow into the enclosure opening;

    b. Measure the static pressure across the opening;

    c. Smoke tubes to demonstrate flow into the enclosure opening;

    d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

5. Pursuant to §63.453(k)(5), the valve or closure mechanism shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

6. Pursuant to §63.453(k)(6), if an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable:

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

    b. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delays in corrective repairs beyond 15 calendar days are allowed in cases where the corrective actions or repairs are technically infeasible without a process unit shutdown or where the emissions resulting from immediate repair would be greater than the emissions likely to result from the delay of the repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

7. Closed vent systems, fixed roofs, covers, or enclosures are exempt from the 30 day and annual inspection requirements, provided that the source or operator determines:

    a. Persons conducting the inspection would be exposed to an imminent or potential danger, or

    b. Equipment could not be inspected without elevating the individual higher than 6 feet above or beyond the work platform, walkway, or catwalk.

    The source or operator shall identify all exempted equipment and explain how the equipment will be inspected during safe-to-inspect periods. The inspection frequency shall be at least once every five calendar years.

E. Pursuant to §63.454(b), for each applicable enclosure opening, closed-vent system, and closed collection system under Specific Condition #152(D), the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

a. Date of inspection;

b. The equipment type and identification;

c. Results of negative pressure tests for enclosures;

d. Results of leak detection tests;

e. The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);

f. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

g. Repair methods applied in each attempt to repair the defect or leak;

h. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

i. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

j. The date of successful repair or the defect or leak;

k. The position and duration of the opening of bypass line valves and the condition of any valve seals; and

l. The duration of the use of bypass valves on computer controlled valves.

153. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(o), except as provided in §63.443(e), operation of the control device below minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

154. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.10(e)(3)(i), an excess emission and continuous monitoring system performance report shall be submitted to the EPA and to the Department semi-annually. For the LVHC system, this report will include:

    A. Periods when any bypass valve is open while the vented source is in operation;

    B. Periods when the temperature in the NCG Incinerator falls below 1600^{o}F while combusting HAPs.

155. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(1), periods of excess emissions at the LVHC System shall not be a violation provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed one percent. If the one percent limit is exceeded, the release is considered an Upset Condition under Regulation #19 and must be reported immediately. These emission limits are detailed in Specific Conditions #148 and #149.

SN-38
HVLC Collection System

Source Description

The HVLC Collection System collects vapors from the brownstock washers, all of the tanks associated with the washers, and the Condensate Collection Tank and equipment that accomplishes the same function as the knotter and screens regulated at §63.443(a)(1)(ii). (Emissions from knotters and screens are collected if the HAP emissions are greater than 0.1 lb/ODTP production for the knotter system and greater than 0.2 lb/ODTP production for the screen system.) It consists of hoods that cover the drums of the washers, lines from the hoods and tanks, a condenser to reduce moisture, a fan and a line into the incineration control device. The incineration occurs at the #3 Wood Waste Boiler (SN-04) with the #1 Package Boiler (SN-14) as a backup. Emissions listed for this system include releases from the system due to startup, shutdown and malfunction conditions in the HVLC System, from the HVLC Collection System and from the control equipment used to reduce total HAP emissions and 4% of process time as provided at §63.443(e)(2). The remaining emissions are sent to the control devices and incinerated.

Specific Conditions

156. Pursuant to §19.501 et seq of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(2), the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #159 and #161.

Pollutant	lb/hr	tpy
VOC	244.1	83.9

157. Pursuant to §19.804 of Regulation #19 and Section 111(d) of the Clean Air Act and 40 CFR Part 63, Subpart S, §63.443(e)(2), the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #159 and #161.

Pollutant	lb/hr	tpy
TRS	20.4	7.1

158. Pursuant to §18.801 of Regulation #18 A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 63, Subpart S, §63.443(e)(2), the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition will be demonstrated by complying with Specific Conditions #159 through #161.

Pollutant	lb/hr	tpy
Acetone	1.5	0.5
Ethanol	0.8	0.3
Terpenes	218.5	75.4
Acrolein	<0.01	<0.10
Methanol	22.4	7.7

159. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 60, Subpart S, §63.440(d)(1) and §63.443(a)(1)(ii)(A) and (iii), the compliance date for the HVLC system shall be no later than April 16, 2006. However, since it is being used to meet the requirements of §63.446(e)(1), the total HAP emissions from the HVLC system shall be controlled no later than April 16, 2001.

160. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c) and §63.443(d)(4), the HVLC System sources shall be enclosed and vented into a closed-vent system and routed to a control device that reduces total HAP emissions using the #3 Wood Waste Boiler (SN-04) and the #1 Package Boiler (SN-14). Pursuant to §63.10(b)(2)(iii), a record will be kept of all maintenance activities performed on the HVLC System control devices.

161. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c), the enclosures and closed-vent system shall meet the requirements specified in §63.450-Standards For Enclosures and Closed-Vent Systems; §63.453(k)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements.

A. Pursuant to §63.450(b), each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

B. Pursuant to §63.450(c), each component of the closed-vent system that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d).

C. Pursuant to §63.450(d), each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations shall comply with either of the following requirements:

1. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. In loop seals, temperature measurement is an acceptable method of demonstrating gas flow.

2. For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

D. Pursuant to §63.453(k), the closed-vent HVLC system shall comply with the following requirements:

1. Pursuant to §63.453(k)(1), for each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

2. Pursuant to §63.453(k)(2), each closed-vent system shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

3. Pursuant to §63.453(k)(3), for positive pressure closed-vent systems or portions of closed-vent systems, demonstrate no detectable leaks measured initially and annually by complying with the following procedures found in §63.457(d):

    a. Method 21, of Part 60, appendix A;

    b. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used;

        1. Zero air (less than 10 parts per million by volume of hydrocarbon in air) and;

        2. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

4. Pursuant to §63.453(k)(4), demonstrate initially and annually that each enclosure opening is maintained at negative pressure by using one of the following procedures found in §63.457(e):

    a. An anemometer to demonstrate flow into the enclosure opening;

    b. Measure the static pressure across the opening;

    c. Smoke tubes to demonstrate flow into the enclosure opening;

    d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

5. Pursuant to §63.453(k)(5), the valve or closure mechanism shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

6. Pursuant to §63.453(k)(6), if an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable:

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

    b. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delays in corrective repairs beyond 15 calendar days are allowed in cases where the corrective actions or repairs are technically infeasible without a process unit shutdown or where the emissions resulting from immediate repair would be greater than the emissions likely to result from the delay of the repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

7. Closed vent systems, fixed roofs, covers, or enclosures are exempt from the 30 day and annual inspection requirements, provided that the source or operator determines:

    a. Persons conducting the inspection would be exposed to an imminent or potential danger, or

    b. Equipment could not be inspected without elevating the individual higher than 6 feet above or beyond the work platform, walkway, or catwalk.

    The source or operator shall identify all exempted equipment and explain how the equipment will be inspected during safe-to-inspect periods. The inspection frequency shall be at least once every five calendar years.

E. Pursuant to §63.454(b), for each applicable enclosure opening, closed-vent system, and closed collection system under Specific Condition #161(D), the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

a. Date of inspection;

b. The equipment type and identification;

c. Results of negative pressure tests for enclosures;

d. Results of leak detection tests;

e. The nature of the defect or leak and the method of detection (i.e. visual inspection or instrument detection);

f. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

g. Repair methods applied in each attempt to repair the defect or leak;

h. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

i. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

j. The date of successful repair or the defect or leak;

k. The position and duration of the opening of bypass line valves and the condition of any valve seals; and

l. The duration of the use of bypass valves on computer controlled valves.

162. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(o), except as provided in §63.443(e)(2), operation of the control device below minimum operating parameter values or above maximum operating parameter values established under this subpart or failure to perform procedures required by this subpart shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

163. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.10(e)(3)(i), an excess emission and continuous monitoring system performance report shall be submitted to the EPA and to the Department semi-annually. For the HVLC system, this report will include:

    A. Periods when any bypass valve is open while the vented source is in operation.

164. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(2), periods of excess emissions at the HVLC System shall not be a violation provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed four percent. If the four percent limit is exceeded, the release is considered an Upset Condition under Regulation #19 and must be reported immediately. These emission limits are detailed in Specific Condition #156, #157, and #158.

