

ARKANSAS DEPARTMENT OF  
POLLUTION CONTROL AND ECOLOGY

MINUTE ORDER NUMBER 82-42

LOCATION - SUBJECT: \_\_\_\_\_

SUMMARY REPORTS

PAGE 1 OF 2 PAGES

The Commission, having considered the following Application for permits submitted by the following respective firms and having reviewed the staff recommendations and the Summary Reports attached hereto, does hereby approve said Applications subject to the conditions contained with the Applications, Summary Reports, or amendments thereto, and Subsection 4(d) of the Arkansas Plan of Implementation; provided, however, that the applicant is hereby ordered and directed to comply with all general terms of the permit and all special terms and conditions to the permit, if any, which are so specified.

APPLICATION FOR PERMIT - INDUSTRIAL FACILITIES

<u>PERMIT NO.</u>	<u>FACILITY &amp; LOCATION</u>	<u>COST</u>
78-A (Mod)	International Paper Camden	10,000,000
279-A (Mod)	Arkansas Aluminum Alloys Hot Springs	90,000
451-A (Mod)	Frit Industries, Inc. Walnut Ridge	10,000
458-A (Mod)	Great Lakes Chemical Corp. - South Plant El Dorado	N/A
544-A (Mod)	Travenol Laboratories Mountain Home	N/A
660-A (Mod)	Sawyer Energy, Inc. Shreveport	N/A
681-A	Charles F. Jones Contractors Magnolia	85,000
682-A	Riceland Foods, Inc., Stuttgart Soybean Division, Stuttgart	900,000

COMMISSIONERS

*[Handwritten signatures of commissioners]*

Continued -

*[Signature of John P. Saylor]*  
Chairman

SUBMITTED BY \_\_\_\_\_

DATE PASSED

5/28/82



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*JL*  
*DB*  
*MB*  
*CH*  
*0137*

Continued -

*John P. Saylor*  
Chairman

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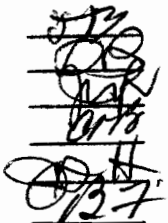
SUMMARY REPORTS

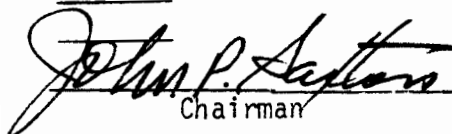
PAGE 2 OF 2 PAGES

<u>PERMIT NO.</u>	<u>FACILITY &amp; LOCATION</u>	<u>COST</u>
683-A	Archer-Daniels-Midland Co. Little Rock	212,000
684-A	Fiber Resources, Inc. Pine Bluff	N/A

The Summary Report, prepared by the staff, is designed to facilitate the administration of the air pollution control program for the State of Arkansas, and, otherwise, for the convenience of the Commission and other interested persons. Copies of the Minute Order, the Permit, and the Summary Report, is to be attached to the Application for Permit which is on file in the Department's central office. It is further noted that the approval of this application is based upon information contained within the Application for Permit - not the Summary Report. Nevertheless, the applicant is expected to forthwith notify the Department of any discrepancies found between the two documents.

COMMISSIONERS



  
Chairman

SUBMITTED BY John D. Ward DATE PASSED 5-28-82

Arkansas Department of Pollution Control and Ecology  
Division of Air Pollution Control

Summary Report Relative to Permit Application

Submitted By: International Paper Company  
Camden

CSN: 520025

First Submittal: 2-26-82

Amended: 4-14-82

Summary: International Paper Company (IP) proposes the replacement of power boilers No. 1 and No. 2 and the wood waste fired boiler with a boiler capable of burning five different fuels. Wood waste is expected to be the primary fuel, to be supplemented with lignite, coal, residual fuel oil, and natural gas. The electricity generated from the steam produced by the boiler will be consumed by the mill. The proposed modification will result in a decrease in particulate (PT) emissions, an increase in sulfur dioxide (SO<sub>2</sub>) emissions, and a possible increase in carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and hydrocarbons (HC). As the proposed emission increases are greater than the "significant net emissions increase" given in the federal Prevention of Significant Deterioration (PSD) regulations, the application was prepared by IP and reviewed by the Department in conformance with the PSD regulations. Because the boiler would have the capacity to consume more than 250 million BTU per hour of fossil fuel, its operation would also be regulated by the federal New Source Performance Standards (NSPS).

