

## RESPONSE TO COMMENTS

### GREEN BAY PACKAGING INC. - ARKANSAS KRAFT DIVISION PERMIT #0224-AOP-R16 AFIN: 15-00001

On September 26, 2014, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, written comments on the draft permitting decision were submitted Samuel M. Leslie, on behalf of the facility. The Department's response to these issues follows.

*Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.*

#### **Comment #1:**

Section II: Introduction, 3<sup>rd</sup> paragraph. This paragraph states that *"The project includes the permanent shutdown of an existing wood fired boiler (#1 Wood Waste Boiler, SN-02)"*. The source and associated Specific Conditions were removed from the permit.

As discussed in the Introduction section of the application, the #1 Wood Waste Boiler (SN-02) will not be shutdown until the start-up of the new boiler (SN-46). The engineering for SN-46 is not complete and construction has not commenced. The #1 Wood Waste Boiler (SN-02) will be operating while the 0224-AOP-R16 is in effect and it is essential that the source and associated specific conditions (as appeared in 0224-AOP-R-15) remain in the permit and a statement added that the source will be shutdown in conjunction with the start-up of the new boiler (SN-46). The source can be removed from the permit in future permitting.

#### **Response to Comment #1:**

The #1 Wood Waste Boiler along with the associated specific conditions have been reinstated in the permit. A condition has been added to the permit which requires the permittee to shutdown #1 Wood Waste Boiler upon the startup of the new boiler, #3 Package Boiler (SN-46).

#### SN-46, #3 Package Boiler

#### **Comment #2:**

Specific Condition #214 states in the second sentence that *"Compliance shall be demonstrated through compliance with Specific Condition #214 and #215 respectively"*. This should be Specific Condition #215 and #216.

#### **Response to Comment #2:**

The condition has been revised to reference the appropriate conditions.

**Comment #3:**

Specific Condition #217 states *"The permittee shall not exceed a throughput of 420 MMBtu/hr of natural gas and 1,000,000 gallons of #2 fuel oil at SN-46 per rolling 12 month period"* and the record requirement (SC-219) requires monthly records and 12-month rolling totals. The natural gas throughput for Specific Condition #217 should be changed to 3,679,200 MMBtu. The pound per hour compliance mechanism is captured in Specific Condition #220 (300,000 pounds per hour of steam during boiler operation based on a 24 hour rolling average).

**Response to Comment #3:**

The condition has been revised as requested.

**Comment #4:**

Specific Condition #219 states *"The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #215 and #217"*. This should be only #217.

**Response to Comment #4:**

The condition has been corrected.

**Comment #5:**

Specific Condition #220 states *"Steam generation in the #3 Package Boiler (SN-46) shall not exceed 300,000 pounds per hour of steam during boiler operation based on a 24 hour rolling average"* however the record requirement found in Specific Condition #221 requires *"monthly records which demonstrate compliance with Specific Conditions #219. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, provided to Department personnel upon requires and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7."*

AKD suggest Specific Condition #220 be revised to read "Steam generation in the #3 Package Boiler (SN-46) shall not exceed 300,000 pounds per hour of steam during boiler operation based on a 24 hour rolling average. Maximum annual steam production shall not exceed 2,628,000,000 pounds, determined on a 12-month rolling total.

**Response to Comment #5:**

The requested language has been added to the condition.

**Comment #6:**

Specific Condition #222 contains the compliance mechanism for both PM<sub>10</sub> and PM and states *"The #3 Package Boiler (SN-46) shall be tested for PM<sub>10</sub>, SO<sub>2</sub>, VOC, NO<sub>x</sub> and CO emissions. Method 5 and Method 202 shall be used for PM<sub>10</sub> with all emissions being reported as PM<sub>10</sub>..."* The PM<sub>10</sub> emission factor was derived from NCASI testing in which EPA Method 201A and Method 202 was the methodology for the testing. The PM<sub>10</sub> emission rate stated in the application as based on the NCASI data. AKD requests

that the compliance mechanism to demonstrate compliance with the PM/PM<sub>10</sub> limits of Specific Condition #212 and #213 be compliance with Specific Condition #217 and #218. AKD requests that the language of Specific Condition #222 be revised to read "...PM testing shall be conducted using EPA Reference Methods 5 or 201A and Reference Method 202. The permittee may report all particulate emissions measured using EPA Method 5 and EPA Method 202 as PM<sub>10</sub> or the permittee may conduct separate PM<sub>10</sub> testing using Reference Method 201A and Method 202.

**Response to Comment #6:**

The language has been added to the permit.

**Comment #7:**

Specific Condition #222 states in the fifth sentence that "Tests shall be conducted with 180 days of the issuance date of this permit". The source will not commence operation within 180 days of the issuance of this permit. The sentence should be revised to read "These test shall be conducted within 180 days of startup".

**Response to Comment #7:**

The change has been made.

**Comment #8:**

Specific Condition #226 states in the second sentence that "*The permittee shall demonstrate that the oil meets the definition of very low sulfur oil by complying with Specific Condition #226*". This should be Specific Condition #227.

**Response to Comment #8:**

The condition has been revised to reference the appropriate condition.

**Comment #9:**

Specific Condition #232 states in the fourth sentence that "*Compliance with this condition shall be demonstrate by complying with Specific Condition #211 and Specific Condition #232*". This should be only Specific Condition #233.

**Response to Comment #9:**

The condition has been revised to reference the appropriate condition.

**Comment #10:**

Specific Condition #233 states "*The permittee shall conduct a performance test for NO<sub>x</sub> using a continuous system for monitoring NO<sub>x</sub> to determine compliance with emissions limit listed in Specific Condition #231...*" This should be revised to read "...to determine compliance with the emissions limit specific in Specific Condition #232.

**Response to Comment #10:**

The condition has been revised to reference the appropriate conditions.

**Comment #11:**

Specific Condition #236 states *“The permittee shall record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor individually for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. All records shall be maintained by the permittee of the facility for a period of 2 years following the date of such record. A twelve month total and each individual month’s data shall be in a spreadsheet, database, or other well-organized format, maintained on site, made available to Department personnel upon request and submitted in accordance with General Provision #21”* and references §60.49b(d) as the regulatory citation.

The #2 Package Boiler (SN-15) is also subject to NSPS Subpart Db and has a similar specific condition. Specific Condition #94F states *“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.”* AKD is agreeable with the language contained in Specific Condition #236 but request that the requirement to submit the information in accordance with General Provision #21 be removed. The information will be in a spreadsheet, database, or other well organized format, maintained on site, and made available to Department personnel upon request.

**Response to Comment #11:**

The condition has been revised as requested.

**Comment #12:**

Specific Condition #238 states *“The permittee is required to submit excess emission reports for any excess emissions which occurred during the reporting period. A twelve month total and each month’s individual data shall be submitted in accordance with General Provision #7”*. The Specific Condition cites 40 CFR §60.49b(h) as the regulatory reference. AKD suggests revising the Specific Condition to read *“The facility is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the #3 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”*. This language is from Specific Condition #94.H of the draft permit and also cites 40 CFR §60.49b(h) as the regulatory reference.

**Response to Comment #12:**

The condition has been revised to have similar language as Specific Condition #94.H.

## **Engines**

### **SN-44, Emergency UPS Generator – Main Office**

#### **Comment #13:**

Specific Condition #193 states *“The permittee shall not operate the emergency generator SN-44 in excess of 500 total hours (emergency and non-emergency) per rolling 12 month period in order to demonstrate compliance with the annual emission rates”*. The Recovery Elevator Drive Engine (SN-42) and the Emergency Lime Kiln Drive Engine (SN-43) have been previously permitted and Specific Condition #177 for SN-42 and SN-43 state *“The permittee shall not operate the emergency engines SN-42 and SN-43, (SN-47) in excess of 500 hours per calendar year for non-emergencies”*. The engines are similar and the language in Specific Condition #193 is not consistent with Specific Condition #177. AKD request the language in Specific Condition #193 be replaced with a calendar year compliance period rather than a rolling 12 month period. The calendar year period is consistent with NESHAP Subpart ZZZZ; §63.6640(f)(2).

#### **Response to Comment #13:**

The condition has been revised as requested.

#### **Comment #14:**

Specific Condition #194 states in the last sentence states *“... and submitted in accordance with General Provision #7”*. The Recovery Elevator Drive Engine (SN-42) and the Emergency Lime Kiln Drive Engine (SN-43) have been previously permitted. The last sentence in Specific Condition #178 for SN-42 and SN-43 states *“...and submitted in accordance with General Provision #21”*. The engines are similar and the language in Specific Condition #194 is not consistent with Specific Condition #178. AKD request the language in Specific Condition #194 be replaced with the language in Specific Condition #178.

#### **Response to Comment #14:**

All emergency engines' specific conditions pertaining to the recordkeeping requirements of the total operating hours have been revised to require the facility to submit required records in accordance with General Provision #7.

### **SN-45, Emergency IT AC Backup**

#### **Comment #15:**

Specific Condition #205 states *“The permittee shall not operate the emergency generator SN-44 in excess of 500 total hours (emergency and non-emergency) per rolling 12 month period in order to demonstrate compliance with the annual emission rates.”* The Recovery Elevator Drive Engine (SN-42) and the Emergency Lime Kiln Drive Engine (SN-43) have been previously permitted. Specific Condition 3177 for SN-42 and SN-43 states *“the permittee shall not operate the emergency engines SN-42 and SN-43 in excess of 500 hours per calendar year for non-emergencies”*. The engines are similar and the language in Specific Condition #205 is not consistent with Specific Condition #177. AKD request the language in Specific Condition #205 be replaced with a calendar year compliance period rather than a rolling 12 month period. The calendar year period is consistent with NSPS Subpart JJJJ; §60.4243(d)(2).

**Response to Comment #15:**

The condition has been revised as requested.

**Comment #16:**

Specific Condition #206 states in the last sentence states “...*and submitted in accordance with General Provision #7*”. The Recover Elevator Drive Engine (SN-42) and the Emergency Lime Kiln Drive Engine (SN-43) have been previously permitted. The last sentence in Specific Condition #178 for SN-42 and SN-43 states “...*and submitted in accordance with General Provision #21*”. The engines are similar and the language in Specific Condition #206 is not consistent with Specific Condition #178. AFD request the language in Specific Condition #206 be replaced with the language in Specific Condition #178.

**Response to Comment #16:**

All emergency engines’ specific conditions pertaining to the recordkeeping requirements of the total operating hours have been revised to require the facility to submit required records in accordance with General Provision #7.



ARKANSAS  
Department of Environmental Quality

January 30, 2015

Thomas Holte  
Environmental Manager  
Green Bay Packaging Inc. (Arkansas Kraft Division)  
P.O. Box 771  
Morrilton, AR 72110

Dear Mr. Holte:

The enclosed Permit No. 0224-AOP-R16 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 12/11/2013.

After considering the facts and requirements of A.C.A. §8-4-101 et seq. as referenced by §8-4-304, and implementing regulations, I have determined that Permit No. 0224-AOP-R16 for the construction and operation of equipment at Green Bay Packaging Inc. (Arkansas Kraft Division) to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Bates", is written over a light blue horizontal line.