SN-39
Pulping Process Condensate Collection

Source Description

The Pulping Process Condensate Collection System collects the condensates and recycles them while the gases are sent through a closed system for control. The treatment system here is to recycle the condensates to the Brownstock Washers (SN-11) as shower water as required under 40 CFR Part 63, Subpart S, §63.446(e)(1). Because the condensate is recycled to SN-11, and the non-condensable gases are sent to HVLC system for control, there are no emissions from this source.

Specific Conditions

165. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(b), the pulping process condensates from the following equipment systems shall be treated to meet the requirements set forth in Specific Condition #166 through #174:

    A. Each digester system;

    B. Each turpentine recovery system;

    C. Each evaporator stage where weak liquor is introduced (feed stages) in the evaporator system;

    D. Each HVLC collection system; and

    E. Each LVHC collection system;

    F. The evaporator vacuum system.

166. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(c)(3), pulping process condensates from equipment systems listed in Specific Condition #165 shall be collected in a sufficient amount where the total HAP mass is at least 7.2 pounds of total HAP per ton of oven dried pulp. Testing will be performed in accordance with Specific Condition #167.

167. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.457(g), the owner or operator shall measure the total HAP concentration as methanol using EPA Reference Method #305 or NCASI Direct Injection Method DI/MOE 94.02.

168. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.457(a), an initial performance test is required for the condensate collection system in order to demonstrate compliance with Specific Condition #166. The test must be conducted before October 16, 2001. Notification of the test date will be given to the EPA and to the Department within 60 days before the test is scheduled to begin.

169. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(d)(2), the condensate tank located within the closed collection system must meet the following requirements:

    A. The fixed roof and all openings (e.g. access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated with an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements of Specific Condition #170 for the HVLC system and routed to a control device that meets the conditions of Specific Condition #20 for the #3 Wood Waste Boiler and/or Specific Condition #80 for the #1 Package Boiler as a control device.

    B. Each opening shall be maintained in a closed, sealed position (e.g. covered by a lid that is gasketed and latched) at all times that the tank contains pulping process condensates or any HAP removed from a pulping process condensate stream except when it is necessary to use the opening for sampling, removal, or for equipment inspection, maintenance, or repair.

170. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(l), the closed condensate system shall meet the requirements specified in §63.453(a)CMS Requirements; §63.453(k)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements. The closed condensate system consists of the lines, pumps, meters, valves and drains between the condensate storage tank and the brownstock washer showers.

    A. Pursuant to §63.450(b), the condensate collection tank shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.

B. Pursuant to §63.450(c), each component of the closed condensate system that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d).

C. Pursuant to §63.450(d), each drain valve or loop seal in the closed condensate system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations shall comply with either of the following requirements:

1. On each drain valve or loop seal, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the line at least once every 15 minutes. The flow indicator shall be installed in the line in such a way as to indicate flow in the line. In loop seals, temperature measurement is an acceptable method of demonstrating gas flow.

2. For drain valves that are not computer controlled, the owner or operator shall maintain the drain valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

3. A continuous record shall be kept of valve position. This record shall be kept in a form suitable for review upon request and shall be kept for at least five years.

D. Pursuant to §63.453(k), the condensate collection system shall comply with the following requirements:

1. Pursuant to §63.453(k)(1), for each enclosure opening, a visual inspection of the closure mechanism shall be performed at least once every 30 days to ensure the opening is maintained in the closed position and sealed. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

2. Pursuant to §63.453(k)(2), each collection system shall be visually inspected every 30 days and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures, and connections to covers for visible evidence of defects. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

3. Pursuant to §63.453(k)(3), each opening and line in the condensate collection system shall demonstrate no detectable leaks measured initially and annually by complying with the following procedures found in §63.457(d):

    a. Method 21, of Part 60, appendix A;

    b. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The following calibration gases shall be used;

        1. Zero air (less than 10 parts per million by volume of hydrocarbon in air) and;

        2. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 parts per million by volume methane or n-hexane.

4. Pursuant to §63.453(k)(4), demonstrate initially and annually that each condensate collection tank opening is maintained at negative pressure by using one of the following procedures found in §63.457(e):

    a. An anemometer to demonstrate flow into the enclosure opening;

    b. Measure the static pressure across the opening;

    c. Smoke tubes to demonstrate flow into the enclosure opening;

    d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

5. Pursuant to §63.453(k)(5), the valve or closure mechanism shall be inspected at least once every 30 days to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line. Inspections shall be conducted once during each calendar month, with any two consecutive inspections being at least 21 calendar days apart.

