

ADEQ OPERATING AIR PERMIT

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

Permit No. : 224-AOP-R5
IS ISSUED TO:

Green Bay Packaging Inc. - Arkansas Kraft Division
338 Highway 113 South
Morrilton, AR 72110
Conway County
AFIN: 15-00001

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 24, 2004

AND

August 23, 2009

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

Signed:

Michael Bonds
Chief, Air Division

Date Modified

Table of Contents

SECTION I: FACILITY INFORMATION	4
SECTION II: INTRODUCTION	5
Summary of Permit Activity	5
Process Description	5
Regulations	9
Emission Summary	10
SECTION III: PERMIT HISTORY	21
SECTION IV: SPECIFIC CONDITIONS	27
SN-01	27
SN-02	28
SN-03	31
SN-04	32
SN-05	39
SN-07	44
SN-08, and SN-22	48
SN-11	55
SN-12	56
SN-14	57
SN-15	61
SN-23	66
SN-24	68
SN-25A	69
SN-25B	71
SN-26 and SN-27	73
SN-30	75
SN-31	77
SN-32	79
SN-34	80
SN-35	81
SN-36	82
SN-37	84
SN-38	91
SN-39	98
SECTION V: COMPLIANCE PLAN AND SCHEDULE	105
SECTION VI: PLANTWIDE CONDITIONS	106
Permit Shield	109
SECTION VIII: GENERAL PROVISIONS	113
Appendix A NSPS Subpart Db	
Appendix B NSPS Subpart BB	
Appendix C NSPS Subpart RR	
Appendix D MACT S	
Appendix E MACT MM	
Appendix F CEM Standards	

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

SECTION I: FACILITY INFORMATION

PERMITTEE: Green Bay Packaging Inc. - Arkansas Kraft Division

AFIN: 15-00001

PERMIT NUMBER: 224-AOP-R5

FACILITY ADDRESS: 338 Highway 113 South
Morrilton, AR 72110

MAILING ADDRESS P.O. Box 711
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: 3883.7 km

UTM East West (X): Zone 15: 523.8 km

SECTION II: INTRODUCTION

Summary of Permit Activity

Green Bay Packaging, Inc.-Arkansas Kraft Division (AKD) 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 kilometers 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 corrects TRS emission limits on the Recovery Boiler (SN-05A) and the #2 Lime Kiln (SN-08). The limits are a restoration of limits that were previously assigned to these sources. The limits were changed in a previous permit based on information supplied by AKD for other purposes. There are no physical changes to the facility.

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 from the chip pile are reclaimed, sized, conditioned, and then 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. During cooking, some gases are vented into the turpentine recovery system which is described below.

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 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, then to the blow tanks, and the remaining pulp is fed to the pulp washers.

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

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-08) or to the NCG Incinerator (SN-22) for incineration.

The HVLC Collection System collects vapors from the brownstock washers, 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.

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

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. Any non-condensable gases from the condenser are collected in the LVHC System and 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 onto a wood waste pile. The wood waste is reclaimed from the wood waste pile by conveyor and transported to the wood waste boilers.

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 sewer. 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 slurring, 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 sewer to the wastewater treatment system.

Green Bay Packaging Inc. - Arkansas Kraft Division**Permit #: 224-AOP-R5****AFIN: 15-00001**

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 put into the mill waste water system. 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 hydrographic control basin/post aeration basin.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective December 19, 2004
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR 60, Subpart Db, New Source Performance Standards for Industrial Steam Generating Units, effective December 16, 1987
40 CFR 60, Subpart BB, New Source Performance Standards for Kraft Pulp Mills, effective May 20, 1986
40 CFR 61, Subpart M, National Emission Standard for Hazardous Air Pollutants for Renovation/Demolition of Asbestos
40 CFR 63, Subpart S, National Emission Standard for Hazardous Air Pollutants from the Pulp and Paper Industry, effective April 15, 1998
40 CFR 63, Subpart MM, National Emission Standard for Hazardous Air Pollutants for Chemical Recovery Combustion Units at Kraft Pulp Mills with a compliance date of 3/12/04.
40 CFR 63, Subpart RR, National Emission Standards for Individual Drain Systems, effective July 1, 1996
40 CFR 63, Subpart DDDDD, National Emission Standard for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters. Proposed final date of February 28, 2004.
40 CFR 64, Compliance Assurance Monitoring, effective October 22, 1997

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

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

Emission Summary

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	1,034.5	1,680.6
		PM ₁₀	542.0	1,075.1
		SO ₂	1,059.6	638.9
		VOC	888.8	1,918.0
		CO	1,888.3	1,739.1
		NO _x	558.5	957.2
		Lead	0.046	0.17
HAPs * = Not included in VOC total		Acetaldehyde	14.54	47.49
		Acrolein	2.93	12.364
		Antimony*	0.001	0.002
		Arsenic*	0.002	0.003
		Benzene	2.74	11.78
		Cadmium*	0.003	0.0136
		Carbon Tetrachloride*	0.13	0.04
		Chloroform	0.10	0.03
		Chromium*	0.002	0.011
		Cobalt*	0.001	0.01
		Cumene	0.05	0.01
		Ethylene Dichloride	0.03	0.01
		Formaldehyde	3.38	13.77
		Hexane	0.88	3.52
		Hydrochloric Acid*	16.33	68.02
		Manganese*	1.012	4.40
		Mercury*	0.001	0.0003
		Methanol	97.22	272.71
		Methyl Ethyl Ketone	36.1	101.227
		Methyl Isobutyl Ketone	0.39	0.987
		Napthalene	0.04	0.20
		Nickel*	0.005	0.021
		Propionaldehyde	0.03	0.12
		Selenium*	0.002	0.0014

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Styrene	1.57	5.70
		Toluene	17.78	3.11
		1,2,4 Trichlorobenzene	0.28	0.02
		1,1,2 Trichloroethane	0.03	0.01
		Trichloroethylene	0.42	1.38
		m,p Xylene	0.21	0.64
		o Xylene	0.17	0.77
		Acetone*	6.00	14.67
		Ammonia*	6.19	25.14
		Benzaldehyde	0.04	0.02
		Butane	0.93	4.10
		Copper*	0.003	0.0166
		Cyclohexanone	0.04	0.02
		p-Cymene	0.04	0.01
		Dimethyl Sulfide	64.72	5.68
		1,2 Dichloroethylene	0.38	1.16
		Dichloromethane	0.18	0.79
		Dimethyl Disulfide	22.31	1.97
	Air Contaminants	Ethane*	1.38	6.06
		Ethanol	0.23	0.07
	* = Not included in VOC total	Hydrogen Sulfide*	0.20	0.22
		Isopropanol	0.11	0.01
		Methane*	511.31	2,810.67
		Methyl Mercaptan	30.34	2.70
		Pentane	1.16	5.05
		a-Pinene	12.32	35.23
		b-Pinene	3.65	9.49
		Propane	0.71	3.13
		Silver*	0.001	0.001
		Sulfuric Acid*	2.54	9.20
		Terpenes	299.73	447.19
		TRS	176.72	210.3
01	Wood Waste Dryer	Removed From Service		

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
02	#1 Wood Waste Boiler	PM	372.0	420.0
		PM ₁₀	191.0	215.0
		SO ₂	4.1	18.0
		VOC	116.0	39.0
		CO	956.5	326.0
		NO _x	57.0	39.0
		Lead	0.01	0.03
		Acetaldehyde	0.13	0.59
		Acetone	0.03	0.13
		Acrolein	0.65	2.84
		Benzene	0.68	2.98
		Dichloromethane	0.05	0.21
		Formaldehyde	0.71	3.12
		Hydrogen Chloride	3.08	13.50
		Manganese	0.26	1.14
		Methane	3.40	14.90
		Styrene	0.31	1.35
		Toluene	0.15	0.65
03	#2 Wood Waste Boiler	Removed From Service		
04	#3 Wood Waste Boiler	PM	45.2	145.0
		PM ₁₀	45.2	145.0
		SO ₂	9.6	42.0
		VOC	22.5	59.0
		CO	119.0	290.0
		NO _x	135.6	521.0
		Lead	0.02	0.10
		Acetaldehyde	0.38	1.64
		Acetone	0.09	0.38
		Acrolein	1.80	7.92
		Benzene	1.90	8.32
		Dichloromethane	0.13	0.58
		Formaldehyde	1.99	8.71
		Hydrogen Chloride	8.59	37.62
		Manganese	0.73	3.17
		Methane	9.49	41.58
		Napthalene	0.04	0.20
		Propionaldehyde	0.03	0.12
		Styrene	0.86	3.76
		Toluene	0.42	1.82

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
05A	Recovery Boiler (Previously SN-05 and SN-06)	PM	539.9	910.0
		PM ₁₀	200.0	520.0
		SO ₂	560.0	494.0
		VOC	19.8	61.0
		CO	223.1	654.0
		NO _x	200.1	206.0
		Lead	0.01	0.02
		Acetone	0.91	3.30
		Arsenic	0.001	0.002
		Benzene	0.04	0.12
		Cadmium	0.001	0.0026
		Copper	0.001	0.0046
		Hydrogen Chloride	4.66	16.90
		Mercury	0.001	0.003
		Methanol	11.50	41.60
		Methyl Ethyl Ketone	0.23	0.83
		Nickel	0.003	0.0090
		Selenium	0.001	0.0004
		Sulfuric Acid	2.54	9.20
		TRS	33.81	148.10
		Toluene	0.03	0.11
		o-Xylene	0.06	0.21

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
07	Smelt Dissolving Tank Vent	PM	25.6	85.0
		PM ₁₀	25.6	85.0
		SO ₂	1.6	5.7
		VOC	3.8	44.0
		NO _x	2.8	9.9
		Lead	0.001	0.0010
		Acetaldehyde	0.06	0.21
		Ammonia	1.09	3.94
		Antimony	0.001	0.0020
		Arsenic	0.001	0.0010
		Cadmium	0.001	0.0010
		Chromium	0.001	0.0010
		Copper	0.001	0.0020
		Methanol	0.45	1.64
		Nickel	0.001	0.0020
		a-Pinene	9.70	35.00
		b-Pinene	2.60	9.40
		Selenium	0.001	0.0010
		Silver	0.001	0.0010
		TRS	1.68	7.35
08 and 22	#2 Lime Kiln and NCG Incinerator	PM	20.2	88.0
		PM ₁₀	20.2	88.0
		SO ₂	58.1	65.7
		VOC	1.0	39.0
		CO	4.5	21.3
		NO _x	18.0	94.6
		Lead	0.005	0.0190
		Acetone	0.23	0.96
		Benzene	0.01	0.04
		Cadmium	0.001	0.0100
		Cobalt	0.001	0.0100
		Copper	0.001	0.0100
		Formaldehyde	0.46	1.92
		Manganese	0.022	0.0900
		Methanol	1.50	6.39
		Methyl Ethyl Ketone	0.04	0.17
		Nickel	0.001	0.0100
		Terpenes	1.10	4.56
		Toluene	0.01	0.03
		TRS	6.43	28.15