As required by the PSD regulations, IP measured the ambient air concentrations of SO<sub>2</sub>, CO, NO<sub>2</sub>, HC, and PT in the area of the proposed modification from April 1980 to April 1981. All of the measured values, as expected, were well below the National Ambient Air Quality Standards (NAAQS). The applicant utilized the monitoring data and EPA dispersion models to predict the ambient air concentrations after the proposed modification for comparison with the PSD increments for TP and SO<sub>2</sub>, and the NAAQS for each of the pollutants. As the project would result in a net decrease in particulate emissions, and the measured particulate concentrations are below the NAAQS, no additional analysis was needed. When the predicted annual contribution of 2 ug/m<sup>3</sup> of NO<sub>x</sub> from the boiler is added to the measured existing value of 11 ug/m<sup>3</sup>, a conservative estimate of the maximum NO<sub>2</sub> concentration of 13 ug/m<sup>3</sup>, or 13 per cent of the NAAQS is obtained. The value is conservative, because the contribution of the existing boilers to be retired was not subtracted from the existing concentration. The screening model predicted a maximum CO concentration from the new boiler less than one third of the significant level given in the PSD regulations. Therefore, additional modelling of the CO emissions was not required. A refined modelling analysis of the SO<sub>2</sub> ambient concentrations using a year of meteorological data was performed. As shown in the attached Summary of Air Quality Modelling, the PSD increment and NAAQS consumption is quite acceptable.

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International Paper at Camden  
Permit No. 78-A (Mod)  
5-28-82

The particulate emissions will be controlled by an electrostatic precipitator (ESP) with a removal efficiency of 99.5 percent. Mechanical collectors will be used for pre-treatment of the gas stream before it enters the ESP. As the designs of the boiler, ESP and fuel handling equipment have not been finalized, IP will submit the procurement specifications for the ESP, and the proposal of the selected vendor, as they are completed. The NSPS allowable SO<sub>2</sub> emission rate of 1.2 pounds per million BTU will be achieved by diluting the sulfur bearing fuels with wood waste which has a very low sulfur content. This is allowable under the NSPS regulations and has the same effect as burning low sulfur fuels. The in-stack SO<sub>2</sub> concentration will be continuously monitored. The carbon monoxide (CO) and hydrocarbon (HC) emissions are created when there is incomplete combustion of the carbon and hydrogen in the fuel. In other words, the reactions do not proceed to completion and create carbon dioxide and water. The CO and HC emissions will be minimized by the design and operation of the boiler such that good, or near complete, combustion will occur. Continuous O<sub>2</sub> and CO instruments will be used as a part of the control system for the boiler fuel feed and the combustion air flow.

The emissions of the oxides of nitrogen (NO<sub>x</sub>) are created by the combination of nitrogen, primarily supplied by the combustion air and secondarily by the fuel, and oxygen in the combustion air. The reaction is encouraged by higher temperatures. Therefore, all of the methods available for minimization of NO<sub>x</sub> formation depend upon lowering the quantity of excess air and directing the air such that the flame temperatures are reduced. Thus, it can be seen that efforts towards decreasing NO<sub>x</sub> emissions tends toward increasing CO and HC emissions. The data gathered during the performance tests will determine if the goal of achieving the best combustion possible will have to be subordinated to comply with the NSPS for NO<sub>x</sub>.

Fugitive emissions from the rail car unloading, the transfer house, and the crusher house will be controlled with wet suppression. The crusher house will also be totally enclosed. Loading to the storage silo will be controlled by a baghouse. Emissions caused by loading the active storage pile will be reduced by use of a telescopic chute. All conveyor systems will be enclosed.

Estimated Cost: \$10,000,000 Total Project: \$75,000,000  
Installation: 12-82 Operation: 4-85  
Recommendation: Approval Permit Number: 78-A (Mod)  
Code \* SIP \* NSPS \* PSD \*  
Reviewed By: MAP,CDH Approved by: JDW Date Approved: 5-28-82

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International Paper at Camden  
 Permit No. 78-A (Mod)  
 5-28-82

ALLOWABLE EMISSION RATES

Proposed Combination Boiler and Associated  
 Fuel Handling Equipment

Boiler -- lb/MM BTU (lb/hr)

Fuel	Heat Input MM BTU/hr	SO2	NOx	PT
Coal	582.0	1.2 (700)	0.7 (410)	0.1 (60)
Coal/Wood	683.4	1.2 (820)	0.7 (480)	0.1 (70)
Lignite	382.0	1.2 (460)	0.6 (230)	0.1 (40)
Lignite/Wood	671.5	1.2 (810)	0.6 (400)	0.1 (70)
Oil	582.0	0.8 (470)	0.3 (175)	0.1 (60)
Oil/Wood	683.4	0.8 (550)	0.3 (200)	0.1 (70)
Gas	582.4	trace	0.2 (120)	trace
Gas/Wood	683.4	trace	0.2 (140)	0.1 (70)
Wood	510.0	trace	*	0.1 (50)

\*NOx will be controlled by work practice standards.