Mike Bates  
Chief, Air Division

Enclosure: Final Permit

# ADEQ OPERATING AIR PERMIT

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

Permit No. : 0224-AOP-R16

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:

April 18, 2011

AND

April 17, 2016

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

Signed:



Mike Bates  
Chief, Air Division

January 30, 2015

Date



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

Table of Contents

<b>SECTION I: FACILITY INFORMATION</b>	5
<b>SECTION II: INTRODUCTION</b>	6
<b>Summary of Permit Activity</b>	6
<b>Process Description</b>	7
<b>Regulations</b>	11
<b>Emission Summary</b>	12
<b>SECTION III: PERMIT HISTORY</b>	22
<b>SECTION IV: SPECIFIC CONDITIONS</b>	32
SN-01 Wood Waste Dryer	32
SN-02 #1 Wood Waste Boiler	33
SN-03 #2 Wood Waste Boiler	36
SN-04 #3 Wood Waste Boiler	37
SN-05A Recovery Boiler	43
SN-07 Smelt Dissolving Tank Vent	48
SN-08 and SN-22 #2 Lime Kiln and NCG Incinerator	52
SN-11 Brownstock Washers	58
SN-12 Aerated Settling Basin and Post Aerated Stabilization Basin	59
SN-15 #2 Package Boiler	60
SN-17 Tall Oil Plant Reactor	63
SN-23 Blow Heat Emergency Vent, Batch Digesters	64
SN-24 Wood Yard Fugitives	66
SN-25A #1 Paper Machine	67
SN-25B #2 Paper Machine	69
SN-26 and SN-27 Basement Air Make-up Heaters #1 and #2	71
SN-30 Landfill	73
SN-31 Weak Black Liquor Tanks	75
SN-32 Green Liquor Tanks	77
SN-36 Slaker/Causticizers	78
SN-37 LVHC Collection System	79
SN-38 HVLC Collection System	85
SN-39 Pulping Process Condensate Collection	91
SN-40 Mill Road Fugitives	98
SN-41 Back-up Fire Water Pump Engine	99
SN-42, SN-43 Recovery Elevator Drive Engine Emergency Lime Kiln Drive Engine	102
SN-44 Emergency UPS Generator- Main Office	106
SN-45 Emergency IT AC Backup	109
SN-46 #3 Package Boiler	112
SN-47 Emergency Air Compressor Engine	120
<b>SECTION V: COMPLIANCE PLAN AND SCHEDULE</b>	123
<b>SECTION VI: PLANTWIDE CONDITIONS</b>	124
Acid Rain (Title IV)	125
Title VI Provisions	125
Permit Shield	126
<b>SECTION VII: INSIGNIFICANT ACTIVITIES</b>	129

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

**SECTION VIII: GENERAL PROVISIONS** ..... 131

Appendix A – NSPS Subpart Db  
Appendix B – NSPS Subpart BB  
Appendix C – NSPS Subpart RR  
Appendix D – NSPS MACT S  
Appendix E – MACT MM  
Appendix F – CEM Standards  
Appendix G – NESHAP ZZZZ  
Appendix H – NSPS Subpart JJJJ  
Appendix I – NSPS Subpart IIII  
Appendix J – NESHAP Subpart DDDDD

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
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 <sub>x</sub>	Nitrogen Oxide
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO <sub>2</sub>	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 #: 0224-AOP-R16  
AFIN: 15-00001

## **SECTION I: FACILITY INFORMATION**

PERMITTEE: Green Bay Packaging Inc. (Arkansas Kraft Division)

AFIN: 15-00001

PERMIT NUMBER: 0224-AOP-R16

FACILITY ADDRESS: 338 Highway 113 South  
Morrilton, AR 72110

MAILING ADDRESS: P.O. Box 771  
Morrilton, AR 72110

COUNTY: Conway County

CONTACT NAME: Thomas Holte

CONTACT POSITION: Environmental Manager

TELEPHONE NUMBER: (501) 354-9289

REVIEWING ENGINEER: Kimberly O'Guinn

UTM North South (Y): Zone 15: 3883770.60 m

UTM East West (X): Zone 15: 523684.37 m

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

## **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.

This modification is to add an emergency diesel engine (SN-44) to the permit under 40 CFR Part 63 Subpart ZZZZ and an emergency natural gas engine (SN-45) to the permit under 40 CFR Part 60 Subpart JJJJ.

In December 2013 the facility submitted a PSD modification to allow for the construction and operation of a new natural gas fired package boiler, #3 Package Boiler (SN-46). The project includes the permanent shutdown of an existing wood fired boiler (#1 Wood Waste Boiler, SN-02). The facility is permitted to continue to operate the #1 Wood Waste Boiler until the startup of the #3 Package Boiler. The facility submitted a PSD evaluation for the new boiler (SN-46). NOx and GHGs exceeded the PSD Significant Emission Rates (SERs) threshold. After conducting a netting analysis, the facility determined that only GHGs emission increases were significant and must undergo PSD review. However, EPA issued a letter stating the United State Supreme Court's decision addressing the application of stationary source permitting requirements to GHG. In very brief summary, the Supreme Court said the EPA may not treat GHG as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD permit. Therefore the facility revised the air permit application to omit the PSD portion for GHG.

In addition to the new package boiler, this modification includes existing sources at the facility that were not included in previous permits. The Woodyard (SN-24) PM emission calculations have been revised to include the emissions from the Chip Cyclone. The inclusion of these emissions does not require a change in the permitted emission rates at the source. The Fly Ash Bunker has been added to the Insignificant Activities list.

This modification also includes the reclassification of the Emergency Fire Pump Engine (SN-41) from an emergency use engine to a non-emergency use engine and changes the name of the source to the "Back-up Fire Water Pump Engine". A small new Emergency Air Compressor Engine (SN-47) is also being added as a new source and emissions calculations for the Emergency IT Generator (SN-45) has been revised. The original estimates used emission factors from AP-42 for diesel fired engines rather than natural gas fired engines.

Total permitted emissions will increase as follows: 0.3 tons/year (tpy) PM/PM<sub>10</sub>, 0.3 tpy SO<sub>2</sub>, 0.3 tpy VOC, 0.4 tpy CO, 0.6 tpy NOx and 0.006 tpy total HAPs.

## **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.

The pulp is washed using counter current drum washers to remove organic and inorganic chemicals (black liquor); defoamers and CO<sub>2</sub> are also 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 conditioned in a white liquor scrubber and then combusted in the #2 Lime Kiln (SN-08) or the NCG Incinerator (SN-22).

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 #3 Package Boiler (SN-46) as a backup.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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

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

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

### **Recausticizing and Lime Recovery**

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

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

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 or burned in the #2 Lime Kiln (SN-08).

### **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 boiler (SN-15) use natural gas as its primary fuel with fuel oil for backup fuel. The wood waste boiler (SN-04) uses 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. The new boiler (#3 Package Boiler) uses natural gas as the primary fuel with fuel oil for backup fuel.



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

## **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, and/or sent to the recycling area, and/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.

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 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 can be added to the waste water to increase the biological development in the aerated settling basin and the hydrographic control basin/post aeration basin.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

### Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective September 13, 2014
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective November 18, 2012
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 Part 60, Subpart IIII, New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines
40 CFR Part 60, Subpart JJJJ, New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines
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 Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR 64, Compliance Assurance Monitoring, effective October 22, 1997

This facility is classified as a major source of greenhouse gas emissions.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

### Emission Summary

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				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions <sup>1</sup>		PM	554.5	1028.2
		PM <sub>10</sub>	314.2	636.7
		SO <sub>2</sub>	127.0	267.8
		VOC	469.1	1348.4
		CO	1342.3	1394.6
		NO <sub>x</sub>	313.7	990.6
		Lead	0.06	0.27
HAPs * = Not included in VOC or PM total		Acetaldehyde	12.35	44.19
		Acrolein	2.79	11.88
		Benzene	2.69	11.67
		Biphenyl	0.11	0.35
		1,3 Butadiene	0.0003	0.0006
		Formaldehyde	3.17	13.67
		n-Hexane	0.36	1.58
		Hydrogen Chloride*	14.65	63.17
		Manganese	0.98	4.3
		Methanol	84.61	247.48
		Methyl Isobutyl Ketone	0.19	0.63
		Methylene Chloride	0.03	0.11
		Napthalene	0.24	0.87
		Phenol	0.16	0.31
		Propionaldehyde	0.03	0.12
		Styrene	1.28	5.47
		Tetrachloroethylene	0.03	0.11
		Toluene	0.77	3.12
		1,2,4 Trichlorobenzene	0.04	0.17
		Trichloroethylene	0.28	0.97
		m,p Xylene	0.13	0.43
		o Xylene	0.11	0.38

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Air Contaminants *	* = Not included in VOC or PM total	Acetone*	3.44	8.30
		Butane	0.42	1.85
		Ammonia*	11.34	44.97
		Ethane	0.62	2.73
		Methane	160.19	701.62
		Pentane	0.52	2.29
		Propane	0.32	1.41
		Propylene	0.008	0.035
		Sulfuric Acid*	1.08	4.38
		TRS	66.91	203.51
01	Wood Waste Dryer	Removed From Service		
02	#1 Wood Waste Boiler	PM	372.0	420.0
		PM <sub>10</sub>	191.0	215.0
		SO <sub>2</sub>	4.1	18.0
		VOC	116.0	15.0
		CO	956.5	326.0
		NO <sub>x</sub>	57.0	15.0
		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
		Formaldehyde	0.71	3.12
		Hydrogen Chloride	3.08	13.50
		Manganese	0.26	1.14
		Styrene	0.31	1.35
		Toluene	0.15	0.65
03	#2 Wood Waste Boiler	Removed From Service		

Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
04	#3 Wood Waste Boiler	PM	45.2	145.0
		PM <sub>10</sub>	45.2	145.0
		SO <sub>2</sub>	9.6	42.0
		VOC	22.5	40.0
		CO	135.6	290.0
		NO <sub>x</sub>	135.6	593.9
		Lead	0.02	0.10
		Acetaldehyde	0.38	1.64
		Acetone	0.09	0.38
		Acrolein	1.81	7.92
		Benzene	1.90	8.32
		Formaldehyde	1.99	8.71
		Hydrogen Chloride	8.59	37.62
		Manganese	0.72	3.16
		Napthalene	0.04	0.20
		Propionaldehyde	0.03	0.12
		Styrene	0.86	3.76
		Toluene	0.42	1.82
05A	Recovery Boiler East/West Stacks  (Previously SN-05 and SN-06)	PM	30.0	93.2
		PM <sub>10</sub>	12.0	38.0
		SO <sub>2</sub>	60.0	157.9
		VOC	10.0	19.7
		CO	223.1	674.8
		NO <sub>x</sub>	80.0	280.6
		Lead	0.01	0.10
		Benzene	0.04	0.14
		Fomaldehyde	0.26	1.05
		Hydrogen Chloride	2.98	12.05
		Methanol	2.38	9.64
		Methylene Chloride	0.03	0.11
		Tetrachloroethylene	0.03	0.11
		Sulfuric Acid	1.08	4.38
		1,2,4-Trichlorobenzene	0.04	0.17
		TRS	33.81	148.10

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
07	Smelt Dissolving Tank Vent	PM	8.9	35.7
		PM <sub>10</sub>	8.9	35.7
		SO <sub>2</sub>	0.3	1.1
		VOC	0.6	2.2
		NO <sub>x</sub>	1.1	4.4
		Lead	0.01	0.02
		Formaldehyde	0.19	0.77
		Methanol	0.50	2.04
		Naphthalene	0.03	0.11
		Ammonia	6.50	26.28
		TRS	1.82	7.36
08	#2 Lime Kiln	PM	35.2	154.2
		PM <sub>10</sub>	35.2	154.2
		SO <sub>2</sub>	0.8	15.0
		VOC	0.3	15.0
		CO	4.5	21.3
		NO <sub>x</sub>	8.4	45.0
		Lead	0.01	0.02
		Methanol	0.96	0.34
		Naphthalene	0.16	0.55
		TRS	6.43	28.15
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	19.3	72.9
		Acetaldehyde	2.05	7.76
		Methanol	17.22	65.16
13	#1 Slaker	Removed From Service		
14	#1 Package Boiler	Removed From Service		

Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
15	#2 Package Boiler	PM	1.6	6.7
		PM <sub>10</sub>	1.6	6.7
		SO <sub>2</sub>	1.5	6.6
		VOC	1.2	4.9
		CO	16.9	74.0
		NO <sub>x</sub>	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
16	Blow Heat Emergency Vent	Emergency Use Only. Not a Source.		
17	Tall Oil Plant Reactor	VOC	5.9	15.0
		Acetone	0.12	0.17
		Methanol	0.47	0.70
		Phenol	0.10	0.14
		TRS	0.21	0.30
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		
22	NCG Flare	SO <sub>2</sub>	49.1	26.3
23	Batch Digesters	VOC	1.9	15.0
		Acetaldehyde	0.04	0.15
		Methanol	0.77	2.83
		TRS	0.32	9.0
24	Wood Yard Fugitives	PM	1.6	2.2
		PM <sub>10</sub>	0.8	1.0
		VOC	202.5	887.0