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
9	#1 Lime Kiln	Removed From Service		
10	NCG Emergency Vent	Removed From Service		
11	Brownstock Washers	Emissions Routed to SN-04		
12	Wastewater Treatment	VOC	35.7	100.1
		Acetaldehyde	0.22	0.62
		Methanol	0.32	0.89
		Methyl Ethyl Ketone	35.13	98.60
13	#1 Slaker	Removed From Service		
14	#1 Package Boiler	PM	28.8	24.0
		PM ₁₀	28.8	14.0
		SO ₂	6.2	3.2
		VOC	70.6	39.0
		CO	560.0	366.3
		NO _x	40.0	39.0
		Butane	0.51	2.25
		Ethane	0.76	3.33
		Hexane	0.44	1.93
		Methane	0.56	2.47
		Pentane	0.64	2.76
		Propane	0.39	1.72
14 & 15	#1 and #2 Package Boiler (Alternate Operating Scenario)	PM ₁₀	28.8	0.1
		SO ₂	418.3	3.5
		VOC	1.1	0.1
		CO	6.7	0.3
		NO _x	89.3	1.1
15	#2 Package Boiler	PM	1.6	6.7
		PM ₁₀	1.6	6.7
		SO ₂	1.5	6.6
		VOC	1.2	4.9
		CO	16.9	74.0
		NO _x	13.8	39.0
		Butane	0.42	1.85
		Ethane	0.62	2.73
		Hexane	0.36	1.58
		Methane	0.46	2.02
		Pentane	0.52	2.29
		Propane	0.32	1.41

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
16	Blow Heat Emergency Vent	Emergency Use Only. Not a Source.		
17	Tall Oil Plant Reactor	VOC	5.9	21.9
		Acetone	0.06	0.09
		Acetaldehyde	0.02	0.03
		Benzene	0.01	0.01
		Dimethyl Sulfide	0.02	0.02
		Dimethyl Disulfide	0.01	0.02
		Hydrogen Sulfide	0.14	0.21
		Methanol	0.12	0.18
		Methyl Ethyl Ketone	0.01	0.01
		Methyl Mercaptan	0.04	0.05
		Toluene	0.01	0.01
		TRS	0.21	0.30
		Terpenes	0.70	1.05
18	#1 Lime Silo (Sodium Carbonate)	Moved to Insignificant Activities		
19	#2 Lime Silo	Moved to Insignificant Activities		
20	Starch Silo	Moved to Insignificant Activities		
21	Lime Silo-Water Plant	Moved to Insignificant Activities		
23	Batch Digesters	VOC	7.5	29.0
		Acetaldehyde	0.04	0.15
		Methanol	0.22	0.83
		Terpenes	7.68	28.30
		TRS	0.23	9.0
24	Wood Yard Fugitives	PM	1.6	2.2
		PM ₁₀	0.8	1.0
		VOC	169.0	737.5

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
25A	#1 Paper Machine	VOC	99.5	339.5
		Acetone	1.28	4.37
		Acetaldehyde	6.75	23.10
		Acrolein	0.26	0.89
		Benzene	0.05	0.17
		1,2 Dichlorethylene	0.19	0.64
		Methanol	34.50	118.20
		Methyl Ethyl Ketone	0.37	1.26
		Methyl Isobutyl Ketone	0.15	0.50
		Styrene	0.09	0.28
		Terpenes	56.25	192.80
		Toluene	0.08	0.27
		Trichloroethylene	0.23	0.77
		m,p Xylene	0.11	0.35
		o Xylene	0.09	0.31
25 B	#2 Paper Machine	VOC	80.0	270.0
		Acetone	1.03	3.47
		Acetaldehyde	5.44	18.40
		Acrolein	0.21	0.71
		Benzene	0.04	0.13
		1,2 Dichlorethylene	0.16	0.51
		Methanol	27.80	94.00
		Methyl Ethyl Ketone	0.30	1.00
		Methyl Isobutyl Ketone	0.12	0.40
		Styrene	0.07	0.22
		Terpenes	45.33	153.30
		Toluene	0.07	0.21
		Trichloroethylene	0.19	0.61
		m,p Xylene	0.09	0.28
		o Xylene	0.08	0.25
26	Basement Air Make-up Heater #1	PM	0.1	0.4
		PM ₁₀	0.1	0.4
		SO ₂	0.1	0.1
		VOC	0.1	0.3
		CO	0.8	3.6
		NO _x	1.0	4.3

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
27	Basement Air Make-up Heater #2	PM	0.1	0.4
		PM ₁₀	0.1	0.4
		SO ₂	0.1	0.1
		VOC	0.1	0.3
		CO	0.8	3.6
		NO _x	1.0	4.3
28	Pocket Vent System Heater #1	Moved to Insignificant Activities		
29	Pocket Vent System Heater #2	Moved to Insignificant Activities		
30	Landfill	VOC	6.6	5.1
		Methane	497.4	2,749.7
31	Weak Black Liquor Tanks	VOC	3.5	15.4
		Acetone	0.07	0.28
		Terpenes	0.56	2.44
32	Green Liquor Tanks	VOC	8.3	34.2
		Acetone	0.08	0.34
		Terpenes	0.35	1.44
33	Small Fuel Oil Storage Tanks	Moved to Insignificant Activities		
34	Turpentine Storage Tanks	VOC	15.9	0.6
35	Turpentine Loading Operation	VOC	4.9	0.3
36	Slaker/Causticizers	VOC	1.4	7.0
		Acetaldehyde	0.69	2.47
		Acetone	0.21	0.88
		Ammonia	5.10	21.20
		Benzene	0.01	0.01
		Methanol	0.59	2.44
		Methyl Ethyl Ketone	0.01	0.05
		Methyl Isobutyl Ketone	0.01	0.01
		Styrene	0.01	0.06
		Toluene	0.01	0.01
		m,p Xylene	0.01	0.01

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
37	LVHC Collection System	VOC	12.1	1.1
		Acetone	0.81	0.07
		Cumene	0.05	0.01
		p-Cymene	0.04	0.01
		Dimethyl Disulfide	22.30	1.95
		Dimethyl Sulfide	64.70	5.66
		Ethanol	0.05	0.01
		Formaldehyde	0.22	0.02
		n-Hexane	0.08	0.01
		Hydrogen Sulfide	0.06	0.01
		Isopropanol	0.11	0.01
		Methanol	1.62	0.14
		Methyl Ethyl Ketone	0.08	0.007
		Methyl Isobutyl Ketone	0.08	0.007
		Methyl Mercaptan	30.30	2.65
		a-Pinene	2.62	0.23
		b-Pinene	1.05	0.09
		Styrene	0.20	0.02
		Terpenes	5.66	0.50
		1,2,3 Trichlorobenzene	0.28	0.02
		TRS	117.36	10.30
38	HVLC Collection System	VOC	202.3	69.7
		Acetaldehyde	0.81	0.28
		Acetone	1.20	0.40
		Acrolein	0.01	0.004
		Benzaldehyde	0.04	0.02
		Carbon Tetrachloride	0.13	0.04
		Chloroform	0.10	0.03
		Cyclohexanone	0.04	0.02
		1,2 Dichloroethylene	0.03	0.01
		Ethanol	0.18	0.06
		Ethylene Dichloride	0.03	0.01
		Methanol	18.60	6.40
		Methyl Ethyl Ketone	0.18	0.06
		Methyl Isobutyl Ketone	0.03	0.01
		Styrene	0.03	0.01
		Terpenes	182.10	62.80
		1,1,2 Trichloroethane	0.03	0.01
		TRS	17.00	7.10

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
39	Pulping Process Condensate Collection	Recycled To SN-11 as Shower Water		

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-R5
AFIN: 15-00001

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 Digester. Emission limits for this permit were: 2,893.8 tpy PM₁₀, 2,496.5 tpy SO₂, 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 Digester, 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 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 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 SO₂ in order to avoid further PSD requirements.

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

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 mg/m³, 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 mg/m³ 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 mg/m³ 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.

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. Flue gas recirculation in #3 Wood Waste Boiler has been demonstrated, under controlled conditions, to provide little or no

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

NO_x reduction. Operating experience and CEM results have shown that the NO_x emission limit is met consistently. Operation of FGR is not a NO_x control technology required for #3 Wood Waste Boiler as of the renewal of Permit #224-AOP-R2. For this permitting action, the facility has taken a limit on SO₂ emissions for the two boilers in order to avoid further PSD applicability.

The PSD analysis for SO₂ 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 NO_x 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 NO_x. The NO_x 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 NO_x MSL. This receptor is located 8.18 km from the center of the AKD Mill. Thus, the NO_x 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.

Permit #224-AOP-R2 was issued on May 13, 2002. This modification defined averaging times for monitoring requirements, lowered permitted annual emissions on most equipment by removing the unneeded safety factors the facility requested in previous applications, allowed wood waste to be burned in the existing #1 Wood Waste Boiler (SN-02) during part of the year, changed control equipment on the Smelt Dissolving Tank Vent (SN-07) from demister pads to a scrubber, and separated the emissions of the #1 and #2 Paper Machines (SN-25A and SN-25B) to prevent future PSD issues.

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

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).