Fugitive Particulate Emissions from Solid Fuel Handling

Source	Opacity
Hopper Unloading	no visible emissions off property line
Loading Into Storage	no visible emissions off property line
Movement on Pile	no visible emissions off property line
Loading out of Storage	no visible emissions off property line
Wind Erosion	no visible emissions off property line

International Paper at Camden  
Permit No. 78-A (Mod)  
5-28-82

SPECIFIC CONDITIONS

1. Installation and operation of the combination fuel boiler shall be in full compliance with the New Source Performance Standards contained in 40 CFR 60.
  2. No later than six months before start-up, a fuel contingency plan shall have been submitted and approved by the Department in writing. The plan shall describe what measures have been taken and would be taken in the event of an interruption in the supply of the lower sulfur fuels to prevent an exceedance of the allowable sulfur dioxide limits.
  3. Only those fuel combinations listed in the ALLOWABLE EMISSION RATES table of this permit are allowed.
  4. Where emission limits are given in both pounds per hour, and pounds per million BTU, the pounds per million BTU shall govern. The opacity on the new combination boiler shall not be greater than 20% except for one six-minute period per hour of not more than 27%.
  5. At no point in the fuel handling operations shall the opacity exceed 20 percent at the point of generation, or be visible at the property lines. In the event the Department observes visible emissions at the property line, the applicant shall be so notified by the Director, and all solid fuel handling operations shall cease until such time that the Department is satisfied that operations can continue without the problem reoccurring.
  6. The procurement specifications and the proposals of the selected vendors, for the boiler, ESP, and fuel handling equipment shall be submitted to the Department for review prior to their final acceptance by the applicant. Prior to installation, the Department shall have approved the locations of the stack ports for the continuous monitors and the stack sampling platforms.
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ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND TECHNOLOGY - AIR DIVISION  
 Summary of Air Quality Modeling Results for PSD Permit Application

PLANT International Paper PERMIT # \_\_\_\_\_

LOCATION Camden CSN \_\_\_\_\_

Analysis performed by  ADPC&E  Applicant

Concentrations in micrograms per cubic meter; % of increment in parentheses

Pollutant and Time Period	Model Used	Max. Concentration		Area Class and Allowable Increment	Existing Ambient Concentr.	Total Estimated Ambient Concentr.	NAAQS
		Due to Proposed Source <sup>a</sup>	Total Increment Consumed				
	BUG 33			Class II	I.P. Monitor		
SO <sub>2</sub> 3 hour		73.5 (14.3%)	73.5 (14.3%)	512	187 (14.4%)	260.5 (20%)	1300
24 hour		15.1 (16.6%)	15.1 (16.6%)	91	31 (8.5%)	46.1 (12.6%)	365
Annual		1.4 (7%)	1.4 (7%)	20	3 (3.75%)	4.4 (5.5%)	80
TSP <sup>1</sup> 24 hour		(%)	(%)	37	104 (40%)	104 <sup>2</sup> (40%)	150
Annual		(%)	(%)	19	35 (46.67%)	35 <sup>2</sup> (46.67%)	75
Other <sup>b</sup>				NA NA NA NA NA NA			
<sup>1</sup> TSP will be reduced by this project					<sup>2</sup> These figures do not take into account the reduction which will occur as a result of this project.		
Nearest Class I area is 150 km away				Class I <sup>c</sup>			
SO <sub>2</sub> 3 hour		(%)	(%)	25			1300
24 hour		(%)	(%)	5			365
Annual		(%)	(%)	2			80
TSP 24 hour		(%)	(%)	10			150
Annual		(%)	(%)	5			75

Distance to nearest Class I Area: 150 KM; Direction: NW Degrees

<sup>a</sup> If maximum SO<sub>2</sub> or TSP concentrations due to proposed source exceed 80% of any Class II increment, see attached plot showing frequency of occurrence of concentrations exceeding 80%.

<sup>b</sup> Maximum pollutant impact; no PSD increments apply.

<sup>c</sup> Show Class I impacts if distance to nearest Class I area is 50 KM or less.