6. Pursuant to §63.453(k)(6), if an inspection identifies visible defects in ductwork, piping, enclosures or connections to covers, or if an instrument reading of 500 parts per million by volume or greater above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable:

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

    b. The repair or corrective action shall be completed no later than 15 calendar days after the problem is identified. Delays in corrective repairs beyond 15 calendar days are allowed in cases where the corrective actions or repairs are technically infeasible without a process unit shutdown or where the emissions resulting from immediate repair would be greater than the emissions likely to result from the delay of the repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

7. Closed vent systems, fixed roofs, covers, or enclosures are exempt from the 30 day and annual inspection requirements, provided that the source or operator determines:

    a. Persons conducting the inspection would be exposed to an imminent or potential danger, or

    b. Equipment could not be inspected without elevating the individual higher than 6 feet above or beyond the work platform, walkway, or catwalk.

    The source or operator shall identify all exempted equipment and explain how the equipment will be inspected during safe-to-inspect periods. The

inspection frequency shall be at least once every five calendar years.

E. Pursuant to §63.454(b), for each applicable enclosure opening, closed-vent system, and closed collection system under Specific Condition #170(D), the owner or operator shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection:

a. Date of inspection;

b. The equipment type and identification;

c. Results of negative pressure tests for enclosures;

d. Results of leak detection tests;

e. The nature of the defect or leak and the method of detection, i.e. visual inspection or instrument detection;

f. The date the defect or leak was detected and the date of each attempt to repair the defect or leak;

g. Repair methods applied in each attempt to repair the defect or leak;

h. The reason for the delay if the defect or leak is not repaired within 15 days after discovery;

i. The expected date of successful repair of the defect or leak if the repair is not completed within 15 days;

j. The date of successful repair or the defect or leak;

k. The position and duration of the opening of bypass line valves and the condition of any valve seals; and

l. The duration of the use of bypass valves on computer controlled valves.

171. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(a), in order to meet the requirements of Specific Condition #172(A-N), the owner or operator

shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous monitoring system. The CMS shall include a continuous recorder.

172. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(i) and (n), a CMS shall be operated to measure the flow of collected condensate streams, flow of pulp and pulp consistency. The flows to be measured, monitored and recorded with a CMS are:

A. Condensate line from the bottom of the 5th evaporator effect into the 6th evaporator effect;

B. Flow of condensate from the condensate collection tank to the brownstock washers;

C. Flow of pulp stock to the brownstock washers;

D. Consistency of pulp to the brownstock washers will be measured once a day manually, or by installing a continuous consistency meter that outputs to a continuous recorder;

E. Mass (in pounds) of HAP to the brownstock washers;

F. Mass (in tons) of oven dried pulp produced (in order to calculate the daily oven dried pulp production, a daily rolling average using pulp consistency will be used);

G. Mass (in pounds) of HAP treated per oven dried ton of pulp produced.

173. Pursuant to §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall maintain daily records which demonstrate compliance with Specific Condition #172(A-N). A thirty day rolling average of each parameter in Specific Condition #172(A-N) shall be used to calculate daily compliance of collection and treatment of 7.2 pounds of HAP per oven air dry tons of pulp. Records shall be updated by the fifteenth day of the month following the month to which the records pertain and shall be kept on site, and shall be made available to Department personnel upon request.

174. Pursuant to §19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(o), operation of the condensate collection system below minimum operation parameter values or above maximum operating parameter values established under Subpart S or failure to perform procedures required in Specific Condition #165 through #173 shall

constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions.

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Green Bay Packaging Inc., Arkansas Kraft Division is in compliance with the applicable regulations cited in the permit application. Green Bay Packaging Inc., Arkansas Kraft Division will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. 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:

    a. Sampling ports adequate for applicable test methods
    b. Safe sampling platforms
    c. Safe access to sampling platforms
    d. Utilities for sampling and testing equipment

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

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.

Acid Rain (Title IV)

7. 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

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

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

9. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)
e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

10. 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.

11. 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.

12. 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.