Permit 224-AOP-R3 was issued to Green Bay Packaging, Inc. – Arkansas Kraft Division on August 24, 2004. This modification was to:

1. Correct emission factors for the Wastewater Treatment (SN-12) and the Landfill (SN-30),
2. Clarify stack testing conditions by removing NO_x testing requirements from SN-04 because it has a NO_x CEM,
3. Increase steam production in the #1 Package Boiler (SN-14) by increasing the permitted limit. This limit was put on the boiler to lower the actual/potential ratio in regards to PSD. There is no physical change to the boiler,
4. Replace the headbox on the #1 Paper Machine (SN-25A),
5. Replace the ESP for the Recovery Boiler (SN-05 and SN-06) with a new ESP (SN-05A) to meet the future MACT MM efficiency requirements,
6. Add the Pocket Vent System Heater #1, the Pocket Vent Heater #2, and the Small Fuel Oil Tanks (SN-33) to the Insignificant Activities Section, and
7. Remove the flue gas recirculation equipment on the #3 Wood Waste Boiler (SN-04). When BACT was originally applied to this source, FGR was thought to lower NO_x emissions in conjunction with low NO_x burners. Testing has demonstrated that emissions are not changed by discontinuing use of the fan. This does alter a previous BACT determination.

This modification was also the Title V permit renewal.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

Permit 0224-AOP-R4 was issued to Green Bay Packaging Inc., Arkansas Kraft Division on July 1, 2005. This modification allowed for the addition of applicable conditions of 40 CFR 63 Subpart MM – National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicchemical Pulp Mills for sources SN-05, SN-07, and SN-08. The #1 Lime Kiln (SN-09) was removed from service. Recycled sanitary products were added to the list of approved fuels for the Wood Waste Boilers (SN-02 and SN-04). Finally, this modification updated the PM₁₀ testing methods for the #3 Wood Waste Boiler (SN-04).

SECTION IV: SPECIFIC CONDITIONS

SN-01
Wood Waste Dryer

Source Description

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

Specific Conditions

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

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 was constructed in 1968 and has not been modified since that time. The use of wood waste as a fuel has been limited to the months of November through March until a wet scrubber is installed for the control of particulate emissions. Until this action is taken, only natural gas is allowed as a fuel at this source during the months of April through October.

The #1 Wood Waste Boiler emits PM that is controlled by multiclones built into the flue gas exit path. The permitted PM emissions from the #1 Wood Waste Boiler are greater than 100 tons per year with the multiclones in place. Therefore, the #1 Wood Waste Boiler is a listed unit for CAM. Multiclones are classified as mechanical collectors. While they are not an inherent part of the process equipment, they are completely passive in operation. They are built into the flue gas exit pathway, and there is no means to bypass these devices. There are no adjustments that can be made to the operation of the multiclones to alter their ability to remove particulate matter from the flue gas. There are no indicators that can be used to monitor the effectiveness of the multiclones in removing particulate matter.

Specific Conditions

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #8, #9, and #11. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	191.0	215.0
SO ₂	4.1	18.0
VOC	116.0	39.0
CO	956.5	326.0
NO _x	57.0	39.0
Lead	0.01	0.03

Green Bay Packaging Inc. - Arkansas Kraft Division**Permit #: 224-AOP-R5****AFIN: 15-00001**

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

Pollutant	lb/hr	tpy
PM	372.0	420.0
Acetaldehyde	0.13	0.59
Acetone	0.03	0.13
Acrolein	0.65	2.84
Benzene	0.68	2.98
Dichloromethane	0.05	0.21
Formaldehyde	0.71	3.12
Hydrogen Chloride	3.08	13.50
Manganese	0.26	1.14
Methane	3.40	14.90
Styrene	0.31	1.35
Toluene	0.15	0.65

4. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method. [40 CFR Part 52, Subpart E]

SN	Limit	Regulatory Citation
02	40%	§19.503

5. While using wood waste as fuel, the 40% opacity limit may be exceeded for up to 45 minutes once in any consecutive 8 hour period and three times in any consecutive 24 hour period for soot blowing, grate cleaning, ash raking, and refiring necessary for proper operation. These activities shall be scheduled for the same specific time each day and a record kept of each occurrence. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

6. The permittee shall maintain daily records of soot blowing, grate cleaning, ash raking, and refiring on SN-02 which demonstrate compliance with Specific Condition #5. Records shall include starting time, ending time, and type of activity. Records shall be kept on site, and shall be made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
7. 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. [§19.502 of Regulation #19 and 40 CFR Part 52, Subpart E]
8. 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. [§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]
9. Untreated wood waste, scrap materials from mill processes, agricultural residues, furniture manufacturing waste, recycled sanitary products, waste polyethylene pellets, natural gas, and/or other approved fuels shall be used to fire this boiler. Wood waste may be used as fuel without the wet scrubber during the months of November through March and during annual stack testing. When wood is used as fuel between April through October, the multiclones and wet scrubber shall be used at all times. Usage of furniture manufacturing waste shall be limited to 3% of total fuel consumption (based on tons of fuel purchased) on a twelve month rolling total. [§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]
10. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions #8 and #9. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. A twelve month overall rolling total and each individual month's data shall be kept on site, and shall be made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
11. The #1 Wood Waste Boiler (SN-02) shall be tested for PM₁₀, VOC, CO, and NO_x emissions using EPA Reference Method 201A or 201 for PM₁₀, 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. Compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. If equipment does not attain 90% of permitted capacity during testing, the operating rate during testing will be 90% of the maximum operating rate until the next test is completed. This testing is to be completed annually, on or before October 30 of every year. This test data shall be used for determination of compliance with the conditions set forth in this permit. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

SN-03
#2 Wood Waste Boiler

Source Description

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

12. 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. [40 CFR Part 52.21 (b)(3)(viii)]

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 an estimated heat input capacity of 452 MMBTU/hr. The heat input capacity was increased from 206.5 MMBTU/hr in permit #224-AOP-R1. Wood waste and natural gas are fired in this boiler. BACT for this piece of equipment was determined to be low NO_x burners in conjunction with flue gas recirculation. Testing has demonstrated that emissions are not changed by discontinuing use of the FGR. Therefore, FGR is no longer required at this source. In permit # 224-AOP-R0, the facility chose to take a limit on SO₂ emissions from the #3 Wood Waste and #2 Package boilers in order to avoid further PSD requirements.

The #3 Wood Waste Boiler emits PM that is controlled by multiclones built into the flue gas exit path and by a wet scrubber. The PM emissions from the #3 Wood Waste Boiler would be greater than 100 tons per year without the multiclones and wet scrubber in place. Therefore, it is a listed unit for CAM. While there are no indicators that can be used to monitor the performance of the multiclones in the flue gas exit path, indicators for the operation of the wet scrubber shall be monitored. These indicators are pressure drop across the scrubber and scrubbing liquid circulation rate.

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 #151 through #159). Emissions listed here reflect the incineration of the vapors that are routed from the HVLC system.

The #3 Wood Waste Boiler will be subject to 40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters. This MACT has a final date of September 13, 2004 and a compliance date of September 13, 2007.

Specific Conditions

13. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #17, #18, #19, #21, and #23. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	45.2	145.0
SO ₂	9.6	42.0
VOC	22.5	59.0
CO	119.0	290.0
Lead	0.02	0.10

14. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #18, #19, and #23. [§19.901 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
NO _x	135.6	521.0

15. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #17, #18, #19, #21, and #23. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	45.2	145.0
Acetaldehyde	0.38	1.64
Acetone	0.09	0.38
Acrolein	1.80	7.92
Benzene	1.90	8.32
Dichloromethane	0.13	0.58
Formaldehyde	1.99	8.71

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

Pollutant	lb/hr	tpy
Hydrogen Chloride	8.59	37.62
Manganese	0.73	3.17
Methane	9.49	41.58
Napthalene	0.04	0.20
Propionaldehyde	0.03	0.12
Styrene	0.86	3.76
Toluene	0.42	1.82

16. The permittee shall conduct daily 6-minute opacity readings on SN-04 in accordance with EPA Reference Method #9 whenever wood 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. [§19.502 of Regulation #19 and 40 CFR Part 52, Subpart E]
17. The #3 Wood Waste Boiler (SN-04) shall be tested for PM₁₀, SO₂, VOC, and CO emissions. Method 5 and Method 202 shall be used for PM₁₀ with all emissions being reported as PM₁₀. Method 6 shall be used for SO₂. Method 25A shall be used for VOC. Method 10 shall be used for CO. Each test shall consist of at least 3 sampling periods at a minimum of 1 hour each. Compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. If equipment does not attain 90% of permitted capacity during testing, the operating rate during testing will be 90% of maximum operating rate until the next test is completed. This testing is to be completed annually, on or before October 30 of every year. This test data shall be used for determination of compliance with the conditions set forth in this permit. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
18. 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. [§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]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

19. Untreated wood waste, scrap materials from mill processes, agricultural residues, furniture manufacturing waste, recycled sanitary products, waste polyethylene pellets, natural gas, and/or other approved fuels shall be used to fire this boiler. Usage of furniture manufacturing waste shall be limited to 3% of total fuel consumption (based on tons of fuel purchased) on a twelve month rolling total. Multiclones in series with a venturi scrubber shall be used at all times when this unit is operating and burning any fuel other than 100% natural gas. [§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]
20. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions #18 and #19. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
21. The liquid flow to the scrubber and the differential pressure across the scrubber for the #3 Wood Waste Boiler shall be maintained at or above the flow rate and the differential pressure measured during any previously successful stack test for PM₁₀ in which the stack test is designed to demonstrate the minimum flow and minimum differential pressure required to attain compliance with the PM₁₀ emission limit. [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
22. The facility shall continuously monitor and record once per hour or continuously (by strip chart or electronically) 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. [§19.703 of Regulation #19, 40 CFR Part 52, Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
23. The #3 Wood Waste Boiler is an affected source of 40 CFR 60, Subpart Db. [§19.304 of Regulation #19 and 40 CFR 60, Subpart Db]
 - 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 (which was performed on May 19, 1998) 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- 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. In a letter dated July 11, 2002, EPA approved the request for alternate monitoring to the COMs, by:
 - 1. Monitoring the scrubber water circulation flow and maintain flow above a minimum rate determined by performance testing; and
 - 2. Monitoring the pressure drop across the scrubber and maintain pressure drop above a minimum determined by performance testing.

These requirements are addressed as Specific Conditions #21 and #22.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- 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). The CEM may be taken off line when the boiler is out of service longer than 24 hours. The CEM for measuring NO_x shall be in continuous operation (except as noted above) and shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Failure to maintain operation time shall also constitute a violation of the CEMs conditions.
- 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. The facility has submitted this information to ADEQ on July 14, 1998.
- 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 waste 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 or the interim variance approved by the Department in Specific Condition #23G.
- 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 §60.48g(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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- 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.
24. The #3 Wood Waste Boiler is a control device for reducing the HAP emissions from the HVLC system (SN-38). The HAP emission stream is introduced into the combustion air going to the boiler. This requirement came into effect April 16, 2001. [§19.304 of Regulation #19 and 40 CFR 60, Subpart S §63.443(d)(4)]

SN-05A
Recovery Boiler

Source Description

The Recovery Boiler can fire up to 730 MMBTU/hr of black liquor. The boiler itself was installed in 1975 and has not been modified since that time. The electrostatic precipitator was replaced in May 2003, and all flue gases were routed through one stack.