IP CAMDEN PSD--NEW BOILER  
ANNUAL AVERAGE CONC. (ug/m<sup>3</sup>)

	.5	.6	.6	.6	.7	.8	.9	1.0	1.1	.8	.5	.4	.4	.4	.3	.3	.3
7.	.5	.6	.6	.6	.7	.7	.8	.9	1.1	1.2	.8	.6	.4	.4	.3	.3	.3
	.5	.5	.6	.7	.7	.8	.9	1.1	1.3	.8	.5	.5	.4	.4	.3	.3	.2
	.5	.5	.6	.7	.7	.8	.9	1.2	1.3	.8	.5	.5	.4	.4	.3	.2	.2
	.5	.5	.6	.7	.7	.8	.9	1.2	1.4	.8	.5	.5	.4	.4	.3	.3	.2
	.4	.5	.5	.6	.6	.7	.8	1.1	1.4	.8	.6	.5	.4	.3	.3	.3	.2
	.3	.4	.4	.5	.5	.6	.7	.8	1.4	.8	.6	.5	.4	.3	.3	.3	.2
	.3	.3	.4	.4	.5	.6	.7	1.3	.7	.7	.5	.4	.3	.3	.2	.2	.2
	.3	.3	.3	.3	.4	.5	.6	.6	.7	.6	.4	.3	.2	.2	.2	.2	.2
	.3	.3	.4	.4	.4	.5	.5	3.0	.0	.2	.3	.3	.3	.2	.2	.2	.2
-1.	.2	.2	.2	.3	.3	.3	.4	.4	.4	.3	.4	.3	.2	.2	.1	.1	.1
	.2	.3	.3	.3	.3	.4	.4	.4	.4	.7	.5	.6	.5	.4	.3	.2	.1
	.3	.3	.3	.3	.4	.4	.4	.4	.4	.7	.6	.5	.6	.5	.4	.3	.3
	.3	.3	.3	.3	.3	.3	.4	.4	.4	.7	.5	.4	.5	.6	.5	.4	.3
-5.	.3	.3	.3	.3	.3	.3	.4	.4	.5	.6	.5	.4	.5	.5	.4	.3	.3
	.3	.3	.3	.3	.3	.3	.4	.4	.5	.6	.5	.4	.4	.4	.4	.5	.4
	.2	.3	.2	.3	.3	.3	.4	.4	.5	.6	.4	.4	.4	.3	.4	.4	.4
	.2	.2	.2	.3	.4	.4	.4	.4	.4	.5	.4	.4	.4	.3	.3	.3	.4
-9.	.2	.2	.2	.3	.3	.3	.4	.4	.5	.4	.4	.3	.3	.3	.3	.3	.3

X-UTM (KM)

Y-UTM (KM)

X-UTM (KM)

IP CAMDEN PSD--NEW BOILER  
 1ST-HIGH 24-HOUR AVERAGE CONC. (ug/m3)

	7	8	6	5	5	8	9	11	10	9	8	7	7	5	6	5	4	5	4
7.	4	7	9	7	6	7	8	11	11	9	9	7	6	5	6	4	5	4	
	6	5	8	9	7	6	9	11	12	10	9	9	6	8	5	6	4	5	
	6	7	6	9	10	7	8	10	13	11	8	9	6	6	7	5	6		
	6	8	8	7	10	9	8	9	15	11	8	7	9	7	5	6	6		
	5	6	7	9	7	10	8	8	13	10	10	6	6	6	7	5	4		
3.	5	4	6	7	8	10	9	8	9	10	10	7	7	7	6	3	4		
	6	6	5	6	6	6	8	9	13	10	10	11	6	6	5	6	5		
	4	4	4	4	6	7	8	12	12	9	11	12	7	6	5	4	3		
	5	5	6	6	6	7	8	11	8	0	5	8	6	4	4	3	3		
-1.	6	5	4	5	5	6	5	8	8	8	15	8	8	4	3	3	3		
	6	5	5	5	4	5	6	7	14	13	10	11	6	8	7	7	5		
	6	5	5	4	6	5	6	8	12	12	9	10	13	9	7	9	8		
	4	4	4	5	4	5	4	5	10	6	10	9	7	9	12	10	7		
-5.	4	4	6	4	4	4	9	10	7	6	9	10	7	6	8	11	9		
	5	5	4	4	4	8	9	6	7	9	10	7	7	8	6	9	8		
	4	4	4	7	8	9	7	7	8	9	9	8	7	6	7	5	8		
	4	3	6	7	8	8	6	5	7	9	8	9	5	7	5	7	5		
-9.	3	5	7	7	8	6	5	5	6	8	7	9	6	7	6	6	6		