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
25A	#1 Paper Machine	VOC	31.4	110.0
		Acetone	0.90	3.20
		Acetaldehyde	4.99	17.46
		Acrolein	0.18	0.59
		Benzene	0.03	0.11
		Biphenyl	0.06	0.20
		Methanol	25.57	89.47
		Methyl Isobutyl Ketone	0.10	0.33
		Phenol	0.03	0.10
		Styrene	0.06	0.19
		Toluene	0.10	0.35
		Trichloroethylene	0.15	0.51
		m,p Xylene	0.07	0.23
		o Xylene	0.06	0.20
25 B	#2 Paper Machine	VOC	26.2	83.7
		Acetone	0.74	2.58
		Acetaldehyde	4.16	14.29
		Acrolein	0.15	0.52
		Benzene	0.03	0.10
		Biphenyl	0.05	0.15
		Methanol	21.31	73.25
		Methyl Isobutyl Ketone	0.09	0.30
		Phenol	0.03	0.07
		Styrene	0.05	0.17
		Toluene	0.09	0.29
		Trichloroethylene	0.13	0.46
		m,p Xylene	0.06	0.20
		o Xylene	0.05	0.18
26	Basement Air Make-up Heater #1	PM	0.1	0.4
		PM <sub>10</sub>	0.1	0.4
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.3
		CO	0.8	3.6
		NO <sub>x</sub>	1.0	4.3
27	Basement Air Make-up Heater #2	PM	0.1	0.4
		PM <sub>10</sub>	0.1	0.4
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.3
		CO	0.8	3.6
		NO <sub>x</sub>	1.0	4.3



Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
28	Pocket Vent System Heater #1	Moved to Insignificant Activities		
29	Pocket Vent System Heater #2	Moved to Insignificant Activities		
30	Landfill	VOC	1.9	8.3
		Methane	159.73	699.60
31	Weak Black Liquor Tanks	VOC	3.5	15.4
		Acetone	0.07	0.28
		TRS	0.44	1.93
32	Green Liquor Tanks	VOC	8.3	34.2
		Acetone	0.08	0.34
		TRS	0.26	1.14
33	Small Fuel Oil Storage Tanks	Moved to Insignificant Activities		
34	Turpentine Storage Tanks	Moved to Insignificant Activities		
35	Turpentine Loading Operation	Moved to Insignificant Activities		
36	Slaker/Causticizers	VOC	1.2	7.0
		Acetaldehyde	0.59	2.29
		Acetone	0.21	0.82
		Ammonia	4.84	18.69
		Methanol	0.59	2.27
37	LVHC Collection System	VOC	12.9	1.1
		Methanol	12.92	1.13
		TRS	4.90	0.43
38	HVLC Collection System	VOC	1.9	0.7
		Acetone	1.20	0.40
		Methanol	1.92	0.65
		TRS	18.72	7.10
39	Pulping Process Condensate Collection	Recycled To SN-11 as Shower Water		
40	Mill Roads	PM	58.4	169.7
		PM <sub>10</sub>	17.9	39.6

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
41	Back-up Fire Water Pump Engine	PM	0.4	0.1
		PM <sub>10</sub>	0.4	0.1
		SO <sub>2</sub>	0.4	0.1
		VOC	0.4	0.1
		CO	1.1	0.3
		NO <sub>x</sub>	5.0	1.3
		Acetaldehyde	8.59E-04	3.76E-03
		Acrolein	1.04E-04	4.54E-04
		Benzene	1.04E-03	4.58E-03
		1,3 Butadiene	4.38E-05	1.92E-04
		Formaldehyde	1.32E-03	5.79E-03
		Naphthalene	9.50E-05	4.16E-04
		Propylene	2.89E-03	1.27E-02
		Toluene	4.58E-04	2.01E-03
42	Emergency Feed Water Pump Engine	PM	0.5	0.2
		PM <sub>10</sub>	0.5	0.2
		SO <sub>2</sub>	0.5	0.2
		VOC	0.5	0.2
		CO	1.4	0.4
		NO <sub>x</sub>	6.5	1.6
		Acetaldehyde	1.11E-03	4.87E-03
		Acrolein	1.34E-04	5.87E-04
		Benzene	1.35E-03	5.92E-03
		1,3 Butadiene	5.67E-05	2.48E-04
		Formaldehyde	1.71E-03	7.49E-03
		Naphthalene	1.23E-04	5.38E-04
		Propylene	3.74E-03	1.64E-02
		Toluene	5.93E-04	2.60E-03

Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
43	Emergency Lime Kiln Drive Engine	PM	0.2	0.1
		PM <sub>10</sub>	0.2	0.1
		SO <sub>2</sub>	0.2	0.1
		VOC	0.2	0.1
		CO	0.5	0.2
		NO <sub>x</sub>	2.4	0.6
		Acetaldehyde	4.03E-04	1.76E-03
		Acrolein	4.86E-05	2.13E-04
		Benzene	4.90E-04	2.15E-03
		1,3 Butadiene	2.05E-05	8.99E-05
		Formaldehyde	6.20E-04	2.71E-03
		Naphthalene	4.45E-05	1.95E-04
		Propylene	1.35E-03	5.93E-03
		Toluene	2.15E-04	9.40E-04
44	UPS Generator – Main Office	PM	0.1	0.1
		PM <sub>10</sub>	0.1	0.1
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.1
		CO	0.3	0.1
		NO <sub>x</sub>	1.1	0.3
45	Emergency IT AC	PM	0.1	0.1
		PM <sub>10</sub>	0.1	0.1
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.1
		CO	0.7	0.2
		NO <sub>x</sub>	0.5	0.2
		Acetaldehyde	5.38E-04	1.35E-04
		Acrolein	5.08E-04	1.27E-04
		Benzene	3.05E-04	7.62E-05
		1,3 Butadiene	1.28E-04	3.20E-05
		Formaldehyde	1.36E-02	3.40E-03
		Napthalene	3.96E-03	9.89E-04
		Toluene	5.91E-04	1.48E-04

Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
46	#3 Package Boiler	PM	6.0	10.9
		PM <sub>10</sub>	4.2	10.4
		SO <sub>2</sub>	30.9	28.1
		VOC	2.8	12.3
		CO	20.2	90.8
		NO <sub>x</sub>	13.7	60.0
		CO <sub>2e</sub>	XX	205,283.0
		Formaldehyde	0.12	0.15
		n-Hexane	0.72	3.14
47	Emergency Air Compressor Engine	PM	0.1	0.1
		PM <sub>10</sub>	0.1	0.1
		SO <sub>2</sub>	0.1	0.1
		VOC	0.1	0.1
		CO	0.1	0.1
		NO <sub>x</sub>	0.3	0.1
		Acetaldehyde	5.00E-05	2.16E-04
		Acrolein	1.00E-05	2.61E-05
		Benzene	1.00E-04	2.63E-04
		1,3 Butadiene	1.00E-05	1.10E-05
		Formaldehyde	1.00E-04	3.32E-04
		Naphthalene	1.00E-05	2.39E-05
		Toluene	3.00E-05	1.15E-04

<sup>1</sup> Total Allowable Emissions includes emissions from #1 Wood Waste Boiler (SN-02), which will operate until the startup of #3 Package Boiler (SN-46). SN-46 is not included in the Total Allowable Emissions.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

### **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 flash 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<sub>x</sub>/hr. The gas fired turbine generator was never constructed.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
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 PM<sub>10</sub>, 2,496.5 tpy SO<sub>2</sub>, 1,861.1 tpy VOC, 11,852.2 tpy CO, 1,660.1 tpy NO<sub>x</sub>, 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<sub>x</sub> 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<sub>x</sub>.

This PSD issue was reviewed in Permit #224-AOP-R0. BACT for the #2 Package Boiler was determined to be low NO<sub>x</sub> burners in conjunction with flue gas recirculation at 0.067 lb NO<sub>x</sub>/MMBTU. The facility did not remove the #2 Wood Waste Boiler as permitted in Permit #224-AR-5; therefore, these emissions decreases were available to be used in permit #224-AOP-R0. For this permitting action, the facility chose to take a federally enforceable limit on SO<sub>2</sub> in order to avoid further PSD requirements.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

An air dispersion modeling analysis was performed to determine if the modification at the AKD Mill would impact ambient air quality in the vicinity of the Upper Buffalo. The U.S. EPA established special PSD increment values for Class I areas for three of the criteria pollutants ( $\text{PM}_{10}$ ,  $\text{SO}_2$ , and  $\text{NO}_x$ ). 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 ( $1.0 \text{ mg/m}^3$ , 24-hour average concentration for all pollutants). Under U. S. EPA guidance, if the results of the initial modeling analysis predict an increase in the 24-hour average pollutant concentration that exceed the  $1.0 \text{ mg/m}^3$  significance level, further analysis was 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 was 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 was estimated to be 350 feet, based on a United States Geological Survey (USGS) topographical map (Russellville, Arkansas quadrangle).

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

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

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

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

The combined net emissions NO<sub>x</sub> increase for the #3 Wood Waste Boiler and the #2 Package Boiler was 71.6 tpy. BACT for the #2 Package Boiler was determined to be low NO<sub>x</sub> burners in conjunction with flue gas recirculation. BACT for the #3 Wood Waste Boiler was determined to be low NO<sub>x</sub> burners in conjunction with flue gas recirculation. Flue gas recirculation in #3 Wood Waste Boiler was demonstrated, under controlled conditions, to provide little or no NO<sub>x</sub> reduction. Operating experience and CEM results have shown that the NO<sub>x</sub> emission limit was met consistently. Operation of FGR is not a NO<sub>x</sub> control technology required for #3 Wood Waste Boiler as of the renewal of Permit #224-AOP-R2. For this permitting action, the facility took a limit on SO<sub>2</sub> emissions for the two boilers in order to avoid further PSD applicability.

The PSD analysis for SO<sub>2</sub> based upon the following.

Proposed Modification Increases:

SN-04	#3 Wood Waste Boiler	+27.0 tpy SO <sub>2</sub>
SN-15	#2 Package Boiler	+ 0.6 tpy SO <sub>2</sub>
		+27.6 tpy SO <sub>2</sub>

PSD permits require an ambient impact analysis. Results of the analysis indicated that increased emissions of NO<sub>x</sub> resulted 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<sub>x</sub>. The NO<sub>x</sub> 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/m<sup>3</sup> NO<sub>x</sub> MSL. This receptor was located 8.18 km from the center of the AKD Mill. Thus, the NO<sub>x</sub> radius of impact (ROI) was 8.18 km.

Permit #224-AOP-R1 was 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 was being added to the #1 Wood Waste Boiler (SN-02) that required 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 it was not subject to NSPS Subpart Kb and emits only 0.23 tons per year so it met 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 #: 0224-AOP-R16  
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 established a federally enforceable production limit on each paper machine that was closer to actual production rates. This would 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<sub>x</sub> testing requirements from SN-04 because it has a NO<sub>x</sub> 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 was 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<sub>x</sub> emissions in conjunction with low NO<sub>x</sub> burners. Testing demonstrated that emissions were not changed by discontinuing use of the fan. This altered a previous BACT determination.

This modification was also the Title V permit renewal.

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 Semichemical 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 PM<sub>10</sub> testing methods for the #3 Wood Waste Boiler (SN-04).

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

Permit 0224-AOP-R5 was issued to Green Bay Packaging Inc. – Arkansas Kraft Division on October 21, 2005. This modification corrected TRS emission limits on the Recovery Boiler (SN-05A) and the #2 Lime Kiln (SN-08). The limits were 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 were no physical changes to the facility.

Permit 0224-AOP-R6 was issued to Green Bay Packaging Inc. – Arkansas Kraft Division on March 15, 2006. This modification clarified inclusion of CO<sub>2</sub> and O<sub>2</sub> diluent CEMS at the #3 Wood Waste Boiler (SN-04), the #2 Lime Kiln (SN-08), and the #2 Package Boiler (SN-15). In addition, the following changes were made:

1. Modification of PM/PM<sub>10</sub> emissions limit for the #2 Lime Kiln (SN-08) based on testing and past data. Before the Title V permit, the emissions were 124.4 tpy, but using AP-42 and NCASI factors, the limit was reduced to 88.0 tpy. Based on stack testing, these factors give a poor estimate of the actual emissions. This modification used stack testing data to give a better estimate of the actuals. There were no physical changes or process increases to account for the increase.
2. Removal of restrictions for burning bark in the #1 Wood Waste Boiler (SN-02). Operating methods for burning wood waste had changed so that the boiler could be successfully operated below the 40% opacity limit. The requirements to install a scrubber, the limitation to burn only during November through March, and the condition allowing greater than 40% opacity during grate cleaning were removed from the permit.
3. Specification of an alternate method for SO<sub>2</sub> testing. Specific Conditions #17, #43, and #100 in the previous permit specified using Method 6 for SO<sub>2</sub> annual stack testing. This modification changed that method to Method 6C.
4. Recordkeeping requirements for Black Liquor Solids (BLS) combustion at the Recovery Boiler (SN-05A) and the Smelt Dissolving Tank (SN-07). The wording was potentially confusing and the condition that clarified what was being measured.
5. Modification of source testing schedule. Plantwide Condition #8 allowed for the permittee to reduce stack testing from annual testing to once every 5 years if the facility demonstrated compliance with two consecutive stack tests. This modification changed stack testing from annual to once every 5 years for the #1 Wood Waste Boiler (SN-02), the #3 Wood Waste Boiler (SN-04), the Recovery Boiler (SN-05A) and the #1 Package Boiler (SN-14).