The Recovery Boiler uses an ESP to control emissions of particulate. Without the ESP in operation, PM emissions would be greater than 100 tons per year. Therefore, this is a listed unit for CAM. However, the Recovery Boiler is subject to 40 CFR Part 63, Subpart MM with a compliance date of March 13, 2004. This rule was finalized after November 15, 1990. Therefore, the Recovery Boiler is exempt from the requirements of CAM.

Specific Conditions

25. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #34, #39, #42, #43, #44, and #45. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	200.0	520.0
SO ₂	560.0	494.0
VOC	19.8	61.0
CO	223.1	654.0
NO _x	200.0	206.0
Lead	0.01	0.02
TRS	33.81	148.10

Green Bay Packaging Inc. - Arkansas Kraft Division**Permit #: 224-AOP-R5****AFIN: 15-00001**

26. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #34, #39, #42, #43, #44, and #45. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	539.9	910.0
Acetone	0.91	3.30
Arsenic	0.001	0.002
Benzene	0.04	0.12
Cadmium	0.001	0.0026
Copper	0.001	0.0046
Hydrogen Chloride	4.66	16.90
Mercury	0.001	0.003
Methanol	11.50	41.60
Methyl Ethyl Ketone	0.23	0.83
Nickel	0.003	0.0090
Selenium	0.001	0.0004
Sulfuric Acid	2.54	9.20
Toluene	0.03	0.11
o-Xylene	0.06	0.21

27. Visible emissions from SN-05A shall not exceed 20% opacity as measured by EPA Reference Method 9. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
28. The permittee shall conduct daily 6-minute opacity readings on SN-05A in accordance with EPA Reference Method #9 when the source is in operation. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
29. The permittee shall calibrate, maintain, and operate a Continuous Opacity Monitoring System (COMS) according to the provision in §§63.6(h), 63.8, and 63.864(d)(1-4). Operation of this COMS is not required when the Recovery Boiler is not in operation. [40 CFR 63.864(d) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

30. The permittee shall develop, implement, and maintain a written startup, shutdown, and malfunction plan as described in §63.6(e)(3) that describes procedures for operating and maintaining the Recovery Boiler during periods of startup, shutdown, and malfunction to minimize HAP emissions and a program of corrective action for malfunctioning of the electrostatic precipitator or the COMS. [40 CFR 63.866(a) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
31. The permittee shall implement the corrective action specified in the SSM Plan when the average of ten consecutive 6-minute averages result in a measurement greater than 20% opacity. [40 CFR 63.864(k)(1)(i) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
32. If opacity measured by the COMS is greater than 35% for 6% or more of the operating time within any quarterly period, the Recovery Boiler is in violation of the standards of Specific Condition #44 and 40 CFR 63.862. [40 CFR 63.864(k)(2)(i) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
33. A quarterly excess emissions report containing the information specified in §63.10 and §63.867(c) shall be submitted to the Director if the conditions of Specific Conditions #31 or #32 occur. If those conditions do not occur, semi-annual reporting to indicate such is required. [40 CFR 63.867(c) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
34. Steam generation in the recovery boiler shall be limited to 394,000 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. [§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]
35. The only fuels to be used in the Recovery Boiler (SN-05A) shall be black liquor solids and natural gas. [§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]
36. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions #34 and #35. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
37. The TRS concentration at the recovery boiler shall be limited to 40 ppm. This limit shall be measured as H₂S 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. [§19.804 of Regulation #19 and §111d of the Clean Air Act]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

38. The facility shall continue to calibrate, maintain, and operate a monitoring device (CEMS) that continuously monitors and records the total reduced sulfur (TRS) and O₂ concentration of gases leaving the recovery boiler through the stack. The TRS monitor shall be operated in accordance with Performance Specification #5. The O₂ monitor shall be operated in accordance with Performance Specification #3. Both Performance Specifications may be found in 40 CFR Part 60, Appendix B. The CEM may be taken off line when the boiler is out of service longer than 24 hours. The CEM shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Failure to maintain operation time shall constitute a violation of the CEMs conditions. [§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]
39. The throughput of black liquor solids in the recovery boiler shall be limited to 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. [§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]
40. 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. Records for the annual flow 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. Failure to comply with these conditions shall be considered a violation of the mass emission limit. [§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]
41. Records shall be maintained of black liquor solids firing rate in tons per day. [40 CFR 63.866(c)(1) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
42. The electrostatic precipitator (ESP) shall not be bypassed during required ESP maintenance as long as black liquor solids are being combusted in the boiler and within one hour after flow of black liquor has been stopped. Gases from combustion of black liquor solids in the recovery boiler shall not be vented to the atmosphere unless the ESP is operating. The ESP may be bypassed during required ESP maintenance if the only fuel in the boiler is natural gas. [§19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

43. The Recovery Boiler (SN-05A) shall be tested for PM₁₀, SO₂, VOC, CO, and NO_x emissions using EPA Reference Method 201A or 202 for PM₁₀, Method 6 for SO₂, 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. Compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. If equipment does not attain 90% of permitted capacity during testing, the operating rate during testing will be 90% of the maximum operating rate until the next test is completed. This testing is to be completed annually, on or before October 30 of every year. This test data shall be used for determination of compliance with the conditions set forth in this permit. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
44. The permittee shall establish an overall PM emission limit for the Recovery Boiler, using the methods in §63.865(a)(1) and (2), such that the sum of PM emissions from the Recovery Boiler (SN-05), the Smelt Dissolving Tank (SN-07), and the #2 Lime Kiln (SN-08) do not exceed the sum of individual units listed in §63.862(a)(1)(i). [40 CFR 63.862(a)(1)(ii) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
45. The permittee shall conduct an initial performance test on PM emissions from the Recovery Boiler by September 9, 2004 using the test methods and procedures listed in §63.7 and §63.865(b). Testing was performed from July 21 through July 26, 2004. [40 CFR 63.865 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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.

A venturi scrubber system was installed in the Spring of 2002 to meet the requirements of 40 CFR Part 63, Subpart MM. Without the scrubber in operation, PM emissions would be greater than 100 tons per year. Therefore, this is a listed unit for CAM. However, the Smelt Dissolving Tank Vent is subject to 40 CFR Part 63, Subpart MM with a compliance date of March 13, 2004. This rule was finalized after November 15, 1990. Therefore, the Smelt Dissolving Tank Vent is exempt from the requirements of CAM.

Specific Conditions

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #52, #54, #62, and #63. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	25.6	85.0
SO ₂	1.6	5.7
VOC	3.8	44.0
NO _x	2.8	9.9
Lead	0.001	0.0010
TRS	1.68	7.35

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

47. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #52, #54, #62, and #63. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	25.6	85.0
Acetaldehyde	0.06	0.21
Ammonia	1.09	3.94
Antimony	0.001	0.0020
Arsenic	0.001	0.0010
Cadmium	0.001	0.0010
Chromium	0.001	0.0010
Copper	0.001	0.0020
Methanol	0.45	1.64
Nickel	0.001	0.0020
a-Pinene	9.70	35.00
b-Pinene	2.60	9.40
Selenium	0.001	0.0010
Silver	0.001	0.0010

48. Visible emissions from the smelt dissolving tank vent shall not exceed 20% opacity as measured by EPA Reference Method 9. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
49. The permittee shall conduct daily 6-minute opacity readings on SN-07 in accordance with EPA Reference Method #9 when the Recovery Boiler is in operation. The results of these readings shall be recorded in a log which shall be kept on site and made available for inspection upon request. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

50. 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 PM₁₀ emissions, the facility may report all emissions measured using Method 5, including back half sampling train particulate, as PM₁₀ or they may conduct separate PM and PM₁₀ testing using EPA Reference Method 5 for PM and Method 201 or 201A for PM₁₀. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
51. The TRS emission rates from the Smelt Dissolving Tank (SN-07) shall not exceed 0.0168 g/kg BLS. Compliance with this condition will be demonstrated by Specific Condition #53. [§19.804 of Regulation #19 and §111d of the Clean Air Act]
52. 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 438,000 tons per consecutive twelve month period. [§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]
53. Flow of strong black liquor shall be measured with a flow meter and shall be recorded at least once per hour when liquor is being burned. The weight concentrations of solids in the liquor shall be measured and recorded at least once per eight hour period when liquor is being burned. The black liquor solids firing rate shall be calculated by multiplying this flow by the weight concentration of solids in the liquor. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
54. The scrubber shall be operated at or above the minimum flow rate and at or above the minimum pressure differential as determined during the initial performance test. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR 63.864(e)(10) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
55. The permittee shall install, calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15 minute period. [40 CFR 63.864(e)(10) and 40 CFR 63.8(c) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
56. The permittee shall develop, implement, and maintain a written startup, shutdown, and malfunction plan as described in §63.6(e)(3) that describes procedures for operating and maintaining the Smelt Dissolving Tank during periods of startup, shutdown, and malfunction to minimize HAP emissions and a program of corrective action for malfunctioning of the scrubber or the CPMS. [40 CFR 63.866(a) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

57. The permittee shall implement the corrective action specified in the SSM Plan when any 3-hour average parameter value is outside the range of values established in the initial performance test. [40 CFR 63.864(k)(1)(ii) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
58. When six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in the initial performance test, the Smelt Dissolving Tank is in violation of the standards of Specific Condition #62 and 40 CFR 63.862. [40 CFR 63.864(k)(2)(iii) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
59. No more than one exceedance will be attributed to any given 24-hour period. [40 CFR 63.864(k)(3) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
60. A quarterly excess emissions report containing the information specified in §63.10 and §63.867(c) shall be submitted to the Director if the conditions of Specific Conditions #57 or #58 occur. If those conditions do not occur, semi-annual reporting to indicate such is required.
61. The permittee shall maintain continuous records which demonstrate compliance with Specific Condition #54. Readings will be recorded every 15 minutes and averaged over three hours. Records shall clearly indicate when liquor is being added to the Recovery Boiler. Measurement of liquid flow and pressure drop is not required after liquor flow to the Recovery Boiler has been stopped for at least one hour. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
62. The permittee shall establish an overall PM emission limit for the Smelt Dissolving Tank, using the methods in §63.865(a)(1) and (2), such that the sum of PM emissions from the Recovery Boiler (SN-05), the Smelt Dissolving Tank (SN-07), and the #2 Lime Kiln (SN-08) do not exceed the sum of individual units listed in §63.862(a)(1)(i). [40 CFR 63.862(a)(1)(ii) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
63. The permittee shall conduct an initial performance test on PM emissions from the Smelt Dissolving Tank by September 9, 2004 using the test methods and procedures listed in §63.7 and §63.865(b). Testing was performed from July 21 through July 26, 2004. [40 CFR 63.865 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN-08, and SN-22
#2 Lime Kiln and NCG Incinerator

Source Description

The maximum firing rate of the #2 Lime Kiln (SN-08) is 75 MMBTU/hr. NCGs are combusted in the #2 Lime Kiln. The #2 Lime Kiln was constructed in 1975 and has not been modified since that time. The #2 Lime Kiln uses only natural gas as fuel, and is equipped with a wet venturi scrubber.