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD--NEW BOILER  
 2ND-HIGH 24-HOUR AVERAGE CONC. ( $\mu\text{g}/\text{m}^3$ )

	5	5	5	5	5	5	6	7	7	8	7	5	5	4	3	3	3	3
7.	4	5	6	5	6	7	7	10	9	8	6	6	5	4	3	3	3	4
	5	4	5	6	6	5	8	9	11	8	6	6	5	4	4	3	4	3
	6	6	5	6	7	7	8	8	13	9	7	7	5	4	4	5	3	3
	5	6	5	5	6	7	7	8	11	10	7	6	4	4	5	3	4	3
	5	6	6	7	7	7	8	8	10	10	10	6	5	6	4	5	3	3
3.	5	4	5	7	7	6	7	8	8	9	9	6	6	5	4	3	4	4
	4	4	5	5	6	7	8	8	9	10	9	8	6	5	4	5	4	3
	3	4	4	4	4	5	7	11	10	8	11	6	6	5	3	3	3	3
-1.	5	5	5	5	6	6	8	9	7	0	5	7	6	4	4	3	3	2
	4	4	4	4	4	4	4	8	8	7	7	8	5	4	3	2	2	2
	4	4	5	5	4	4	6	7	10	10	10	9	6	6	6	5	3	2
	4	4	4	4	5	5	5	6	9	8	8	10	8	7	6	6	5	6
	4	4	4	5	4	4	4	7	8	5	8	6	9	10	9	6	6	6
-5.	4	4	5	4	4	4	7	7	6	6	9	6	5	7	9	9	7	6
	5	5	3	4	5	7	9	5	6	8	6	5	5	6	6	8	8	7
	4	3	3	4	4	7	7	6	5	6	7	6	6	5	4	7	5	8
	3	3	3	7	6	7	5	5	6	7	6	6	5	5	4	6	5	7
-9.	3	3	6	6	6	6	5	5	6	7	6	6	5	6	3	5	5	4

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD--NEW BOILER  
 1ST-HIGH 3-HOUR AVERAGE CONC. (ug/m3)

	20	23	22	24	19	27	29	22	28	25	27	27	24	18	16	14	15	21
7.	20	22	24	24	24	29	27	22	28	26	29	22	17	20	17	18	21	15
	24	22	24	24	25	24	21	28	31	28	27	29	21	19	19	20	25	16
	21	23	24	24	26	25	27	32	33	31	23	32	24	18	20	27	15	23
	20	20	26	24	28	29	26	28	32	38	28	25	20	20	29	16	22	19
	21	21	21	30	24	28	30	34	30	48	37	32	28	29	19	29	25	17
3.	20	16	24	26	21	30	28	33	35	57	42	36	31	24	33	22	20	24
	26	30	26	23	23	30	34	44	62	56	53	41	29	27	25	26	21	16
	14	14	19	24	28	27	36	45	74	67	65	42	32	27	28	23	21	22
	18	19	20	23	24	34	50	70	41	0	37	42	29	21	18	20	20	19
-1.	24	18	18	20	23	26	25	46	52	53	53	45	31	20	19	16	15	16
	19	17	22	22	31	24	28	30	50	48	60	38	27	24	24	22	16	14
	27	22	27	24	20	21	27	31	39	42	42	32	38	26	21	24	20	19
	25	24	23	16	20	22	23	30	19	37	28	29	28	35	27	21	21	21
-6.	23	15	18	19	21	21	23	23	23	31	25	24	18	25	32	28	22	19
	15	17	17	20	20	22	28	27	24	29	22	20	20	22	26	29	27	17
	15	19	18	17	18	25	22	23	27	27	19	22	32	16	29	24	27	20
	20	17	17	18	20	23	21	18	26	24	19	19	21	21	15	28	22	25
-9.	16	16	18	19	22	19	24	18	23	22	18	18	19	33	17	19	23	19

Y-UTM (KM)

X-UTM (KM)

IP CAMDEN PSD--NEW BOILER  
 2ND-HIGH 3-HOUR AVERAGE CONC. (ug/m3)