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

Permit 224-AOP-R7 was issued to Green Bay Packaging, Inc. – Arkansas Kraft Division on May 18, 2006. This minor modification application allowed for burning of Tall Oil in the #2 Lime Kiln (SN-08). To make this change, Green Bay installed a new burner in the Lime Kiln and some piping and mechanical changes to get the tall oil from the processing area to the lime kiln. The burner was a low NO<sub>x</sub> burner designed to feed a combination of liquid and gaseous fuel into the kiln. Compared to what was in the kiln, this burner provided some efficiency that reduced total heat requirements by 6% or more. To provide stability, a minimum of 5.8% of the total heat input must come from natural gas. It was not anticipated that this change allowed for an increase in production. It did not cause a change in the rated heat input capacity of the kiln. This project had no impact on Tall Oil production or emissions from the Tall Oil source (SN-17). There were no emissions changes associated with this modification.

Permit 224-AOP-R8 was issued to Green Bay Packaging, Inc. – Arkansas Kraft Division on August 17, 2006. This modification application allowed the facility to change the emissions factors used for criteria pollutants from pounds pollutant per pound of steam to pounds pollutant per ton of black liquor solids (BLS) for the Recovery Boiler (SN-05A). Previous permit limits restricted the amount of steam that could be produced to a level below the steam generating capacity of the boiler and below the capacity of the boiler to process BLS. This modification changed the emission limits to the boiler BLS processing capacity. There were no physical changes to the facility. This source was not regulated by PSD.

Hourly and annual permit limits of the Recovery Boiler (SN-05A) emissions were based on an emission factor times the amount of steam produced. These factors were developed using stack test data. Therefore, the permit limited hourly and annual steam production and also limited the hourly and annual Black Liquor Solids (BLS) throughput.

Industry standard at this time was to base the emission factor on pounds of pollutants per pounds of BLS instead of steam production. Green Bay changed their emission factor basis with this modification. Because emissions were limited by the amount of BLS burned, an annual steam production limit was no longer needed. However, steam production on an hourly basis was conveniently measured. So, compliance with hourly emissions was demonstrated by the original hourly steam limit, and compliance on an annual basis was based on the new BLS limit.

Additionally, this modification incorporated the emissions changes brought about by replacing the electrostatic precipitator as the source control device for the Recovery Boiler in 2003. MACT rules required installation of a new electrostatic precipitator and this was included in Permit #224-AOP-R3. The ESP was installed in 2003 and stack testing was done three times after installation.

No projects were done to cause or enable an increase in BLS processing. These permit changes reduced the permitted PM by 816.8 tpy, reduced the permitted PM<sub>10</sub> by 482.0 tpy, reduced the permitted SO<sub>2</sub> by 336.1 tpy, reduced the permitted VOC by 42.0 tpy, increased the permitted CO by 20.8 tpy and increased the permitted NO<sub>x</sub> by 74.6 tpy. Actual emissions increases were not anticipated.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

Permit #224-AOP-R9 was issued on June 4, 2007. This permitting action allowed the facility to modify VOC emission factors and production limits for the #1 and #2 Paper Machines (SN-25A & SN-25B). The increase in production did not constitute a Prevention of Significant Deterioration (PSD) modification because there was no physical change or change in the method of operation at SN-25A & SN-25B. Lastly, this modification allowed the permittee to increase the short term CO emissions from the #3 Wood Waste Boiler (SN-04). The current permitted short term CO emission limit was based on an inaccurate heat input capacity (396.5 MMBTU/hr) for the #3 Wood Waste Boiler. The heat input capacity was corrected in 224-AOP-R3 (452 MMBTU/hr); however the CO limit was not changed. Permitted VOC, Manganese, Acetone, Hazardous Air Pollutants (HAPs) and Air Containments emissions decreased by 188.6 tons/year (tpy), 0.28 tpy, 2.57 tpy, 113.70 tpy, and 69.82 tpy, respectively.

Permit #224-AOP-R10 was issued on April 14, 2008. This permitting action incorporated the following administrative amendments and modifications:

- Removed the Boiler MACT reference in the Source Description area for #1 Package Boiler, SN-14.
- Replaced Specific Condition #19 of Air Permit #224-AOP-R8 which was mistakenly removed from Permit #224-AOP-R9.
- Corrected the referenced condition in Specific Condition #183 of Permit #224-AOP-R9. The condition should reference Specific Condition #184 (A-G); not #167 Permit #224-AOP-R9. However, with this modification the referenced specific condition is now Specific Condition #184 with a reference to Specific Condition #185 (A-G).
- Corrected the referenced condition in Specific Condition #85D. The condition should reference Specific Condition #166; not #173. However, with this modification the referenced specific condition is now Specific Condition #86D with a reference to Specific Condition #167.
- Granted an 18-month extension for the construction of a modification to the #2 Lime Kiln (SN-08) to burn Tall Oil as fuel in the kiln. The facility originally received authorization to modify the kiln in Permit #224-AOP-R7, issued May 18, 2006; which provided a deadline to have work completed by November 18, 2007. This modification granted an extension to have work completed by May 18, 2009.
- Changed emission monitoring parameters for emissions from the Waste Treatment System (SN-12). The specific condition for this source specified monitoring finished paper production, but emission factors were actually based on water flow into the system. Therefore, the condition was revised to limit Kraft pulp processed at the facility.

Permitted emissions for VOC and Methyl Ethyl Ketone decreased by 51.8 tons/year (tpy) and 98.13 tpy, respectively. Permitted emissions for Acetaldehyde and Methanol increased by 9.98 tpy and 36.31 tpy, respectively. These emission changes were due to the revised emission factors for the Waste Treatment System (SN-12).

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

Permit #224-AOP-11 was issued on October 14, 2008. This permitting action was to reroute the HVLC emissions from the #1 Package Boiler (SN-14) to the #1 Wood Waste Boiler (SN-02). Actual emissions from the #1 Wood Waste Boiler were significantly less than permitted emissions therefore there were not any changes in the permitted emission rates for SN-02. Also this modification established an alternate operating scenario to change the pH control from the paper machines back into the Pulp Mill. This operating scenario involved turning on CO<sub>2</sub> going into the final washing stage of each of the Brown Stock Washer lines (SN-11) and reducing the amount of pH controlling chemicals (alum, sulfuric acid and CO<sub>2</sub>) used on the paper machines. Permitted emission rates remained unchanged.

Permit #224-AOP-R12 was issued on April 18, 2011. This permitting action was to renew the facility's existing permit. During this modification, emission factors were updated and some previously permitted sources were re-listed as insignificant activities. Emissions from paved and unpaved roads (SN-40) were included in this permit and methane emissions associated with the landfill (SN-30) were reduced.

On January 21, 2009, the facility submitted an application for a minor modification to the existing permit. The modification was to allow the use of low sulfur diesel fuel as a fuel in the Recovery Boiler (SN-05A). A draft permit was issued June 2009. However, the permit was not issued final. Instead the permit was held and rolled into the renewal application. During this period, the facility's need for this modification had passed and the facility no longer needed this to be included in the permit.

On August 14, 2009, the facility submitted a letter to the Department requesting to add "used oil" into the fuel oil storage tank and to be burned in the #2 Package Boiler (SN-15).

On September 9, 2009, the facility submitted a request to remove the Alternate Operating Scenario for SN-15.

On June 9, 2010, the facility submitted a request to modify Specific Conditions #7 and #19 of Permit #224-AOP-R11. These conditions specified the material that may be used as fuel in the #1 and #3 Wood Waste Boilers (SN-02 and SN-04). One of the permitted fuels was for waste polyethylene pellets. The facility requested to change this name to "scrap non-halogenated plastics". Also the facility requested that the scrap non-halogenated plastic be limited to 15% by weight of the total fuel burned on an annual basis.

Permitted emission limits were changed as follows:

POLLUTANT	TONS/YEAR (TPY)
PM	+96.5
PM <sub>10</sub>	-23.6
SO <sub>2</sub>	-32.2
VOC	-287.8
CO	-366.3
NOx	-45.2
Lead	+0.10
Total HAPs	-6.37
Total Air Contaminants	-2506.85

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

Permit #224-AOP-R13 was issued on February 14, 2012. This modification was to make permanent an alternate operating scenario for the Brownstock Washers (SN-11). Permitted emissions remained unchanged.

Permit #224-AOP-R14 was issued on November 8, 2012. This modification was to replace the steam quench tank with a spray scrubber on the Slaker/Causticizers, SN-36. This revision did not cause any increase in emissions from SN-36. However, permitted emissions changed to reflect a change in the permitted capacity of the lime kiln that took place with Permit #0224-AOP-R12 but the effect of that change was not calculated into SN-36. Emissions were reduced to correspond to that production reduction. Also the modification was to correct a calculation error that was submitted during the Title V renewal application. Based on the emission factor and the annual production for the Tall Oil Plant, SN-17, the emission rate listed in the application (0.18 tons Methanol/yr) was inaccurate. This modification permitted the source for the actual emission rate of 0.70 tons Methanol/yr. Total permitted HAPs emissions increased by 0.16 tons/year (tpy) and total air contaminants decreased by 1.46 tpy.

Permit #224-AOP-R15 was issued on October 21, 2013. This modification was to revise Specific Conditions #149 & #158 to remove language referencing the exclusion of SSM for SN-37, LVHC Collection System, and SN-38, HVLC Collection System, under 40 CFR 63 Subpart S due to recent final rule changes by EPA. Also this modification allowed the addition of three emergency RICE engines to the permit under 40 CFR Part 60 Subpart ZZZZ (SN-41, SN-42, and SN-43). Lastly the modification replaced the headbox on the #2 Paper Machine (SN-25B). Since replacing the headbox is not a routine maintenance activity, evaluation of the emissions from the source for PSD applicability was required. The facility submitted a PSD evaluation which demonstrated replacing the headbox was less than the PSD significance level for VOC. Therefore, PSD permitting was not required. Permitted emissions rates increased as follows: 0.4 tons/year (tpy) PM/PM<sub>10</sub>, 1.6 tpy SO<sub>2</sub>, 0.4 tpy VOC, 0.9 tpy CO, 3.5 tpy NO<sub>x</sub> and 0.048 tpy of total HAPs.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

#### **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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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.

HVLC emissions previously routed to the #1 Package Boiler (SN-14) are now routed to #1 Wood Waste Boiler as a backup control device for the HVLC Collection system (SN-38).

**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 #6, #7, and #9. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	191.0	215.0
SO <sub>2</sub>	4.1	18.0
VOC	116.0	15.0
CO	956.5	326.0
NO <sub>x</sub>	57.0	15.0
Lead	0.01	0.03



Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

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 #6, #7, and #10. [§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
Formaldehyde	0.71	3.12
Hydrogen Chloride	3.08	13.50
Manganese	0.26	1.14
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 9. [40 CFR Part 52, Subpart E]

SN	Limit	Regulatory Citation
02	40%	§19.503

5. 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]
6. Steam generation in the #1 Wood Waste Boiler (SN-02) shall not exceed 100,000 pounds of steam per hour during boiler operation based on a 24 hour rolling average. Maximum annual steam production will not exceed 225,000,000 pounds, determined on a 12 month rolling total. [§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 #: 0224-AOP-R16  
AFIN: 15-00001

7. Untreated wood waste, scrap materials from mill processes, agricultural residues, furniture manufacturing waste, recycled sanitary products, scrap non-halogenated plastics, 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. Usage of scrap non-halogenated plastics shall be limited to 15% by weight of the total fuel burned on an annual rate. [§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]
8. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions #6 and #7. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
9. The #1 Wood Waste Boiler (SN-02) shall be tested for PM<sub>10</sub>, VOC, CO, and NO<sub>x</sub> emissions using EPA Reference Method 201 or Method 201A for PM<sub>10</sub>, Method 25A for VOC, Method 10 for CO, and Method 7E for NO<sub>x</sub>. 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 once in the first year of every 5 year permit period. 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]
10. The #1 Wood Waste 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 wood waste 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)]
11. The facility shall maintain records of the time that the #1 Wood Waste 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]
12. The permittee shall not operate the #1 Wood Waste Boiler, SN-02, upon startup of the #3 Package Boiler (SN-46). [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
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**

13. 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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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<sub>x</sub> 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 SO<sub>2</sub> 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.