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 uses a wet scrubber to control emissions of particulate. Without the scrubber in operation, PM emissions would be greater than 100 tons per year. Therefore, this is a listed unit for CAM. However, the #2 Lime Kiln is subject to 40 CFR Part 63, Subpart MM with a compliance date of March 12, 2004. This rule was finalized after November 15, 1990. Therefore, the #2 Lime Kiln is exempt from the requirements of CAM.

The #2 Lime Kiln and the NCG Incinerator are subject to 40 CFR Part 63, Subpart S-National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. They are used as control devices to reduce total HAP emissions for the LVHC system (SN-37). Emissions that are listed for SN-08 and SN-22 reflect the incineration of gases that are routed from the LVHC system.

Specific Conditions

64. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #69, #71, #74, #75, #77, #78, #79, #88, #89, and #90. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
08	PM ₁₀	20.2	88.0
	SO ₂	9.0	39.4
	VOC	1.0	39.0
	CO	4.5	21.3
	NO _x	18.0	94.6
	Lead	0.005	0.0190
22	SO ₂	49.1	26.3
08 and 22 combined	TRS	6.43	28.15

Green Bay Packaging Inc. - Arkansas Kraft Division**Permit #: 224-AOP-R5****AFIN: 15-00001**

65. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #71, #74, #75, #77, #78, #79, #88, #89, and #90. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
08 22	PM	20.2	88.0
	Acetone	0.23	0.96
	Benzene	0.01	0.04
	Cadmium	0.001	0.0100
	Cobalt	0.001	0.0100
	Copper	0.001	0.0100
	Formaldehyde	0.46	1.92
	Manganese	0.022	0.0900
	Methanol	1.50	6.39
	Methyl Ethyl Ketone	0.04	0.17
	Nickel	0.001	0.0100
	Terpenes	1.10	4.56
	Toluene	0.01	0.03

66. Visible emissions from SN-08 shall not exceed 20% opacity as measured by EPA Reference Method 9. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
67. The permittee shall conduct weekly 6-minute opacity readings on SN-08 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. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
68. Visible emissions from SN-22 shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance with this condition will be burning natural gas. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

69. The TRS emission rates from the #2 Lime Kiln (SN-08) shall not exceed 40 ppm. This limit shall be measured as H₂S 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. [§19.804 of Regulation #19 and §111d of the Clean Air Act]
70. The facility shall continue to calibrate, maintain, and operate a monitoring device (CEMS) that continuously monitors and records the total reduced sulfur (TRS) concentration of gases leaving the #2 Lime Kiln (SN-08). The CEM may be taken off line when the kiln is out of service longer than 24 hours. The CEM shall meet minimum frequency of operation requirements of 95% up-time for each quarter and for each pollutant measured. Failure to maintain operation time shall constitute a violation of the CEMs conditions. [§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]
71. The total throughput of lime through the #2 Lime Kiln (SN-08) shall be limited to 91,250 tons per consecutive rolling twelve month total. [§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]
72. The permittee shall maintain records of CaO production for the #2 Lime Kiln in units of tons per day. [40 CFR 63.866(c)(2) and A.C.A. §8- 4-203 as referenced by §8-4-304 and §8-4-311]
73. The facility shall maintain monthly records of the lime throughput through the #2 Lime Kiln. Records of this rate are to be maintained on a twelve month rolling total. Such records shall be maintained on site and made available to the Department upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
74. The NCG Incinerator (SN-22) shall be used at all times when NCGs are not incinerated in the #2 Lime Kiln (SN-08). The facility shall maintain effective incineration of NCGs at a minimum temperature of 1200°F for at least 0.5 second. [§19.804 of Regulation #19 and 111(d) of the Clean Air Act]
75. Operation of the NCG Incinerator shall not exceed 1000 hours on a consecutive 12 month basis. [§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]
76. The facility shall maintain records of all hours of operation and minimum temperature for the NCG Incinerator updated daily. These records shall be kept on site and shall be provided to Department personnel on request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
77. The #2 Lime Kiln (SN-08) shall use only natural gas as fuel. [§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]

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

78. Particulate emissions from the #2 Lime Kiln (SN-08) shall be controlled by a wet scrubber. The wet scrubber shall be used at all times when the #2 Lime Kiln is processing lime. [§19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
79. The liquid flow to the scrubber and differential pressure across the scrubber for the #2 Lime Kiln (SN-08) shall be maintained at or above the flow rate and the differential pressure measured, based on a three hour rolling average, as determined during the initial performance test. [§19.703 of Regulation #19, 40 CFR Part 52, Subpart E, 40 CFR 864(e)(10), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
80. The facility shall continuously monitor and record once per hour or continuously (by strip chart or electronically) the pressure drop across the scrubber (SN-08) and the liquid flow to the scrubber. The flow rate and pressure drop compliance demonstration measurements are based on a three hour rolling average. Scrubber flow and pressure drop do not have to be measured when the source is not processing lime. These records shall be maintained on site and provided to Department personnel upon request. [§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]
81. The permittee shall install, calibrate, maintain, and operate a CPMS that can be used to determine and record the pressure drop across the scrubber and the scrubbing liquid flow rate at least once every successive 15 minute period. [40 CFR 63.864(e)(10), 40 CFR 63.8(c) and A.C.A. §8- 4-203 as referenced by §8-4-304 and §8-4-311]
82. The permittee shall develop, implement, and maintain a written startup, shutdown, and malfunction plan as described in §63.6(e)(3) that describes procedures for operating and maintaining the #2 Lime Kiln during periods of startup, shutdown, and malfunction to minimize HAP emissions and a program of corrective action for malfunctioning of the scrubber or the CPMS. [40 CFR 63.866(a) and A.C.A. §8- 4-203 as referenced by §8-4-304 and §8-4-311]
83. The permittee shall implement the corrective action specified in the SSM Plan when any 3-hour average parameter value is outside the range of values established in the initial performance test. [40 CFR 63.864(k)(1)(ii) and A.C.A. §8- 4-203 as referenced by §8-4-304 and §8-4-311]
84. When six or more 3-hour average parameter values within any 6-month reporting period are outside the range of values established in the initial performance test, the #2 Lime Kiln is in violation of the standards of Specific Condition #89 and 40 CFR 63.862. [40 CFR 63.864(k)(2)(iii) and A.C.A. §8- 4-203 as referenced by §8-4-304 and §8-4-311]
85. No more than one exceedance will be attributed to any given 24-hour period. [40 CFR 63.864(k)(3) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

86. A quarterly excess emissions report containing the information specified in §63.10 and §63.867(c) shall be submitted to the Director if the conditions of Specific Conditions #83 or #84 occur. If those conditions do not occur, semi-annual reporting to indicate such is required. [40 CFR 63.867(c) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
87. The total HAP emissions routed from the LVHC system shall be controlled no later than April 16, 2001. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(a)(1)(i) and §63.440(d)]
88. The #2 Lime Kiln (SN-08) and the NCG Incinerator (SN-22) are the control devices for reducing the HAP emissions from the LVHC system (SN-37). [§19.304 of Regulation #19 and 40 CFR 60, Subpart S §63.443(d)(3) and (4)]
- A. The HAP emission stream shall be introduced into the flame zone of the lime kiln. [§63.443(d)(4)]
- B. The NCG Incinerator shall be operated at a minimum of 871 °C (1600 °F) and a minimum residence time of 0.75 seconds. [§63.443(d)(3)]
- C. 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. [§63.453(b)]
1. 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. [§63.10(b)(2)(vii)]
2. A record of each period during which the temperature probe is malfunctioning or inoperative shall be kept. [§63.10(b)(2)(vi)]
3. A record shall be kept of all calibration checks, maintenance, and adjustments of the temperature probe. [§63.10(b)(2)(x) and (xi)]
- D. Operation of the NCG Incinerator (SN-22) below 871 °C (1600 °F) 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 #173. [§63.453(o), except as provided in §63.443(e)]
89. The permittee shall establish an overall PM emission limit for the #2 Lime Kiln, using the methods in §63.865(a)(1) and (2), such that the sum of PM emissions from the Recovery Boiler (SN-05), the Smelt Dissolving Tank (SN-07), and the #2 Lime Kiln (SN-08) do not exceed the sum of individual units listed in §63.862(a)(1)(i). [40 CFR 63.862(a)(1)(ii) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

90. The permittee shall conduct an initial performance test on PM emissions from the #2 Lime Kiln by September 9, 2004 using the test methods and procedures listed in §63.7 and §63.865(b). Testing was performed from July 21 through July 26, 2004. [40 CFR 63.865 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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.

Specific Conditions

91. Emissions generated by the Brownstock Washers (SN-11) are collected in the HVLC Collection System (SN-38) thus eliminating emissions from SN-11. The washers cannot (based on the scope of the HVLC Collection System) be vented into the atmosphere. [40 CFR Part 52.21 (b)(3)(viii)]

SN-12
Aerated Settling Basin and Post Aerated Stabilization Basin

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. This modification includes updated emission factors from the *NCASI Handbook of Chemical-Specific Information for SARA Section 313 Form R Reporting* which now includes emissions of MEK.