	18	21	18	19	19	21	21	22	24	23	22	20	20	18	15	14	15	16	
7.	20	19	21	19	21	23	24	20	26	26	21	20	17	18	16	18	18	13	
	17	21	21	23	24	20	20	22	28	28	22	20	21	18	19	20	19	14	
	19	21	21	22	24	22	24	26	31	30	22	22	20	17	18	19	15	18	
	20	20	23	22	24	27	23	28	30	33	24	22	19	18	21	16	21	15	
	19	20	20	20	24	25	28	32	28	34	30	27	22	24	17	18	15	18	
3.	19	16	18	23	21	27	26	27	28	41	38	31	29	23	16	21	18	19	
	20	22	24	22	22	25	32	36	48	53	39	39	28	26	22	23	20	14	
	13	13	18	21	28	26	32	44	54	56	53	42	26	24	19	21	16	18	
	18	19	20	21	24	28	39	51	40	0	35	38	27	19	17	16	17	18	
-1.	17	16	14	17	20	26	23	41	30	41	52	39	23	19	14	12	14	15	
	17	15	17	20	21	19	25	29	45	42	45	30	24	24	23	19	16	13	
	18	21	25	18	18	18	21	29	25	37	39	31	31	24	19	22	19	19	
	19	17	18	16	16	20	22	25	19	31	25	25	28	29	27	21	18	18	
-5.	16	14	16	13	18	21	21	20	19	31	24	24	18	24	26	25	20	19	
	13	16	16	19	19	19	25	24	22	26	21	20	17	18	23	22	23	19	
	15	15	18	16	17	22	20	20	22	23	18	20	21	15	20	22	19	21	
	13	17	14	18	20	23	20	17	20	20	16	19	19	14	14	20	21	17	
-9.	15	12	16	18	19	18	19	18	18	19	17	17	18	17	15	15	18	19	

Y-UTM (km)

X-UTM (km)

X-UTM (km)

IP CAMDEN PSD--ALL IP SOURCES  
ANNUAL AVERAGE CONC. (ug/m<sup>3</sup>)

	.7	.8	.7	.8	.9	1.0	1.2	1.3	1.5	1.0	.7	.5	.5	.4	.4	.3
7.	.7	.8	.8	.9	.9	1.1	1.2	1.4	1.6	1.0	.7	.5	.5	.4	.4	.3
	.7	.7	.8	.9	.9	1.1	1.2	1.5	1.7	1.0	.7	.6	.5	.4	.4	.3
	.6	.7	.8	.9	.9	1.0	1.2	1.6	1.8	1.0	.7	.6	.5	.4	.3	.3
	.6	.7	.7	.8	.9	1.0	1.3	1.6	1.9	1.1	.7	.6	.6	.5	.3	.3
	.5	.6	.7	.7	.9	1.0	1.1	1.5	2.0	1.1	.8	.7	.6	.4	.4	.3
3.	.4	.5	.5	.7	.8	.9	1.1	1.2	1.4	2.2	1.1	.9	.7	.5	.4	.3
	.4	.4	.5	.5	.6	.8	.9	1.2	1.2	2.1	1.1	.9	.7	.6	.4	.3
	.4	.4	.4	.5	.6	.7	1.0	1.4	2.2	1.2	.9	.6	.4	.3	.2	.2
	.4	.4	.5	.5	.6	.7	.8	.8	0.0	.5	.5	.4	.4	.3	.3	.2
-1.	.3	.3	.3	.4	.4	.5	.6	.7	1.0	.8	.6	.5	.3	.2	.2	.2
	.3	.3	.4	.5	.5	.6	.6	.7	1.1	.8	.9	.7	.6	.4	.3	.2
	.4	.4	.4	.5	.5	.5	.5	.6	1.0	.8	.7	.8	.7	.6	.5	.4
	.4	.4	.4	.4	.4	.5	.6	.7	.9	.7	.6	.7	.8	.7	.6	.5
-5.	.4	.4	.4	.4	.4	.5	.6	.6	.9	.7	.6	.5	.6	.7	.5	.4
	.3	.3	.4	.4	.4	.5	.5	.6	.8	.6	.6	.5	.5	.6	.6	.5
	.3	.3	.3	.3	.5	.5	.5	.6	.8	.6	.5	.4	.5	.5	.5	.5
	.3	.3	.3	.4	.5	.5	.5	.6	.7	.6	.5	.4	.4	.4	.4	.5
-9.	.3	.3	.3	.4	.4	.4	.5	.6	.7	.6	.5	.4	.4	.3	.3	.4