**Specific Conditions**

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, #20, and #23. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	45.2	145.0
SO <sub>2</sub>	9.6	42.0
VOC	22.5	40.0
CO	135.6	290.0
Lead	0.02	0.10

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 #19, #20, #23 and #24. [§19.901 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
NO <sub>x</sub>	135.6	593.9

16. 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, #20, 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	1.81	7.92
Benzene	1.90	8.32
Formaldehyde	1.99	8.71
Hydrogen Chloride	8.59	37.62
Manganese	0.72	3.16
Napthalene	0.04	0.20
Propionaldehyde	0.03	0.12
Styrene	0.86	3.76
Toluene	0.42	1.82

17. The source 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 as measured in accordance with EPA Reference Method 9. Continuing compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #22. [§19.502 of Regulation #19 and §60.43b(f)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

18. The #3 Wood Waste Boiler (SN-04) shall be tested for PM<sub>10</sub>, SO<sub>2</sub>, VOC, and CO emissions. Method 5 and Method 202 shall be used for PM<sub>10</sub> with all emissions being reported as PM<sub>10</sub>. Method 6C shall be used for SO<sub>2</sub>. 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 once in the first year of every 5 year permit period. 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]
19. 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]
20. Untreated wood waste, scrap materials from mill processes, agricultural residues, furniture manufacturing waste, recycled sanitary products, scrap non-halogenated plastics, 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. Usage of scrap non-halogenated plastics shall be limited to 15% by weight of the total fuel burned on an annual rate. 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]
21. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions #19 and #20. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
22. 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 PM<sub>10</sub> in which the stack test is designed to demonstrate the minimum flow and minimum differential pressure required to attain compliance with the PM<sub>10</sub> emission limit. [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

23. 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]
24. 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.
  - 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<sub>x</sub> 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<sub>x</sub> in excess of 0.30 lb/MMBTU based on a 30 day rolling average as specified in §60.44b(a).
  - 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<sub>x</sub> 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:

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 Condition #23.

- H. Pursuant to §60.48b(b), the facility shall install, calibrate, maintain, and operate a continuous monitoring system for measuring NO<sub>x</sub> emissions to the atmosphere, the diluent CO<sub>2</sub> emissions, 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<sub>x</sub> 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 452 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 #: 0224-AOP-R16

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.
25. 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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

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, #35, #37, #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 <sub>10</sub>	12.0	38.0
SO <sub>2</sub>	60.0	157.9
VOC	10.0	19.7
CO	223.1	674.8
NO <sub>x</sub>	80.0	280.6
Lead	0.01	0.10
TRS	33.81	148.10

27. 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, #35, #39, #42, #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	30.0	93.2
Benzene	0.04	0.14
Formaldehyde	0.26	1.05
Hydrogen Chloride	2.98	12.05
Methanol	2.38	9.64
Methylene Chloride	0.03	0.11
Sulfuric Acid	1.08	4.38
Tetrachloroethylene	0.03	0.11
1,2,4-Trichlorobenzene	0.04	0.17

28. The permittee shall comply with the opacity and monitoring standards of 40 CFR, Subpart MM for the recovery boiler. Compliance with this specific condition shall be demonstrated through Specific Conditions #30, #32 and #33. [§19.503 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]
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 results 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 EPA and to the Department 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. [§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. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 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 H<sub>2</sub>S 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]
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 O<sub>2</sub> concentration of gases leaving the recovery boiler through the stack. The TRS monitor shall be operated in accordance with Performance Specification #5. The O<sub>2</sub> 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 while burning BLS. The weight concentrations of solids in the liquor shall be measured and recorded at least once per 8 hour period while burning BLS. The black liquor solids firing rate shall be calculated by multiplying the flow by the weight concentration of solids in the liquor. The facility shall maintain a daily and monthly log of the tons of BLS fired in the Recovery Boiler. Records for the annual throughput of BLS 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. 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. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [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]
43. The Recovery Boiler (SN-05A) shall be tested for PM<sub>10</sub>, SO<sub>2</sub>, VOC, CO, and NO<sub>x</sub> emissions using EPA Reference Method 201 or Method 201A for PM<sub>10</sub>, Method 6C for SO<sub>2</sub>, Method 25A for VOC, Method 10 for CO, and Method 7E for NO<sub>x</sub>. 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 once in the first year of every 5 year permit period. 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 #: 0224-AOP-R16

AFIN: 15-00001

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]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 #50, #51, #53, #61, and #62. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	8.9	35.7
SO <sub>2</sub>	0.3	1.1
VOC	0.6	2.2
NO <sub>x</sub>	1.1	4.4
Lead	0.01	0.02
TRS	1.82	7.36

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

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 #51, #53, #61, and #62. [§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	8.9	35.7
Formaldehyde	0.19	0.77
Methanol	0.50	2.04
Naphthalene	0.03	0.11
Ammonia	6.50	26.28

48. The permittee shall comply with the opacity and monitoring standards of 40 CFR Part 63, Subpart MM for the smelt dissolving tank vent. Compliance with this specific condition shall be demonstrated through Specific Conditions #53, #56, and #57.
49. The facility shall measure the particulate emissions from the smelt dissolving tank. Method 5 and Method 202 shall be used for PM<sub>10</sub> with all emissions being reported as PM<sub>10</sub>. Testing is to be completed once in the first year of every 5 year permit period. [§19.702 of Regulation #19 and 40 CFR Part 52, Subpart E]
50. 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 #52. [§19.804 of Regulation #19 and §111d of the Clean Air Act]
51. 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]



52. The flow of strong black liquor shall be measured with a flow meter and shall be recorded at least once per hour while burning BLS. The weight concentrations of solids in the liquor shall be measured and recorded at least once per 8 hour period while burning BLS. The black liquor solids firing rate shall be calculated by multiplying the flow by the weight concentration of solids in the liquor. The facility shall maintain a daily and monthly log of the tons of BLS fired in the Recovery Boiler. Records for the annual throughput of BLS 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. 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]
53. 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]
54. 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]
55. 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]
56. 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]
57. 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 #61 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]
58. 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 #: 0224-AOP-R16  
AFIN: 15-00001

59. A quarterly excess emissions report containing the information specified in §63.10 and §63.867(c) shall be submitted to EPA and to the Department if the conditions of Specific Conditions #56 or #57 occur. If those conditions do not occur, semi-annual reporting to indicate such is required.
60. The permittee shall maintain continuous records which demonstrate compliance with Specific Condition #53. 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]
61. 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]
62. 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]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 60 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 or tall oil 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 NGC Incinerator are subject to 40 CFR Part 63, Subpart S-National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry. They 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

63. 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 #68, #70, #73, #74, #76, #77, #78, #87, #88, and #89. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
08	PM <sub>10</sub>	35.2	154.2
	SO <sub>2</sub>	0.8	15.0
	VOC	0.3	15.0
	CO	4.5	21.3
	NO <sub>x</sub>	8.4	45.0
	Lead	0.01	0.02
22	SO <sub>2</sub>	49.1	26.3
08 and 22 combined	TRS	6.43	28.15

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 #70, #73, #74, #76, #77, #78, #87, #88, and #89. [§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	PM	35.2	154.2
	Methanol	0.96	0.34
	Naphthalene	0.16	0.55

65. 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]
66. The permittee shall comply with the opacity and monitoring standards of 40 CFR Part 63, Subpart MM for the lime kiln. Compliance with this specific condition shall be demonstrated through Specific Conditions #77, #78, and #82. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

67. Visible emissions from SN-22 shall not exceed 20% opacity as measured by EPA Reference Method 9. Compliance with this condition will be burning only natural gas. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
68. The TRS emission rates from the #2 Lime Kiln (SN-08) shall not exceed 40 ppm. This limit shall be measured as H<sub>2</sub>S 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]
69. 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) and the O<sub>2</sub> concentration. 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]
70. The total throughput of lime through the #2 Lime Kiln (SN-08) shall be limited to 84,950 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]
71. 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]
72. The facility shall maintain monthly records of the lime throughput through the #2 Lime Kiln. Records of this throughput 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
73. 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]
74. 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]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

75. 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
76. 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]
77. 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]
78. 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]
79. 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]
80. 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]
81. 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]
82. 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]

83. 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 #88 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]
84. 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]
85. A quarterly excess emissions report containing the information specified in §63.10 and §63.867(c) shall be submitted to EPA and to the Department if the conditions of Specific Conditions #82 or #83 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]
86. 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)]
87. 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 #149. [§63.453(o), except as provided in §63.443(e)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

88. 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]
89. 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]
90. [RESERVED]



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 Wood Waste Boiler (SN-02) 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)]
92. The permittee may add CO<sub>2</sub> to the shower water of each Brownstock washer line (SN-11) to control pH at a specified level based on demand on the Paper machines (SN-25A and SN-25B). This replaces most of the pH control requirements at the Paper machines. [A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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.

**Specific Conditions**

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 #95. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	19.3	72.9

94. 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 #95. [§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	2.05	7.76
Methanol	17.22	65.16

95. The permittee shall not exceed 310,333 bone dried tons of Kraft pulp 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]
96. The facility shall maintain records of the tons of bone dried Kraft pulp produced. 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. 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 #: 0224-AOP-R16  
AFIN: 15-00001

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**

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 #101, #102, and #105. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

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

98. 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 #101 and #102. [§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 #: 0224-AOP-R16  
AFIN: 15-00001

99. 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 #100. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
100. 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]
101. The #2 Package Boiler shall only burn natural gas as fuel. Fuel oil shall only be burned in the event of natural gas curtailment or for short periods, upon notification of the Department, to test boiler fuel oil combustion controls. Used oil may be added to the fuel oil during gas curtailment provided that the used oil meets the exemption criteria listed in Regulation 23 §279.11. [§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]
102. 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§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. 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 steam production 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. 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]
104. The facility accepted limits on SO<sub>2</sub> 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 SO<sub>2</sub> 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]
105. 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<sub>x</sub> in excess of 0.20 lb/MMBTU based on a 30 day rolling average. [§60.44b(a)]

- B. The NO<sub>x</sub> 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)]
- C. The facility shall install, calibrate, maintain, and operate a continuous monitoring system for measuring NO<sub>x</sub> emissions and the diluent CO<sub>2</sub> 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<sub>x</sub> 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 §60.49b(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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

106. 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 #108. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	5.9	15.0
TRS	0.21	0.30

107. 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 #108. [§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	0.12	0.17
Methanol	0.47	0.70
Phenol	0.10	0.14

108. 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]
109. The facility shall maintain records of production or processing of Tall Oil to demonstrate compliance with Specific Condition #108. 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. 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]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

110. 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 #112 and #135. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.9	15.0
TRS	0.32	9.0

111. 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 #112 and #135. [§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	0.77	2.83

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

112. 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 Digester 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 digester (SN-23) 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  $\pm 1$  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)]



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-24  
Wood Yard Fugitives

**Source Description**

Wood yard 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**

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 #117 and #121. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.8	1.0
VOC	202.5	887.0

114. 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 #117 and #121. [§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

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

115. 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 #117. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	31.4	110.0

116. 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 #117. [§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	0.90	3.20
Acetaldehyde	4.99	17.46
Acrolein	0.18	0.59
Benzene	0.03	0.11
Biphenyl	0.06	0.20
Methanol	25.57	89.47
Methyl Isobutyl Ketone	0.10	0.33
Phenol	0.03	0.10
Styrene	0.06	0.19
Toluene	0.10	0.35
Trichloroethylene	0.15	0.51
m, p Xylene	0.07	0.23
o Xylene	0.06	0.20

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

117. The yearly production rate of the #1 Paper Machine shall be limited to 301,750 air dried tons of finished paper and the use of 170,683 tons of bone dried kraft pulp (55% of 310,333 bone dried tons pulp) based on a rolling twelve month total. The amount of kraft tons each month will be a calculated amount from the total amount of kraft pulp sent to either paper machine (SN-25A & SN-25B). [§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 permittee shall maintain records of the production rate and kraft pulp use 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

119. 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 #121. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	26.2	83.7

120. 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 #121. [§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	0.74	2.58
Acetaldehyde	4.16	14.29
Acrolein	0.15	0.52
Benzene	0.03	0.10
Biphenyl	0.05	0.15
Methanol	21.31	73.25
Methyl Isobutyl Ketone	0.09	0.30
Phenol	0.03	0.07
Styrene	0.05	0.17
Toluene	0.09	0.29
Trichloroethylene	0.13	0.46
m, p Xylene	0.06	0.20
o Xylene	0.05	0.18

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

121. The yearly production rate of the #2 Paper Machine shall be limited to 248,500 air dried tons of finished paper and the use of 139,650 tons of bone dried kraft pulp (45% of 310,333 tons of bone dried pulp) based on a rolling twelve month total. The amount of kraft tons each month will be a calculated amount from the total amount of kraft pulp sent to either paper machine (SN-25A & SN-25B). [§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]
122. The permittee shall maintain records of the production rate and kraft pulp use 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. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

123. 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 #126. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

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

124. 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 #126. [§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 #: 0224-AOP-R16  
AFIN: 15-00001

125. 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]
126. 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]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 yd<sup>3</sup>. Landfill 3, Phase 1 has a design capacity of 449,000 yd<sup>3</sup>. It was filled in 2002. Landfill 3, Phase 2 was filled in 2008. It has a design capacity of 425,000 yd<sup>3</sup>. Landfill 3, Phase 3 has a capacity of 376,000 yd<sup>3</sup>. Currently, waste is being put into Landfill 3 Phase 3. Phase 4 will be used when Phase 3 is filled. Pulp mill landfills provide a poor environment for formation and release of gases because of low nitrogen content, high moisture and waste with high pH levels.