Testing

13. Pursuant to §19.702 of Regulation #19 and 40 CFR Part 52, Subpart E, the permittee shall pursue annual source testing as specified in the permit. However, if test results (i.e., for each source and similar sources) for each year of the first two years of the permit term indicate that emission levels are below permit limits, source testing for the remainder of the permit term may be reduced or eliminated. The permittee must submit a permit modification application in order to reduce or eliminate testing for the remainder of the permit term.

    The permit may be modified through the minor modification procedures if the permittee, in the application documentation, addresses the relationship between the tested emission levels and other required monitoring parameters (e.g., throughput levels, control equipment operating parameters, etc.) at the time of testing that would continue to be monitored through the remainder of the permit term.

Permit Shield

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

    A. The following have been specifically identified as applicable requirements based upon information submitted by the permittee in the applications dated June 10, 1996 and December 6, 1996.

Source No.	Regulation	Description
Facility	Arkansas Regulation 19	Compilation of Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Facility	Arkansas Regulation 26	Regulations of the Arkansas Operating Air Permit Program
Facility	40 CFR 61, Subpart A	National Emission Standards for Hazardous Air Emissions
Facility	40 CFR 61, Subpart M	National Emissions Standards for Asbestos
SN-04 and SN-15	40 CFR 52.21	Prevention of Significant Deterioration

Source No.	Regulation	Description
SN-22 and SN-23	40 CFR 60, Subpart BB	Standards of Performance for Kraft Pulp Mills
SN-14	40 CFR 60, Subpart D	Standards of Performance for Fossil-Fuel Fired Steam Generators
SN-2A, SN-04, and SN-15	40 CFR 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in the applications dated June 10, 1996 and December 6, 1996.

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	40 CFR 60, Subpart Db	SN-02	Installed prior to June 19, 1984.
Standards of Performance for Kraft Pulp Mills	40 CFR 60, Subpart BB	SN-05, SN-06, SN-07, SN-08, SN-09, and SN-11	Installed prior to September 24, 1976.
Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	40 CFR 60, Subpart Db	SN-14	Installed prior to June 19, 1984.

C. Nothing shall alter or affect the following:

Provisions of Section 303 of the Clean Air Act;

The liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance;

The applicable requirements of the acid rain program, consistent with section 408(a) of the Clean Air Act; or

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

SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated June 16, 1999.

Description	Category
Gasoline Storage Tank	Group A, Number 3
Used Oil Storage Tank	Group A, Number 3
North Diesel Storage Tank	Group A, Number 3
South Diesel Storage Tank	Group A, Number 3
Diesel Oil Storage Tank	Group A, Number 3
Sulfuric Acid Tank	Group A, Number 3
Phosphoric Acid Tank	Group A, Number 3
Large Fuel Oil Tank	Group A, Number 13

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

SECTION VIII: GENERAL PROVISIONS

1. Pursuant to 40 CFR 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq*.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.

2. Pursuant to 40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000, this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.

3. Pursuant to §26.406 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.

4. Pursuant to 40 CFR 70.6(a)(1)(ii) and §26.701(A)(2) of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.

5. Pursuant to 40 CFR 70.6(a)(3)(ii)(A) and §26.701(C)(2) of Regulation #26, records of monitoring information required by this permit shall include the following:

    a.The date, place as defined in this permit, and time of sampling or measurements;
    b.The date(s) analyses were performed;

c.The company or entity that performed the analyses;
d.The analytical techniques or methods used;
e.The results of such analyses; and
f.The operating conditions existing at the time of sampling or measurement.

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

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

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

8. Pursuant to 40 CFR 70.6(a)(3)(iii)(B), §26.701(C)(3)(b) of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

a.The facility name and location,
b.The process unit or emission source which is deviating from the permit limit,
c.The permit limit, including the identification of pollutants, from which deviation occurs,
d.The date and time the deviation started,
e.The duration of the deviation,

f. The average emissions during the deviation,
g. The probable cause of such deviations,
h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
i. The name of the person submitting the report.

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

    a.Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
    b.Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    c.Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    d.As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.

21. Pursuant to 40 CFR 70.6(c)(5) and §26.703(E)(3) of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:

    a.The identification of each term or condition of the permit that is the basis of the certification;
    b.The compliance status;
    c.Whether compliance was continuous or intermittent;
    d.The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
    e.Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.

22. Pursuant to §26.704(C) of Regulation #26, nothing in this permit shall alter or affect the following:

    a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
    b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
    c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
    d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.