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD--ALL IP SOURCES  
 1ST-HIGH 24-HOUR AVERAGE CONC. (ug/m3)

	8	10	8	7	7	10	10	11	14	12	11	10	9	8	6	8	6	5	6						
7.	5	9	+	11	9	+	8	9	+	10	14	+	14	14	+	11	9	+	7	6	8	+	5	7	5
	7	6	+	10	12	9	+	7	12	14	+	16	13	11	+	11	7	+	10	6	8	+	5	6	6
	8	8	+	7	11	12	8	+	10	13	17	+	14	10	11	+	8	8	+	8	8	+	6	6	7
	8	10	+	10	9	13	12	10	13	20	14	10	8	11	9	6	7	8	5						
	6	7	9	11	9	13	11	11	17	14	13	8	7	7	8	7	5	4							
3.	7	5	7	9	10	13	13	11	12	14	13	9	9	10	7	4	5	8							
	7	8	7	7	7	11	12	11	17	14	14	14	14	8	7	7	8	6	4						
	5	5	5	5	7	9	10	16	17	13	16	15	9	7	7	5	4	4							
	7	7	8	8	8	9	11	15	12	0	8	11	7	6	5	4	3	3							
-1.	7	6	6	6	7	7	7	10	11	14	20	10	10	5	4	4	4	4							
	8	7	6	7	6	7	8	10	18	19	14	15	9	11	9	9	7	4							
	7	6	6	6	7	7	8	11	15	17	11	13	17	13	9	11	10	7							
	6	6	5	7	6	6	6	12	13	9	14	12	9	12	15	13	8	9	10						
-5.	5	5	7	5	6	11	13	9	8	12	14	8	7	10	13	12	10	9							
	6	6	5	5	10	11	11	8	10	12	13	9	10	9	8	11	10	10							
	5	5	5	9	11	12	8	9	10	12	11	10	10	8	9	7	10	9							
	5	4	8	9	10	10	7	7	9	11	10	12	7	9	6	8	6	9							
-9.	4	6	9	8	10	7	7	6	8	11	9	11	8	9	8	7	7	5							

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD  
1ST-HIGH 3-

	25	28	28	33	25
7.	25	27	30	30	31
	31	28	30	31	31
	26	30	31	33	31
	26	25	32	32	36
	27	26	26	37	31
3.	27	22	30	33	28
	33	38	34	30	34
	19	18	23	30	35
-1.	23	24	25	28	31
	32	25	22	25	28
	24	22	31	32	40
	36	27	34	32	25
	31	31	30	21	26
-5.	29	19	24	25	27
	20	22	22	25	25
	19	24	23	22	23
	26	21	22	23	26
-9.	20	21	23	24	27

Y-UTM (KM)

50 100

IP CAMDEN PSD--ALL IP SOURCES  
2ND-HIGH 24-HOUR AVERAGE CONC. (UG/M3)

	6	6	7	7	7	9	8	11	9	10	8	7	6	5	4	4	4	4
7.	5	6	7	6	7	8	9	12	11	10	8	8	7	5	4	4	4	5
	7	6	7	8	8	7	10	12	14	11	8	8	6	5	5	4	5	4
	8	8	6	7	9	8	10	10	16	12	8	9	6	5	5	6	4	4
	7	8	7	7	8	10	8	11	15	13	9	8	5	6	6	4	5	4
	6	7	8	9	9	9	10	11	13	14	12	8	7	7	4	6	4	3
3.	6	5	6	8	10	9	9	11	11	12	12	9	8	6	5	4	5	5
	6	6	6	7	7	9	10	10	14	13	11	11	8	7	6	7	6	4
	5	5	5	5	6	7	10	15	15	13	15	15	8	7	6	4	4	4
	6	6	7	7	8	9	11	14	10	0	8	9	7	5	4	4	3	3
-1.	5	5	6	6	6	6	6	10	11	12	10	10	7	5	3	3	2	3
	5	5	6	7	5	6	7	8	13	14	13	12	9	7	8	8	7	4
	5	5	5	5	6	7	6	8	12	10	10	10	13	12	8	8	8	7
	6	5	5	6	6	6	10	11	8	11	10	8	11	13	12	8	7	7
-5.	5	5	6	5	5	9	9	8	8	12	9	8	7	9	12	11	9	7
	6	6	4	5	6	9	11	7	8	10	8	6	7	7	7	10	10	9
	5	4	4	5	9	9	7	6	8	9	7	8	7	5	9	6	9	9
	4	4	4	9	8	9	6	6	8	9	7	7	6	7	5	7	6	8
-9.	4	4	7	7	8	7	6	6	8	9	7	7	6	7	4	6	6	5