### Specific Conditions

127. 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 #129. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.9	8.3

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 Condition #129. [§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	159.73	699.60

129. Annual waste acceptance rate for the landfill shall not exceed 489,000 cubic yards uncompacted waste 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]
130. The facility shall record the amounts of waste received in the landfill. The records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]



Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

131. Landfill 2 (Area I and II) and Landfill 3, Phase 1 and Phase 2 are filled and covered 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]
132. 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]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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**

133. 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 #135. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	3.5	15.4
TRS	0.44	1.93

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 #135. [§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

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

135. A throughput limit of 310,333 bone 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]
136. The permittee shall maintain records of the throughput of bone dried Kraft pulp at the facility. Records shall be updated monthly, maintained on site and made available to the Department upon request. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. 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 #: 0224-AOP-R16  
AFIN: 15-00001

SN-32  
Green Liquor Tanks

**Source Description**

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

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

**Specific Conditions**

137. 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 #135. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	8.3	34.2
TRS	0.26	1.14

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 #135. [§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

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. A scrubber with spray nozzles scrubs the vapors produced from the slacker with a spray of weak wash. Vapors from the overflow of the causticizers go into the standpipe that allows the release of emissions to atmosphere. Process rate is limited by the lime processing rate of the lime kilns at a rate of 84,950 tons per year.

**Specific Conditions**

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 Condition #141. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.2	7.0

140. 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. [§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	0.59	2.29
Acetone	0.21	0.82
Ammonia	4.84	18.69
Methanol	0.59	2.27

141. The throughput of lime through the Slaker system shall not exceed 84,950 tons during any consecutive twelve month period. Compliance for this condition is shown by maintaining records of lime usage outlined in Specific Condition #72. [§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 #: 0224-AOP-R16  
AFIN: 15-00001

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**

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 Conditions #147 and #148. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	12.9	1.1
TRS	4.90	0.43

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 Conditions #145, #147 and #148. [§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
Methanol	12.92	1.13

144. 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)]
145. 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)]
146. A record will be kept of all required maintenance activities performed on the LVHC System control devices. [§63.10(b)(2)(iii)]
147. 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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

1. On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to manufacturer's specifications, a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line. In loop seals, temperature measurement is an acceptable method of demonstrating gas flow.
2. For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

D. 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;
  - 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

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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

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

- E. 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.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

148. 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)]
149. 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.
150. Periods of excess emissions at the LVHC System shall not be a violation provided that the time of excess emissions 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 periods are detailed in Specific Condition #149. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(1)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 Wood Waste Boiler (SN-02) 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 Wood Waste Boiler (SN-02). 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**

151. 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 #156 and #157. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.9	0.7
TRS	18.72	7.10

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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 Conditions #156 and #157. [§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	1.20	0.40
Methanol	1.92	0.65

153. 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)]
154. 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 Wood Waste Boiler (SN-02). [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(c) and §63.443(d)(4)]
155. A record will be kept of all required maintenance activities performed on the HVLC System control devices. [§63.10(b)(2)(iii)]
156. 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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

- 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.
- 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;

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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;
  - 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.

- 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;



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

- 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.
- 157. 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)]
- 158. 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.
- 159. Periods of excess emissions at the HVLC System shall not be a violation provided that the time of excess emissions 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 periods are detailed in Specific Condition #158. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.443(e)(2)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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. Emissions 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**

160. The pulping process condensates from the following equipment systems shall be treated to meet the requirements set forth in Specific Condition #161 through #168: [§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.

161. Pulping process condensates from equipment systems listed in Specific Condition #160 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 #168. Testing will be performed in accordance with Specific Condition #162. [§19.304 of Regulation #19 and 40 CFR Part 63, Subpart S, §63.446(c)(3)]
162. 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)]
163. An initial performance test is required for the condensate collection system in order to demonstrate compliance with Specific Condition #161. 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)]
164. 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 #147 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 #234 for the #3 Package Boiler (SN-46).
  - 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.

165. 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.
  - 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;
  - 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.

- 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)]

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

- 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.

166. 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 #: 0224-AOP-R16  
AFIN: 15-00001

167. 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 bone dried ton of pulp produced.
168. The permittee shall maintain daily records which demonstrate compliance with Specific Condition #167(A-G). A rolling average of each parameter in Specific Condition #167(A-G) shall be used to calculate daily compliance of collection and treatment of 7.2 pounds of HAP per bone 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]
169. 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 #160 through #168 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 #: 0224-AOP-R16  
AFIN: 15-00001

SN-40  
Mill Road Fugitives

**Source Description**

Traffic on paved and unpaved roadways on the site property can create fugitive dust emissions as PM<sub>10</sub>. These emissions are calculated based on vehicular traffic, the actual distance traveled, site operating hours and control measures (i.e. water of roads).

**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 compliance with Specific Condition #172. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	17.9	39.6

171. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #172. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	58.4	169.7

172. Dust suppression activities should be conducted in a manner and at a rate of application that will not cause runoff from the area being applied. Best Management Practices (40 CFR §122.44(k)) should be used around streams and waterbodies to prevent the dust suppression agent from entering Waters of the State. Except for potable water, no agent shall be applied within 100 feet of wetlands, lakes, ponds, springs, streams, or sinkholes. Failure to meet this condition may require the permittee to obtain a National Pollutant Discharge Elimination System (NPDES) permit in accordance with 40 CFR §122.1(b). [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-41  
Back-up Fire Water Pump Engine

**Source Description**

The Back-up Fire Water Pump Engine is a 160-hp compression ignition engine using diesel fuel. The engine was built in 1984 by Detroit Diesel Allison Division. The engine is subject to 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (Subpart ZZZZ).

**Specific Conditions**

173. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #176 and #180. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.4	0.1
SO <sub>2</sub>	0.4	0.1
VOC	0.4	0.1
CO	1.1	0.3
NO <sub>x</sub>	5.0	1.3

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

Pollutant	lb/hr	tpy
PM	0.4	0.1
Acetaldehyde	8.59E-04	3.76E-03
Acrolein	1.04E-04	4.54E-04
Benzene	1.04E-03	4.58E-03
1,3 Butadiene	4.38E-05	1.92E-04
Formaldehyde	1.32E-03	5.79E-03
Naphthalene	9.50E-05	4.16E-04
Propylene	2.89E-03	1.27E-02
Toluene	4.58E-04	2.01E-03

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

175. The permittee shall not exceed 20% opacity from SN-41 as measured by EPA Reference Method 9. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #178. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
176. The permittee shall not operate the SN-41 in excess of 500 hours each per calendar year. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
177. The permittee shall maintain monthly and annual records to demonstrate compliance with Specific Condition #176. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. A twelve month calendar total and each individual month's data shall be in a spreadsheet, database, or other well-organized format, maintained on site, made available to Department personnel upon request and submitted in accordance with General Provision #21. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
178. The permittee shall conduct annual visible emissions observations as a method of compliance verification for the opacity limit assigned for SN-41. Observations shall be conducted by someone trained in EPA Reference Method 9. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:
  - a. Take immediate action to identify the cause of the visible emissions,
  - b. Implement corrective action, and
  - c. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
  - d. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.
179. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:
  - a. The time and date of each observation/reading,
  - b. Any observance of visible emissions appearing to be above permitted limits or any Method 9 reading which indicates exceedance,
  - c. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
  - d. The name of the person conducting the observation/reading.
180. The permittee shall limit concentration of CO in SN-41 exhaust to 230 ppmvd or less at 15% O<sub>2</sub>. Compliance is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 of Subpart ZZZZ. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6602]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

181. The permittee shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply at all times. The permittee shall operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6605]
182. The permittee shall conduct an initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply within 180 days after the compliance date that is specified for SN-41 in §63.6595 and according to the provisions in §63.7(a)(2). [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6612(a)]
183. The permittee is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in §63.6612(b)(1) through (4).
  - a. The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
  - b. The test must not be older than 2 years.
  - c. The test must be received and accepted by the Department.
  - d. Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.[Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6612]
184. The permittee shall minimize SN-41 time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c of Subpart ZZZZ. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(h)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-42, SN-43  
Recovery Elevator Drive Engine  
Emergency Lime Kiln Drive Engine

**Source Description**

SN-42 is a 207-hp, diesel fired, emergency Recovery Elevator drive engine built by Cummins Engine in 1989. SN-43 is a 75-hp, diesel fired, emergency lime kiln drive engine built by Deutz in 2006. Each engine is subject to 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal combustion Engines (RICE) (Subpart ZZZZ).

**Specific Conditions**

185. 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 #188 and #198. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
42	PM <sub>10</sub>	0.5	0.2
	SO <sub>2</sub>	0.5	0.2
	VOC	0.5	0.2
	CO	1.4	0.4
	NO <sub>x</sub>	6.5	1.6
43	PM <sub>10</sub>	0.2	0.1
	SO <sub>2</sub>	0.2	0.1
	VOC	0.2	0.1
	CO	0.5	0.2
	NO <sub>x</sub>	2.4	0.6

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

186. 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 #188 and #198. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
42	PM	0.5	0.2
	Acetaldehyde	1.11E-03	4.87E-03
	Acrolein	1.34E-04	5.87E-04
	Benzene	1.35E-03	5.92E-03
	1,3 Butadiene	5.67E-05	2.48E-04
	Formaldehyde	1.71E-03	7.49E-03
	Naphthalene	1.23E-04	5.38E-04
	Propylene	3.74E-03	1.64E-02
	Toluene	5.93E-04	2.60E-03
43	PM	0.2	0.1
	Acetaldehyde	4.03E-04	1.76E-03
	Acrolein	4.86E-05	2.13E-04
	Benzene	4.90E-04	2.15E-03
	1,3 Butadiene	2.05E-05	8.99E-05
	Formaldehyde	6.20E-04	2.71E-03
	Naphthalene	4.45E-05	1.95E-04
	Propylene	1.35E-03	5.93E-03
	Toluene	2.15E-04	9.40E-04

187. The permittee shall not exceed 20% opacity from SN-42 and SN-43 as measured by EPA Reference Method 9. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition 190. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]
188. The permittee shall not operate the emergency generator SN-42 and SN-43 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Regulation 19 §19.602 and other applicable regulations. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
189. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #188. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

190. The permittee shall conduct annual visible emissions observations as a method of compliance verification for the opacity limit assigned for SN-42 and SN-43. Observations shall be conducted by someone trained in EPA Reference Method 9. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:
  - a. Take immediate action to identify the cause of the visible emissions,
  - b. Implement corrective action, and
  - c. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
  - d. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.
191. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:
  - a. The time and date of each observation/reading,
  - b. Any observance of visible emissions appearing to be above permitted limits or any Method 9 reading which indicates exceedance,
  - c. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
  - d. The name of the person conducting the observation/reading.
192. The permittee shall meet the following requirements of Table 2c of 40 CFR Part 63 Subpart ZZZZ:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first.
  - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6602]
193. The permittee shall operate and maintain SN-42 and SN-43 according to the manufacturer's emission-related written instructions or develop maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(e)(2)]
194. The permittee shall install a non-resettable hour meter if one is not already installed at SN-42 and SN-43, by May 3, 2013. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(f)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

195. The permittee shall minimize the engines (SN-42 and SN-43) time spent at idle during startup and minimize the engines startup time to a period needed for appropriate and safe loading of the engines, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c of 40 CFR Part 63 Subpart ZZZZ apply. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(h)]
196. The permittee may operate the emergency stationary RICE (SN-42 and SN-43) for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. SN-42 and SN-43 may be operated up to 50 hours per year in non-emergency situations, but those hours per year are counted towards the 100 hours per year provided for maintenance and testing. The hours cannot be used for peak shaving or to generate income for the facility to supply power to the electric grid or otherwise supply power as part of a financial arrangement with another entity. There are no time limits for the use of an emergency stationary RICE in emergency situations. The engines may not be operated for more than 30 minutes prior to the time when the emergency conditions expected to occur, and the engines operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6640(f)(1)(i, ii, iii)]
197. The permittee shall keep records of the maintenance conducted on SN-42 and SN-43 in order to demonstrate that they were operated and maintained according to the maintenance plan. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6655(e)(2)]
198. The permittee shall keep records of the hours of operation of the engines that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, records of notification of the emergency situation, and the time the engines were operated as part of demand response. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6655(f)(1)]
199. The permittee shall maintain files of all information required by 40 CFR Part 63 Subpart ZZZZ recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6660]



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-44  
Emergency UPS Generator- Main Office

**Source Description**

SN-44 is a 34-hp, 4 stroke compression ignition, diesel fired emergency fire pump engine built by Deutz. The engine is subject to 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal combustion Engines (RICE) (Subpart ZZZZ).