Specific Conditions

92. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #94. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	35.7	100.1

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

Pollutant	lb/hr	tpy
Acetaldehyde	0.22	0.62
Methanol	0.32	0.89
Methyl Ethyl Ketone	35.13	98.60

94. The permittee shall not exceed 461,400 air dried tons of finished product at this source during any consecutive twelve month period. [§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]
95. The facility shall maintain records of the tons of air dried finished product produced at SN-12. Records for these annual 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. Failure to comply with these conditions shall be considered a violation of the mass emissions limit. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

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. The boiler was constructed in 1973 and has not been modified since that time.

The #1 Package Boiler is 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. Emissions listed here reflect the incineration of gases routed from the HVLC system.

Specific Conditions

96. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #100, #102, #103, #105, and #107. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	28.8	14.0
SO ₂	6.2	3.2
VOC	70.6	39.0
CO	560.0	366.3
NO _x	40.0	39.0

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

97. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #100, #102, #105, and #107. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	28.8	24.0
Butane	0.51	2.25
Ethane	0.76	3.33
Hexane	0.44	1.93
Methane	0.56	2.47
Pentane	0.64	2.76
Propane	0.39	1.72

98. 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 #99. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
99. 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. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
100. The #1 Package Boiler (SN-14) shall be tested for PM₁₀, SO₂, VOC, CO, and NO_x emissions using EPA Reference Method 201A or 201 for PM₁₀, Method 6 for SO₂, 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. This test data shall be used for determination of compliance with the conditions set forth in this permit. Compliance testing shall be conducted while the equipment being tested is operating within 90% of its permitted capacity. If equipment does not attain 90% of permitted capacity during testing, the operating rate during testing will be 90% of the maximum operating rate until the next test is completed. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

101. The #1 Package Boiler would be an affected source if it were capable of firing fossil fuel at a heat input rate greater than 250 MMBTU/hr. The facility's policy is 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. [§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]
102. The #1 Package Boiler shall only burn natural gas as fuel. Fuel oil may be burned but only in the event of natural gas curtailment or as detailed in the alternate operating scenario. [§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]
103. Sulfur content in the fuel shall be no greater than 2% by weight. [§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]
104. The permittee shall obtain and maintain the fuel oil receipts from the fuel supplier which certify that the oil contains no more than 2% sulfur by weight. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
105. 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 370,000,000 pounds, determined on a 12 month rolling total. [§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]
106. The facility shall maintain records of the steam generation at SN-14. Records for the hourly rate are to be maintained on a 24 hour rolling average, updated hourly. Records for the annual rate 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. Failure to comply with these conditions shall be considered a violation of the mass emissions limit. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
107. The #1 Package Boiler will be the backup control device for reducing the HAP emissions from the HVLC system (SN-38). The HAP emissions stream shall be introduced into the combustion air going to the boiler. 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. [§19.304 of Regulation #19 and 40 CFR 63.443(d)(4)]
108. The facility shall maintain records of the time that the #1 Package Boiler is being used as a backup control device. Records are to be maintained on an hourly basis. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

ALTERNATE OPERATING SCENARIO FOR COMBINATION OF SN-14 and SN-15

109. 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 #103, #105, and #107. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
Alternate Operating Scenario			
14 and 15	PM ₁₀	28.8	0.1
	SO ₂	418.3	3.5
	VOC	1.1	0.1
	CO	6.7	0.3
	NO _x	89.3	1.1

110. 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 in SN-14 and SN-15 except during periods of natural gas curtailment. [§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]
111. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

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. The boiler was constructed in 1996 and began operation in February 1997.

Specific Conditions

112. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #116, #117, and #120. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.6	6.7
SO ₂	1.5	6.6
VOC	1.2	4.9
CO	16.9	74.0
NO _x	13.8	39.0

113. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #116, #117, and #120. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.6	6.7
Butane	0.42	1.85
Ethane	0.62	2.73
Hexane	0.36	1.58
Methane	0.46	2.02
Pentane	0.52	2.29
Propane	0.32	1.41

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

114. 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 #115. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
115. 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. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
116. The #2 Package Boiler shall only burn natural gas as fuel. Fuel oil shall only be burned in the event of natural gas curtailment, under the Alternate Operating Scenario in Specific Conditions #109 through #111, or for short periods, upon notification of the Department, to test boiler fuel oil combustion controls. [§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]
117. 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. [§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]
118. The facility shall maintain records of the steam generation at SN-15. Records for the hourly rate are to be maintained on a 24 hour rolling average, updated hourly. Records for the annual rate 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. Failure to comply with these conditions shall be considered a violation of the mass emissions limit. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
119. The facility accepted limits on SO₂ 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) was tested for SO₂ using EPA Reference Method 6. A written report of the results of the completed tests was furnished to the Compliance Section of the Department within 30 days of test completion (October 1, 1997). [§19.901 et seq. of Regulation #19, and 40 CFR Part 52, Subpart E]
120. The #2 Package Boiler is an affected source of 40 CFR Part 60, Subpart Db-Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. [§19.304 of Regulation #19 and 40 CFR Part 60, Subpart Db]
 - 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. [§60.44b(a)]
 - B. 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). [§60.46b(a)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- C. 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). The CEM may be taken off line when the boiler is out of service longer than 24 hours. The CEM shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Failure to maintain operation time shall constitute a violation of the CEMs conditions. [§60.48b(b)]
- D. 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. [§60.49b]
- E. 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. The facility submitted this report on November 2, 1997. [§60.49b(b)]
- F. 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. [§60.49b(d)]
- G. The facility shall maintain records for the #2 Package Boiler for each steam generating unit operating day. As per §60.48g(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. [§60.49b(g)]
- H. 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. [§60.49b(h)(2)]
- I. The facility shall retain all required records for the #2 Package Boiler for a period of 2 years following the date of such record. [60.49b(o)]

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

121. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #123. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	5.9	21.9
TRS	0.21	0.30

122. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #123. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	0.06	0.09
Acetaldehyde	0.02	0.03
Benzene	0.01	0.01
Dimethyl Sulfide	0.02	0.02
Dimethyl Disulfide	0.01	0.02
Hydrogen Sulfide	0.14	0.21
Methanol	0.12	0.18
Methyl Ethyl Ketone	0.01	0.01
Methyl Mercaptan	0.04	0.05
Toluene	0.01	0.01
Terpenes	0.70	1.05

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

123. The production or processing of Tall Oil shall be limited to 15,012 tons per consecutive twelve month period. [§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]
124. The facility shall maintain records of production or processing of Tall Oil. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-23
Blow Heat Emergency Vent, Batch Digesters

Source Description

Product and pressured gases from the digesters 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 Digesters located at the facility. Batch Digesters #1 and #2 were installed in 1965, #3 and #4 in 1974, and #5 in 1987. Batch Digester #2 was repaired in 1996. In the Batch Digesters, wood chips and sawdust are cooked to separate the wood fiber from the lignin that binds the fibers together.

The Batch Digesters use the NCG/LVHC Collection System to control emissions of VOC. Without the NCG/LVHC Collection System in operation, VOC emissions would be greater than 100 tons per year. Therefore, this is a listed unit for CAM. However, the Batch Digesters are subject to 40 CFR Part 63, Subpart S with an effective date of April 15, 2001. Therefore, the Batch Digesters are exempt from the requirements of CAM.

Specific Conditions

125. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #127 and #150. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	7.5	29.0
TRS	0.23	9.0

126. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #127 and #150. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetaldehyde	0.04	0.15
Methanol	0.22	0.83
Terpenes	7.68	28.30

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

127. Batch Digester #5 is an affected source of 40 CFR Part 60, Subpart BB-Standards of Performance for Kraft Pulp Mills. [§19.304 of Regulation #19 and 40 CFR Part 60, Subpart BB]
- A. 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 1200°F for a minimum of 0.5 seconds.
[§60.283(a)(1)(iii)]
 - B. 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 digester system. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 percent of the temperature being measured.
[§60.284(b)(1)]
 - C. The facility shall report semiannually periods of excess emissions. For the digester 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 1200°F. 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. [§60.284(d)(3)(ii)]

SN-24
Wood Yard Fugitives

Source Description

Woodyard activities at the mill are classified as the unloading of wood chips and wood waste at the two receiving dumps, material drop points, stacking and removing material to and from storage piles, wind erosion from storage piles, and road emissions. Chips are sent to the semicircular chip pile by means of a belt conveyor. 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

128. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #132 and #136. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.8	1.0
VOC	169.0	737.5

129. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #132 and #136. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.6	2.2

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

130. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #132. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	99.5	339.5

131. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #132. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	1.28	4.37
Acetaldehyde	6.75	23.10
Acrolein	0.26	0.89
Benzene	0.05	0.17
1,2 Dichloroethylene	0.19	0.64
Methanol	34.50	118.20
Methyl Ethyl Ketone	0.37	1.26
Methyl Isobutyl Ketone	0.15	0.50
Styrene	0.09	0.28
Terpenes	56.25	192.80
Toluene	0.08	0.27
Trichloroethylene	0.23	0.77

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

Pollutant	lb/hr	tpy
m, p Xylene	0.11	0.35
o Xylene	0.09	0.31

132. The yearly production rate of the #1 Paper Machine shall be limited to 257,000 air dried tons of finished paper based on a rolling twelve month total. [§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]
133. The permittee shall maintain records of the production rate of the #1 Paper Machine. These records shall be updated at least monthly, shall be kept on site, and shall be provided to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

SN-25B
#2 Paper Machine

Source Description

The #2 Paper Machine was installed in 1978 and modified in 1998. At the paper machine, pulp is formed into a sheet, drained and pressed for dewatering, and then dried with steam heated dryers.

Specific Conditions

134. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #136. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	80.0	270.0

135. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #136. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	1.03	3.47
Acetaldehyde	5.44	18.40
Acrolein	0.21	0.71
Benzene	0.04	0.13
1,2 Dichloroethylene	0.16	0.51
Methanol	27.80	94.00
Methyl Ethyl Ketone	0.30	1.00
Methyl Isobutyl Ketone	0.12	0.40
Styrene	0.07	0.22
Terpenes	45.33	153.30
Toluene	0.07	0.21

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

Pollutant	lb/hr	tpy
Trichloroethylene	0.19	0.61
m, p Xylene	0.09	0.28
o Xylene	0.08	0.25

136. The yearly production rate of the #2 Paper Machine shall be limited to 204,400 air dried tons of finished paper based on a rolling twelve month total. [§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]
137. The permittee shall maintain records of the production rate of the #2 Paper Machine. These records shall be updated at least monthly, shall be kept on site, and shall be provided to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

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

Source Description

The Basement Air Make-up Heaters #1 and #2 (SN-26 and SN-27) are both 10 MMBTU/hr natural gas fired heaters. They were installed in 1967.