**Specific Conditions**

200. 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 #204 and #206 through #212. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.1	0.1
SO <sub>2</sub>	0.1	0.1
VOC	0.1	0.1
CO	0.3	0.1
NO <sub>x</sub>	1.1	0.3

201. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #204 and #206 through #212. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.1

202. The permittee shall not exceed 20% opacity from SN-44 as measured by EPA Reference Method 9. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #203. [§19.503 of Regulation #19 and 40 CFR Part 52, Subpart E]

203. Annual observations of the opacity from SN-44 shall be conducted by a person trained but not necessarily certified in EPA Reference Method 9. If visible emissions in excess of the permitted levels are detected, the permittee shall immediately take action to identify the cause of the visible emissions in excess of the permit limit, implement corrective action, and document that visible emissions did not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records which contain the following items in order to demonstrate compliance with this specific condition. These records shall be updated annually, kept on site, and made available to Department personnel upon request.
- a. The date and time of the observation.
  - b. If visible emissions which appeared to be above the permitted limit were detected.
  - c. If visible emissions which appeared to be above the permitted limit were detected, the cause of the exceedance of the opacity limit, the corrective action taken, and if the visible emissions appeared to be below the permitted limit after the corrective action was taken.
  - d. The name of the person conducting the opacity observations.
204. The permittee shall not operate the emergency generator SN-44 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Regulation 19 §19.602 and other applicable regulations. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
205. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #204. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]
206. The permittee shall meet the following requirements, except during periods of startup.
- a. Change oil and filter every 500 hours of operation or annually, whichever comes first.
  - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6602]
207. The permittee shall operate and maintain SN-44 according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(e)(2)]

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

208. The permittee shall install a non-resettable hour meter if one is not already installed. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(f)]
209. The permittee shall minimize the engine's time spent at idle during startup time and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(h)]
210. The permittee have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Specific Condition #206. [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6625(i)]
211. The permittee shall operate SN-44 according to the following requirements:
- a. There is no time limit on the use of SN-44 in emergency situations.
  - b. The permittee may operate SN-44 a maximum of 100 hours per calendar year for any combination of purposes as specified in §63.6640(f)(2)(i) through (iii)
  - c. The permittee may operate SN-44 for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response.
- [Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6640(f)]
212. The permittee shall keep the following records in a form suitable and readily available for expeditious review. Records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record in hard copy or electronic form.
- a. Records of the occurrence and duration of each malfunction of operation.
  - b. Records of performance tests and performance evaluations.
  - c. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process to its normal or usual manner of operation.
  - d. Records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE.
  - e. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.40(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of the engine operation for these purposes.

[Regulation No. 19 §19.304 and 40 CFR Part 63, Subpart ZZZZ, §63.6655 and §63.6660]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-45  
Emergency IT AC Backup

**Source Description**

SN-45 is a 23.6-hp, 4 stroke spark ignition, natural gas fired emergency fire pump engine built by Kohler. The engine is subject to 40 CFR 60, Standards for Performance for Stationary Spark Ignition Internal Combustion Engines (Subpart JJJJ).

**Specific Conditions**

213. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #216 and #218 through #222. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.1	0.1
SO <sub>2</sub>	0.1	0.1
VOC	0.1	0.1
CO	0.7	0.2
NO <sub>x</sub>	0.5	0.2

214. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #216 and #218 through #222. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.1
Acetaldehyde	5.38E-04	1.35E-04
Acrolein	5.08E-04	1.27E-04
Benzene	3.05E-04	7.62E-05
1,3 Butadiene	1.28E-04	3.20E-05
Formaldehyde	1.36E-02	3.40E-03
Napthalene	3.96E-03	9.89E-04
Toluene	5.91E-04	1.48E-04

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

215. The permittee shall not exceed 5% opacity from SN-45 as measured by EPA Reference Method 9. Compliance will be demonstrated by only burning natural gas. [Regulation 18, §18.501, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
216. The permittee shall not operate the emergency generator SN-45 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Regulation 19 §19.602 and other applicable regulations. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
217. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #216. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]
218. The permittee shall comply with the emissions standards in §60.4231(a) for SN-45 over the entire life of the engine. [Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart JJJJ, §60.4233, §60.4234]
219. The permittee shall install a non-resettable hour meter upon startup of SN-45. [Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart JJJJ, §60.4237(c)]
220. The permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The permittee shall also meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as applicable. If the permittee adjust engine settings according to and consistent with the manufacturer's instruction, the engine will not be considered out of compliance. Otherwise the engine will be considered a non-certified engine, and the permittee must demonstrate compliance according to §60.4243(a)(2)(i) through (iii), as appropriate. [Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart JJJJ, §60.4243(a)(1)]
221. The permittee shall operate SN-45 according to the following requirements. In order for the engine to be considered an emergency stationary ICE any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4243(d)(1) through (3).
  - a. There is no limit on the use of SN-45 in emergency situations.
  - b. The permittee may operate SN-45 for any combination of the purposes specified in §60.4243(d)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Specific Condition #221c counts as part of the 100 hours per calendar year allowed.

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

- c. SN-45 may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Specific Condition #221b. Except as provided in paragraph §60.4243(d)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart JJJJ, §60.4243(d)]

222. The permittee shall keep the following records of information:

- a. All notifications submitted to comply with 40 CFR Part 60 Subpart JJJ and all documentation supporting any notification.
- b. Maintenance conducted on SN-45.
- c. Documentation from the manufacturer that SN-45 is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

[Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart JJJJ, §60.4245(a)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-46  
#3 Package Boiler

**Source Description**

The #3 Package Boiler has a maximum heat input capacity of 420 MMBtu/hr. The boiler will be fired by natural gas and will have the capability to fire oil during period of natural gas curtailment or supply interruptions. The #3 package Boiler will replace the #1 Wood Waste Boiler (SN-02) as the back-up incineration device for the HVLC gas stream. The boiler will be of sufficient size to allow the paper machines to fully operate in the event of a scheduled or unscheduled outage of one of the mill's other large boilers, (#3 Wood Waste Boiler or #2 Recovery Boiler).

The #3 Package Boiler is subject to 40 CFR Part 60 Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* and 40 CFR Part 63 Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*.

**Specific Conditions**

223. 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 #227, #228, #229, #231, #233, #234 and #237. [Regulation 19 §19. et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	4.2	10.4
SO <sub>2</sub>	30.9	28.1
VOC	2.8	12.3
CO	20.2	90.8
NO <sub>x</sub>	13.7	60.0
CO <sub>2e</sub>	46,868.3	205,283

224. 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 #227, #228, #229, #231, and #234. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	6.0	10.9
Formaldehyde	0.12	0.15
n-Hexane	0.72	3.14

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

225. The visible emissions from this source shall not exceed 20% opacity when burning fuel oil and 5% opacity when burning natural gas. Compliance shall be demonstrated through compliance with Specific Condition #226 and #227, respectively. [§18.501 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]
226. The permittee shall conduct daily observations of the opacity from this source during fuel oil combustion and keep a record of these observations. This daily observation may be performed with a continuous opacity monitor during fuel oil combustion if the permittee chooses to do so. If visible emissions that exceed 20% opacity are detected, the permittee shall take corrective action and perform the observation again. If visible emissions above permitted levels are still present, the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method #9. The results of these readings shall be kept on site and made available to Department personnel upon request. [§19.705 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8 4 304 and §8 4 311]
227. Compliance with the natural gas opacity limit of 5% shall be demonstrated by burning only pipeline natural gas. There is no daily opacity observation required when burning natural gas. [Regulation No. 18 §18.501, and A.C.A. §8 4 203 as referenced by §8 4 304 and §8 4 311]
228. The permittee shall not exceed a throughput of 3,679,200 MMBtu of natural gas and 1,000,000 gallons of #2 fuel oil at SN-46 per rolling 12 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]
229. The permittee accepted a limit on the sulfur content in fuel oil of 0.0015% in order to avoid PSD requirements. The permittee shall demonstrate compliance by complying with Specific Condition #233. [§19.901 et seq. of Regulation #19, and 40 CFR Part 52, Subpart E]
230. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #228. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. §19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
231. Steam generation in the #3 Package Boiler (SN-46) shall not exceed 300,000 pounds per hour of steam during boiler operation based on a 24 hour rolling average. Maximum annual steam production shall not exceed 2,628,000,000 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 #: 0224-AOP-R16

AFIN: 15-00001

232. The permittee shall maintain monthly records which demonstrate compliance with Specific Conditions #231. Records shall be updated by the fifteenth day of the month following the month to which the records pertain. These records shall be kept on site, provided to Department personnel upon request and may be used by the Department for enforcement purposes. A twelve month total and each month's individual data shall be submitted in accordance with General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]
233. The #3 Package Boiler (SN-46) shall be tested for PM<sub>10</sub>, SO<sub>2</sub>, VOC, NO<sub>x</sub> and CO emissions. PM testing shall be conducted using EPA Reference Methods 5 or 201A and Reference Method 202. The permittee may report all particulate emissions measured using EPA Method 5 and EPA Method 202 as PM<sub>10</sub> or the permittee may conduct separate PM<sub>10</sub> testing using Reference Method 201A and Method 202. Method 6C shall be used for SO<sub>2</sub>. Method 25A shall be used for VOC. Method 10 shall be used for CO and Method 7E for NO<sub>x</sub>. These tests shall be conducted within 180 days of startup. 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 once in the first year of every 5 year permit period. 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]
234. The #3 Package Boiler (SN-46) 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 #3 Package Boiler will not be used more than 2,880 hours in any 12 month period to incinerate emissions collected in the HVLC system. [§19.304 of Regulations #19 and 40 CFR §63.443(d)(4)]
235. The facility shall maintain records of the time that the #3 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]

#### **40 CFR Part 60 Subpart Db**

236. The #3 Package Boiler (SN-46) shall comply with all applicable provisions of 40 CFR Part 60, Subpart A - *General Provisions* and Subpart Db, *Standards of Performance Industrial - Commercial - Institutional Steam Generating Units*. [§19.304 of Regulation 19 and 40 CFR Part 60, Subpart Db]

#### **SO<sub>2</sub>**

237. The permittee shall only combust very low sulfur oil and natural gas with a potential SO<sub>2</sub> emission rate of 0.32 lb/MMBtu (140 ng/J) heat input or less. The permittee shall demonstrate that the oil meets the definition of very low sulfur oil by complying with Specific Condition #238. [19.502 of Regulation 19 and §60.42b(k)(2)]

238. The permittee shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in § 60.41b and the applicable sulfur limit. Reports shall be submitted to the Department in accordance with General Provision #7 certifying that only very low sulfur oil meeting this definition, were combusted in the affected facility during the reporting period. [19.502 of Regulation 19, §60.42b(j)(2) and §60.49b(r)]

#### **PM and Opacity**

239. The permittee is exempt for the PM emission limits in §60.43b(h)(1) providing the permittee only combust oil with a sulfur content that is no more than 0.30 weight percent sulfur. [19.502 of Regulation 19 and §60.43b(h)(5)]
240. The permittee shall not cause to be discharged into the atmosphere 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 as measured by EPA Reference Method 9. The permittee shall comply with the opacity standards at all times, except during periods of startup, shutdown, or malfunction. [19.502 of Regulation 19 and §60.43b(f) and §60.43b(g)]
241. The permittee shall conduct an initial performance test to demonstrate compliance with the opacity limit within 180 days after initial startup of the #3 Package Boiler, SN-46. Subsequent performance tests shall be conducted using the procedures in §60.48b(a). [19.502 of Regulation 19 and §60.43b(f) and §60.48b(a)]
242. The permittee shall maintain records of opacity. The records shall include the following information:
- a. Dates and time intervals of all opacity observation periods;
  - b. Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
  - c. Copies of all visible emission observer opacity field data sheets.