Specific Conditions

138. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #141. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
26	PM ₁₀	0.1	0.4
	SO ₂	0.1	0.1
	VOC	0.1	0.3
	CO	0.8	3.6
	NO _x	1.0	4.3
27	PM ₁₀	0.1	0.4
	SO ₂	0.1	0.1
	VOC	0.1	0.3
	CO	0.8	3.6
	NO _x	1.0	4.3

139. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #141. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
26	PM	0.1	0.4
27	PM	0.1	0.4

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

140. Visible emissions from these sources shall not exceed 5% opacity as measured by EPA Reference Method 9. Compliance will be demonstrated by only burning natural gas. [§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]
141. The #1 and #2 Basement Air Make-Up Heaters shall only use natural gas as a fuel source. [§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]

SN-30
Landfill

Source Description

The landfill at Green Bay is separated into two areas. Landfill 2 (Area I and II), which operated from 1981 to 1999, has a design capacity of 1,121,750 yd³. Landfill 3, Phase 1 is a currently active area with a design capacity of 449,000 yd³. Landfill 3, Phase 1 is projected to be closed in 2002. Landfill 3, Phase 2 will be put into use in 2002. It has a design capacity of 425,000 yd³. The material stored in the landfill is about 80% sludge and 20% miscellaneous waste. Emission limits are based upon the emissions generated from both landfills. 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

142. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #144. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	6.6	5.1

143. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #144. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Methane	497.4	2,749.7

144. Annual waste acceptance rate for the landfill shall not exceed 489,000 cubic yards per year as calculated on a twelve month rolling total. [§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]
145. The facility shall record the amounts of waste received in the landfill. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
146. Landfill 2 (Area I and II) is closed and shall no longer accept waste. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

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

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)
0467	Weak Black Liquor Boil Out Tank	750,000
0470	Blend Tank	18,426
0472	Screen Accepts Tank	18,426
0474	Weak Black Liquor Storage Tank	1,055,016

Specific Conditions

148. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #150. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	3.5	15.4

149. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #150. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	0.07	0.28
Terpenes	0.56	2.44

150. A throughput limit of 310,333 air dried tons of Kraft pulp at the facility per consecutive twelve month period shall be considered compliance with emission limits for this source. [§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]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

151. The permittee shall maintain records of the throughput of air dried Kraft pulp at the facility. Records shall be updated monthly, 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

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 Clarifier (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 Clarifier/Washer Tank	69,177

Specific Conditions

152. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #150. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	8.3	34.2

153. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #150. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	0.08	0.34
Terpenes	0.35	1.44

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

154. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #155. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	15.9	0.6

155. 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. [§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]

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

156. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #157. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	4.9	0.3

157. 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. [§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]

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

158. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #160. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.4	7.0

159. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #160. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetaldehyde	0.69	2.47
Acetone	0.21	0.88
Ammonia	5.10	21.20
Benzene	0.01	0.01
Methanol	0.59	2.44
Methyl Ethyl Ketone	0.01	0.05
Methyl Isobutyl Ketone	0.01	0.01

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

Pollutant	lb/hr	tpy
Styrene	0.01	0.06
Toluene	0.01	0.01
m, p Xylene	0.01	0.01

160. 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 #73. [§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]

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.

The LVHC/NCG Collection System collects all of the non-condensable gases emitted from the digester system, the turpentine recovery system, and the evaporator system. These gases are transported through the collection system to be incinerated in the #2 Lime Kiln (SN-09) and the NCG Flare (SN-22). Without the use of the kiln and flare as control devices, the emission of HAPs and TRS gases would exceed the 25 ton per year threshold for HAPs and the 100 tons per year for VOCs. Therefore, this is a listed unit for CAM. However, the LVHC/NCG Collection System is subject to 40 CFR Part 63, Subpart S with an effective date of April 15, 2001. Therefore, the LVHC/NCG Collection System is exempt from the requirements of CAM.

Specific Conditions

161. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #166 and #167. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	12.1	1.1
TRS	117.36	10.30

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

162. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #166 and #167. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	0.81	0.07
Cumene	0.05	0.01
p-Cymene	0.04	0.01
Dimethyl Disulfide	22.30	1.95
Dimethyl Sulfide	64.70	5.66
Ethanol	0.05	0.01
Formaldehyde	0.22	0.02
n-Hexane	0.08	0.01
Hydrogen Sulfide	0.06	0.01
Isopropanol	0.11	0.01
Methanol	1.62	0.14
Methyl Ethyl Ketone	0.08	0.007
Methyl Isobutyl Ketone	0.08	0.007
Methyl Mercaptan	30.30	2.65
a-Pinene	2.62	0.23
b-Pinene	1.05	0.09
Styrene	0.20	0.02
Terpenes	5.66	0.50
1,2,4-Trichloro-benzene	0.28	0.02

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

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

164. 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). [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c) and §63.443(d)(4)]
165. A record will be kept of all required maintenance activities performed on the LVHC System control devices. [§63.10(b)(2)(iii)]
166. The enclosures and closed-vent system shall meet the requirements specified in §63.450- Standards For Enclosures and Closed-Vent Systems; §63.453(k)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c)]
 - A. Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs. [§63.450(b)]
 - B. Each component of the closed-vent system that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d). [§63.450(c)]
 - C. Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations shall comply with either of the following requirements: [§63.450(d)]
 1. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- D. The closed-vent LVHC Collection System shall comply with the following requirements: [§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. [§63.453(k)(1)]
 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. [§63.453(k)(2)]
 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): [§63.453(k)(3)]
 - 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. 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): [§63.453(k)(4),]
 - 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;

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.
- 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. [§63.453(k)(5),]
- 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: [§63.453(k)(6)]
 - 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- E. For each applicable enclosure opening, closed-vent system, and closed collection system under Specific Condition #147(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: [§63.454(b),]
- 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 of 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.
167. 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. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(o), except as provided in §63.443(e)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

168. 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: [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.10(e)(3)(i),]
- 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°F while combusting HAPs.
169. 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 #161 and #162. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(1)]

SN-38
HVLC Collection System

Source Description

The HVLC Collection System collects vapors from the Brownstock washers, all of the required 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) 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.

The HVLC Collection System collects all of the non-condensable gases emitted from the Brownstock Washer system and portions of the condensate collection system. These gases are transported through the collection system to be incinerated in the #3 Wood Waste Boiler (SN-04) and the #1 Package Boiler (SN-14). Without the use of the two boilers as control devices, the emissions of HAPS and VOC gases would exceed the 25 ton per year threshold for HAPs and the 100 tons per year for VOCs. Therefore, this is a listed unit for CAM. However, the HVLC Collection System is subject to 40 CFR Part 63, Subpart S with an effective date of April 15, 2001. Therefore, the HVLC Collection System is exempt from the requirements of CAM.

Specific Conditions

170. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #175 and #176. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	202.3	69.7
TRS	17.00	7.10

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

171. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Conditions #175 and #176. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetaldehyde	0.81	0.28
Acetone	1.20	0.40
Acrolein	0.01	0.004
Benzaldehyde	0.04	0.02
Carbon Tetrachloride	0.13	0.04
Chloroform	0.10	0.03
Cyclohexanone	0.04	0.02
1,2 Dichloroethylene	0.03	0.01
Ethanol	0.18	0.06
Ethylene Dichloride	0.03	0.01
Methanol	18.60	6.40
Methyl Ethyl Ketone	0.18	0.06
Methyl Isobutyl Ketone	0.03	0.01
Styrene	0.03	0.01
Terpenes	182.10	62.80
1,1,2 Trichloroethane	0.03	0.01

172. 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. [§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)]
173. 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). [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c) and §63.443(d)(4)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

174. A record will be kept of all required maintenance activities performed on the HVLC System control devices. [§63.10(b)(2)(iii)]
175. The enclosures and closed-vent system shall meet the requirements specified in §63.450- Standards For Enclosures and Closed-Vent Systems; §63.453(k)-Monitoring Requirements; and §63.454(b)-Recordkeeping Requirements. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c)]
- A. Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in §63.457(e). Each enclosure or hood opening closed during the initial performance test specified in §63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs. [§63.450(b)]
 - B. Each component of the closed-vent system that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in §63.457(d). [§63.450(c)]
 - C. Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations shall comply with either of the following requirements: [§63.450(d)]
 - 1. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- D. The closed-vent HVLC Collection System shall comply with the following requirements: [§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. [§63.453(k)(1)]
 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. [§63.453(k)(2)]
 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): [§63.453(k)(3)]
 - 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. 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): [§63.453(k)(4)]
 - 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;

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.
- 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.
[§63.453(k)(5)]
- 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:
[§63.453(k)(6)]
 - 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- E. For each applicable enclosure opening, closed-vent system, and closed collection system under Specific Condition #156(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: [§63.454(b)]
- 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 of 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.
176. 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. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(o), except as provided in §63.443(e)(2)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

177. 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: [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.10(e)(3)(i)]
- A. Periods when any bypass valve is open while the vented source is in operation.
178. 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 #170, and #171. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(2)]

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.

The Condensate Collection System collects process condensates containing large concentrations of HAPs and VOCs. The condensates are recycled to the Brown Stock Washers where emissions are controlled through the HVLC Collection System. Emission from the Condensate Collection Tank are also controlled through the HVLC Collection System. Without the use of the HVLC Collection System as a control device, the emissions of HAPS and VOC gases would exceed the 25 ton per year threshold for HAPs and the 100 tons per year for VOCs. Therefore, this is a listed unit for CAM. However, the Pulping Process Condensate Collection System is subject to 40 CFR Part 63, Subpart S with an effective date of April 15, 2001. Therefore, the HVLC Collection System is exempt from the requirements of CAM.

Specific Conditions

179. The pulping process condensates from the following equipment systems shall be treated to meet the requirements set forth in Specific Condition #180 through #188: [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(b)]
- 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;
 - E. Each LVHC collection system; and
 - F. The evaporator vacuum system.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

180. Pulping process condensates from equipment systems listed in Specific Condition #185 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 based on the averaging period developed in Specific Condition #187. Testing will be performed in accordance with Specific Condition #181. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(c)(3)]
181. 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. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.457(g)]
182. An initial performance test is required for the condensate collection system in order to demonstrate compliance with Specific Condition #180. 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. This report was submitted to ADEQ on November 16, 2001. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.457(a)]
183. The condensate tank located within the closed collection system must meet the following requirements: [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(d)(2)]
 - A. The fixed roof and all openings (e.g. access hatches, sampling ports, gauge wells) shall be designed and operated with no detectable leaks as indicated with an instrument reading of less than 500 parts per million above background, and vented into a closed-vent system that meets the requirements of Specific Condition #165 for the HVLC system and routed to a control device that meets the conditions of Specific Condition #24 for the #3 Wood Waste Boiler and/or Specific Condition #88 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.

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

184. 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. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(l)]
- A. 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. [§63.450(b)]
 - B. 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). [§63.450(c)]
 - C. 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: [§63.450(d)]
 - 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- D. The condensate collection system shall comply with the following requirements: [§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. [§63.453(k)(1)]
 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. [§63.453(k)(2)]
 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): [§63.453(k)(3)]
 - 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. 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): [§63.453(k)(4)]
 - 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;

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.
- 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.
[§63.453(k)(5)]
- 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:
[§63.453(k)(6)]
 - 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.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

- E. For each applicable enclosure opening, closed-vent system, and closed collection system under Specific Condition #165(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: [§63.454(b)]
- 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 of 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.
185. In order to meet the requirements of Specific Condition #167(A-G), 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. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(a)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

186. 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 the ones tested in the Initial Performance Test and used to demonstrate collection of 7.2 pounds of HAP per ton of oven dried pulp produced. This includes: [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(i) and (n)]
- A. Condensate from the condensate collection tank to the Brown Stock washer showers;
 - B. Fresh water flow into the condensate collection tank;
 - 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.
187. The permittee shall maintain daily records which demonstrate compliance with Specific Condition #186(A-G). A rolling average of each parameter in Specific Condition #186(A-G) shall be used to calculate daily compliance of collection and treatment of 7.2 pounds of HAP per oven air dry tons of pulp. The averaging period for each calculation will be based on the results from the Initial Performance Test and any subsequent tests. 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. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
188. 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 Conditions #179 through #187 shall constitute a violation of the applicable emission standard of this subpart and be reported as a period of excess emissions. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.453(o)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

SECTION V: COMPLIANCE PLAN AND SCHEDULE

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

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

8. 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 emissions 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 (eq., 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. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
9. The permittee shall operate all Continuous Emissions Monitors in accordance with the Continuous Emission Monitoring Systems Conditions in Appendix E. [§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]

Acid Rain (Title IV)

10. 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. [§26.701 of Regulation #26 and 40 CFR 70.6(a)(4)]

Title VI Provisions

11. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
 1. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 2. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 3. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 4. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

12. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 3. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)
 5. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
13. 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.
14. 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.

15. 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.

Green Bay Packaging Inc. - Arkansas Kraft Division**Permit #: 224-AOP-R5****AFIN: 15-00001****Permit Shield**

16. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated January 25, 2004.

Applicable Regulations

Source No.	Regulation	Description
Facility	Regulation 18	Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Facility	Regulation 19	Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective December 19, 2004
Facility	Regulation 26	Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
SN-04 and SN-15	40 CFR 60, Subpart Db	New Source Performance Standards for Industrial Steam Generating Units, effective December 16, 1987
Facility	40 CFR 60, Subpart BB	New Source Performance Standards for Kraft Pulp Mills, effective May 20, 1986
Facility	40 CFR 61, Subpart M	National Emission Standard for Hazardous Air Pollutants for Renovation/Demolition of Asbestos
Facility	40 CFR 63, Subpart S	National Emission Standard for Hazardous Air Pollutants from the Pulp and Paper Industry, effective April 15, 1998
SN-05, SN-07, and SN-08	40 CFR 63, Subpart MM	National Emission Standard for Hazardous Air Pollutants for Chemical Recovery Combustion Units at Kraft Pulp Mills with a compliance date of 3/12/04.
SN-39	40 CFR 63, Subpart RR	National Emission Standards for Individual Drain Systems, effective July 1, 1996
SN-02, SN-03, SN-14, and SN-15	40 CFR 63, Subpart DDDDD	National Emission Standard for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters. Proposed final date of February 28, 2004.

Green Bay Packaging Inc. - Arkansas Kraft Division**Permit #: 224-AOP-R5****AFIN: 15-00001**

Source No.	Regulation	Description
SN-02, SN-11, SN- 15, SN-23, SN-37, SN-38, and SN-39	40 CFR 64	Compliance Assurance Monitoring, effective October 22, 1997

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated January 25, 2004.

Inapplicable Regulations

Source No.	Regulation	Description
Facility	NSPS Subpart K	New Source Performance Standards for Petroleum Storage Tanks Less than 40,000 Gallons with Construction between 6/11/73 and 5/19/78
Facility	NSPS Subpart Ka	New Source Performance Standards for Petroleum Storage Tanks Less than 40,000 Gallons with Construction between 5/18/78 and 7/23/84
Facility	NSPS Subpart Kb	New Source Performance Standards for Petroleum Storage Tanks Less than 40,000 Gallons with Construction After 7/23/84
Facility	NSPS Subpart HH	New Source Performance Standards for Lime Manufacturing

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated February 6, 2002.

Description	Category
Pocket Vent System Heater #1	Group A, Number 1
Pocket Vent System Heater #2	Group A, Number 1
Gasoline Storage Tank	Group A, Number 3
Used Oil 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
50% Caustic Storage Tanks	Group A, Number 4
Emissions From Laboratory Vents	Group A, Number 5
Sulfuric Acid Tanks (4)	Group A, Number 13
Phosphoric Acid Tank	Group A, Number 13
Small Fuel Oil Tanks (SN-33)	Group A, Number 13
Large Fuel Oil Tank	Group A, Number 13
Intermediate Black Liquor Storage Tanks (2)	Group A, Number 13
Heavy Black Liquor Storage Tanks (3)	Group A, Number 13
White Liquor Storage Tanks (4)	Group A, Number 13
High Density Pulp Storage Tanks (2)	Group A, Number 13
Cooling Towers	Group A, Number 13
Salt Cake Storage Tank	Group A, Number 13
Muriatic Acid Tote Bin	Group A, Number 13
Tall Oil Brine Storage Tanks (3)	Group A, Number 13
Alum Storage	Group A, Number 13

Green Bay Packaging Inc. - Arkansas Kraft Division
Permit #: 224-AOP-R5
AFIN: 15-00001

Description	Category
Starch Cooker	Group A, Number 13
Sludge Press Area – Vent Exhaust	Group A, Number 13
Ferric Sulfate Storage	Group A, Number 13
N-Sol 32 Storage	Group A, Number 13
Secondary Fiber Plant	Group A, Number 13
#1 Lime Silos (Sodium Carbonate) (SN-18)	Group A, Number 13
#2 Lime Silos (Sodium Carbonate) (SN-19)	Group A, Number 13
Starch Silo (SN-20)	Group A, Number 13
Lime Silo – Water Plant (SN-21)	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. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.[40 CFR 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [§26.701(B) of Regulation #26 and 40 CFR 70.6(a)(2)]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [§26.406 of Regulation #26]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [§26.701(A)(2) of Regulation #26 and 40 CFR 70.6(a)(1)(ii)]
5. The permittee must maintain the following records of monitoring information as required by this permit. [§26.701(C)(2) of Regulation #26 and 40 CFR 70.6(a)(3)(ii)(A)]
 1. The date, place as defined in this permit, and time of sampling or measurements;
 2. The date(s) analyses performed;
 3. The company or entity performing the analyses;
 4. The analytical techniques or methods used;
 5. The results of such analyses; and
 6. The operating conditions existing at the time of sampling or measurement.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [§26.701(C)(2)(b) of Regulation #26 and 40 CFR 70.6(a)(3)(ii)(B)]
7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in §26.2 of Regulation #26 must certify all required reports. The permittee will send the reports to the address below: [§26.701(C)(3)(a) of Regulation #26 and 40 C.F.R. 70.6(a)(3)(iii)(A)]

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

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit. The permittee shall make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 1. The facility name and location,
 2. The process unit or emission source deviating from the permit limit,
 3. The permit limit, including the identification of pollutants, from which deviation occurs,
 4. The date and time the deviation started,
 5. The duration of the deviation,
 6. The average emissions during the deviation,
 7. The probable cause of such deviations,
 8. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
 9. The name of the person submitting the report.

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

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [§26.701(E) of Regulation #26, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6(a)(5)]
10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [§26.701(F)(1) of Regulation #26 and 40 CFR 70.6(a)(6)(i)]
11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [§26.701(F)(2) of Regulation #26 and 40 CFR 70.6(a)(6)(ii)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [§26.701(F)(3) of Regulation #26 and 40 CFR 70.6(a)(6)(iii)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [§26.701(F)(4) of Regulation #26 and 40 CFR 70.6(a)(6)(iv)]
14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [§26.701(F)(5) of Regulation #26 and 40 CFR 70.6(a)(6)(v)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [§26.701(G) of Regulation #26 and 40 CFR 70.6(a)(70)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [§26.701(H) of Regulation #26 and 40 CFR 70.6(a)(8)]
17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [§26.701(I)(1) of Regulation #26 and 40 CFR 70.6(a)(9)(i)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [§26.702(A) and (B) of Regulation #26 and 40 CFR 70.6(b)]
19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [§26.703(A) of Regulation #26 and 40 CFR 70.6(c)(1)]

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [§26.703(B) of Regulation #26 and 40 CFR 70.6(c)(2)]
 1. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 2. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 4. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [§26.703(E)(3) of Regulation #26 and 40 CFR 70.6(c)(5)]
 1. The identification of each term or condition of the permit that is the basis of the certification;
 2. The compliance status;
 3. Whether compliance was continuous or intermittent;
 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 5. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
 1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 2. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 3. The applicable requirements of the acid rain program, consistent with §408(a) of the Act or,
 4. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

Green Bay Packaging Inc. - Arkansas Kraft Division

Permit #: 224-AOP-R5

AFIN: 15-00001

23. This permit authorizes only those pollutant emitting activities addressed in this permit.
[A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F