[19.502 of Regulation 19 and §60.49b(f)(1)(i) through (iii)]

#### **NO<sub>x</sub>**

243. NO<sub>x</sub> emissions shall not exceed 0.2 lb/MMBtu heat input. The nitrogen oxides emission standards under §60.44b apply at all times, this includes periods of startup, shutdown, and malfunction. Compliance with the NO<sub>x</sub> emission limits is determined on a 30-day rolling average. Compliance with this condition shall be demonstrated by complying with Specific Condition #223 and Specific Conditions #244. [40 CFR §60.44b(a)(1)(ii), §60.44b(h) and §60.44b(i)]

244. The permittee shall conduct a performance test for NO<sub>x</sub> using a continuous system for monitoring NO<sub>x</sub> to determine compliance with emissions limit listed in Specific Condition #243.
- a. For the initial compliance test, NO<sub>x</sub> from SN-46 are monitored for 30 successive steam generating unit operating days and the 30-day average emission rates is used to determine compliance with the NO<sub>x</sub> emission standards. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.
  - b. Following the date on which the initial performance test is completed or required to be completed, whichever date comes first, the permittee shall determine compliance with the NO<sub>x</sub> standards on a continuous basis through the use of 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO<sub>x</sub> emission data for the preceding 30 steam generating unit operating days.
- [19.502 of Regulation 19, §60.46b(e)(1),(3)]
245. The permittee shall install, calibrate, maintain, and operate CEMS for measuring NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>) emissions discharged to the atmosphere, and shall record the output of the system. The continuous monitoring systems shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [19.502 of Regulation 19, 40 CFR §60.48b(b)(1), (c)]
246. The permittee shall submit to the Department the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B of 40 CFR Part 60. [40 CFR §60.49b(b)]
247. The permittee shall record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor individually for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. All records shall be maintained by the permittee of the facility for a period of 2 years following the date of such record. A twelve month total and each individual month's data shall be in a spreadsheet, database, or other well-organized format, maintained on site, made available to Department personnel upon request. [40 CFR §60.49b(d)]
248. The permittee shall maintain records of the following information for each steam generating unit operating day. The permittee shall submit reports containing the information recorded. All records required under §60.49b shall be maintained by the permittee of the facility for a period of 2 years following the date of such record. [40 CFR §60.49b(g), (i)] [40 CFR §60.49b(g)]
- a. Calendar date.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

- b. The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/million Btu heat input) measured or predicted.
- c. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
- d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
- e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- h. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- i. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1.

249. The permittee is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the #3 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. [40 CFR §60.49b(h)]

#### **40 CFR Part 63, Subpart DDDDD**

250. The #3 Package Boiler (SN-46) shall comply with all applicable provisions of 40 CFR Part 63, Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* upon startup. Applicable provisions of Subpart Db include, but are not limited to the following: [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart DDDDD]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

251. The permittee shall operate SN-46 with a continuous oxygen trim systems that maintains an optimum air to fuel ratio. The permittee shall conduct a tune-up every five (5) years of SN-46 to demonstrate continuous compliance as specified as follows:
- a. Inspect the burner, and clean or replace any components of the burner as necessary,
  - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame patten. The adjustment should be consistent with the manufacturer's specifications, if available,
  - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly,
  - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject,
  - e. Measure the concentration in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made.
  - f. Maintain on-site and submit, if requested by the Department, an annual report containing the information as follows:
    - i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
    - ii. A description of any corrective actions taken as a part of the tune-up; and
    - iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period.

[19.502 of Regulation 19, §63.7540(a)(10)(i)-(vi)]

252. The permittee shall submit annual compliance reports. The first compliance report must cover the period beginning upon startup of SN-46 and ending on July 31 or January 31, whichever date is the first date that occurs at least 180 days after startup. Compliance reports must contain
- a. Company and facility name and address
  - b. Process unit information
  - c. Date of report and beginning and ending dates of the reporting period
  - d. Total operating time during the reporting period.
  - e. Date of the most recent tune-up, burner inspection.

[§63.7550(a),(c)(1)]

Green Bay Packaging Inc. (Arkansas Kraft Division)

Permit #: 0224-AOP-R16

AFIN: 15-00001

253. The permittee must keep records of each notification and report to comply with 40 CFR Part 63 Subpart DDDDD. All records must be in a form suitable and readily available for expeditious review. Records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. [§63.7560]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

SN-47  
Emergency Air Compressor Engine

**Source Description**

SN-47 is a 9.2 hp, 4 stroke compression ignition, diesel gas fired certified emergency engine built by Yanmar. The engine is subject to 40 CFR 60, Standards for Performance for Stationary Compression Ignition Internal Combustion Engines (Subpart IIII).

**Specific Conditions**

254. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #259, #261 and #263. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM <sub>10</sub>	0.1	0.1
SO <sub>2</sub>	0.1	0.1
VOC	0.1	0.1
CO	0.1	0.1
NO <sub>x</sub>	0.3	0.1

255. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #259 and #263. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.1
Acetaldehyde	5.00E-05	2.16E-04
Acrolein	1.00E-05	2.61E-05
Benzene	1.00E-04	2.63E-04
1,3 Butadiene	1.00E-05	1.10E-05
Formaldehyde	1.00E-04	3.32E-04
Napthalene	1.00E-05	2.39E-05
Toluene	3.00E-05	1.15E-04

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

256. The permittee shall not exceed 20% opacity from SN-47 as measured by EPA Reference Method 9. Compliance with this Specific Condition shall be demonstrated by compliance with Specific Condition #257. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]
257. The permittee shall conduct annual visible emissions observations as a method of compliance verification for the opacity limit assigned for SN-47. Observations shall be conducted by someone trained in EPA Reference Method 9. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:
- a. Take immediate action to identify the cause of the visible emissions,
  - b. Implement corrective action, and
  - c. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
  - d. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.
258. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:
- a. The time and date of each observation/reading,
  - b. Any observance of visible emissions appearing to be above permitted limits or any Method 9 reading which indicates exceedance,
  - c. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and the name of the person conducting the observation/reading.
259. The permittee shall not operate the emergency generator SN-47 in excess of 500 total hours (emergency and non-emergency) per calendar year in order to demonstrate compliance with the annual emission rate limits. Emergency operation in excess of these hours may be allowable but shall be reported and will be evaluated in accordance with Regulation 19 §19.602 and other applicable regulations. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
260. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #259. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The calendar year totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]



Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

261. The permittee shall comply with the following emission standards for SN-47. The permittee shall operate and maintain the emission standards over the entire life of the engine.

NO <sub>x</sub> + NMHC	CO	PM
7.5 g/KW-hr 5.6 g/HP-hr	8.0 g/KW-hr 6.0 g/HP-hr	0.40 g/KW-hr 0.30 g/HP-hr

[Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart IIII, §60.4205(b) and §60.4206]

262. The permittee shall purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

- a. Sulfur content: 15 ppm maximum for NR diesel fuel
- b. Cetane index or aromatic content, as follows:
  - i. A minimum cetane index of 40; or
  - ii. A maximum aromatic content of 35 volume percent

[Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart IIII, §60.4207(b)]

263. The permittee shall install a non-resettable hour meter prior to startup of the engine.  
[Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart IIII, §60.4209]

264. The permittee shall operate and maintain SN-47 according to the manufacturer's emission-related written instruction, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Parts 89, 945 and/or 1068, as they apply. [Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart IIII, §60.4211(a)]

265. The permittee may operate SN-47 for the purpose of maintenance checks and readiness testing. Maintenance checks and readiness testing of SN-47 is limited to 100 hours per year. There is no time limit on the use in emergency situations. The permittee may operate SN-47 up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.  
[Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart IIII, §60.4211(f)]

266. The permittee shall keep records of the operation of SN-47 in emergency and non-emergency services that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [Regulation No. 19 §19.304 and 40 CFR Part 60, Subpart IIII, §60.4214(b)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

## **SECTION V: COMPLIANCE PLAN AND SCHEDULE**

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. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
4. The permittee must provide:
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment.

[Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

7. The permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation 19, §19.304 and 40 CFR 63.6(e)(3)]
8. 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)

9. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if 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. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. A copy of the facility's Acid Rain Permit is attached in an appendix to this Title V permit. [Regulation 26, §26.701 and 40 CFR 70.6(a)(4)]

#### Title VI Provisions

10. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
  - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
11. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
12. 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.
  13. 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.

14. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

#### Permit Shield

15. 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 February 6, 2009.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

Applicable Regulations

Source No.	Regulation	Description
Facility	Regulation 19	Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 15, 2007
Facility	Regulation 26	Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
SN-04, SN-15, SN-46	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-11, SN-15, SN-23, SN-37, SN-38, and SN-39	40 CFR 64	Compliance Assurance Monitoring, effective October 22, 1997
SN-41, SN-42, SN-43, SN-44	40 CFR Part 63, Subpart ZZZZ	National Emissions Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines
SN-45	40 CFR part 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
SN-46	40 CFR Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
SN-47	40 CFR Part 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

## 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 §26.304 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, 2009.

Description	Category
Pocket Vent System Heater #1 (SN-28)	Group A, Number 1
Pocket Vent System Heater #2 (SN-29)	Group A, Number 1
DeFoamer Tank (Pulp Mill)	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 Recovery Area	Group A, Number 4
50% Caustic Storage Tanks Tall Oil Area	Group A, Number 4
50% Caustic Storage Tanks Secondary Recovery Area	Group A, Number 4
Emissions From Laboratory Vents	Group A, Number 5
Sulfuric Acid Tanks (4)	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



Green Bay Packaging Inc. (Arkansas Kraft Division)  
 Permit #: 0224-AOP-R16  
 AFIN: 15-00001

Description	Category
Calcium Carbonate Storage	Group A, Number 13
Alum Storage	Group A, Number 13
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
Turpentine Storage Tank (SN-34)	Group A, Number 13
Turpentine Loading Operation (SN-35)	Group A, Number 13
Gasoline Storage Tank	Group A, Number 13
Fly Ash Bunker	Group A, Number 13

## **SECTION VIII: GENERAL PROVISIONS**

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

[40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
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. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]
7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

Arkansas Department of Environmental Quality  
Air Division  
ATTN: Compliance Inspector Supervisor  
5301 Northshore Drive  
North Little Rock, AR 72118-5317

[40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
  - a. For all upset conditions (as defined in Regulation 19, § 19.601), the permittee will 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:
    - i. The facility name and location;
    - ii. The process unit or emission source deviating from the permit limit;
    - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
    - iv. The date and time the deviation started;
    - v. The duration of the deviation;
    - vi. The average emissions during the deviation;
    - vii. The probable cause of such deviations;
    - viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
    - ix. The name of the person submitting the report.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

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.

- b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), 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. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]
11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]
12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]
17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]
19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]
20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
  - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
  - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
  - a. Such an extension does not violate a federal requirement;
  - b. The permittee demonstrates the need for the extension; and
  - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

Green Bay Packaging Inc. (Arkansas Kraft Division)  
Permit #: 0224-AOP-R16  
AFIN: 15-00001

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
- a. Such a request does not violate a federal requirement;
  - b. Such a request is temporary in nature;
  - c. Such a request will not result in a condition of air pollution;
  - d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
  - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
  - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
- a. The request does not violate a federal requirement;
  - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
  - c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

**CERTIFICATE OF SERVICE**

I, Pamela Owen, hereby certify that a copy of this permit has been mailed by first class mail to Green Bay Packaging Inc. (Arkansas Kraft Division), P.O. Box 771, Morrilton, AR, 72110, on this 30<sup>th</sup> day of January, 2015.

Pamela Owen  
Pamela Owen , ASIII, Air Division