Y-UTM (KM)

50 100

X-UTM (KM)



IP CAMDEN PSD--ALL IP SOURCES  
 1ST-HIGH 3-HOUR AVERAGE CONC. (ug/m3)

	25	28	33	25	34	37	29	36	31	34	34	30	23	20	18	20	26		
7.	25 +	27 +	30 +	30 +	31 +	36 +	35 +	28 +	36 +	33 +	36 +	27 +	21 +	25 +	21 +	24 +	27 +	28	
	31 +	28 +	30 +	31 +	31 +	27 +	35 +	28 +	40 +	35 +	34 +	36 +	27 +	25 +	25 +	26 +	31 +	21	
	26 +	30 +	31 +	33 +	31 +	37 +	40 +	42 +	43 +	38 +	29 +	40 +	31 +	23 +	26 +	34 +	21 +	30	
	26 +	25 +	32 +	32 +	36 +	38 +	34 +	36 +	39 +	47 +	34 +	31 +	26 +	24 +	37 +	20 +	28 +	33	
	27 +	26 +	26 +	37 +	31 +	38 +	40 +	42 +	37 +	60 +	46 +	40 +	34 +	39 +	23 +	38 +	31 +	24	
3.	27 +	22 +	30 +	33 +	28 +	38 +	35 +	41 +	44 +	74 +	54 +	45 +	37 +	30 +	43 +	28 +	24 +	31	
	33 +	38 +	34 +	30 +	34 +	39 +	45 +	55 +	80 +	75 +	68 +	52 +	44 +	36 +	30 +	35 +	27 +	18	
	19 +	18 +	23 +	30 +	35 +	37 +	44 +	57 +	93 +	82 +	57 +	40 +	33 +	35 +	28 +	26 +	24 +	26	
	23 +	24 +	25 +	28 +	31 +	42 +	62 +	90 +	60 +	0 +	48 +	53 +	36 +	25 +	23 +	25 +	25 +	24	
-1.	32 +	25 +	22 +	25 +	28 +	32 +	31 +	57 +	68 +	72 +	67 +	58 +	39 +	24 +	23 +	19 +	19 +	21	
	24 +	22 +	31 +	32 +	40 +	29 +	35 +	37 +	62 +	61 +	74 +	49 +	34 +	31 +	30 +	29 +	23 +	18	
	36 +	27 +	34 +	32 +	25 +	26 +	33 +	39 +	48 +	52 +	53 +	40 +	48 +	33 +	28 +	33 +	26 +	26	
	31 +	31 +	30 +	21 +	26 +	27 +	29 +	39 +	23 +	45 +	36 +	36 +	38 +	43 +	34 +	27 +	26 +	28	
-5.	29 +	19 +	24 +	25 +	27 +	27 +	30 +	31 +	29 +	39 +	31 +	32 +	22 +	31 +	39 +	34 +	27 +	24	
	20 +	22 +	22 +	25 +	25 +	28 +	35 +	36 +	31 +	37 +	27 +	27 +	26 +	29 +	33 +	36 +	33 +	24	
	19 +	24 +	23 +	22 +	23 +	31 +	28 +	30 +	36 +	33 +	26 +	28 +	42 +	22 +	37 +	30 +	32 +	25	
	26 +	21 +	22 +	23 +	26 +	30 +	27 +	25 +	34 +	30 +	26 +	25 +	27 +	26 +	18 +	35 +	27 +	30	
-9.	20	21	23	24	27	24	30	23	29	27	23	23	25	42	22	24	29	24	27

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD--ALL SOURCES AFTER CHANGE  
ANNUAL AVERAGE CONC. (ug/m3)

35	39	3.3	3.7	3.8	4.2	4.9	5.4	6.2	6.7	7.1	7.5	8.6	9.9	12.	7.5	4.8	4.1	3.5	3.0
38	43	2.6	3.1	3.8	4.3	4.5	5.3	6.0	7.0	7.5	8.1	9.2	11.	13.	7.7	4.9	4.3	3.6	3.1
37	52	2.6	2.7	3.0	3.6	4.5	5.0	5.7	6.7	8.1	8.7	8.7	11.	14.	7.9	5.4	4.4	3.7	2.6
53	53	2.5	2.8	3.1	3.4	3.5	4.2	5.4	6.2	7.5	9.2	9.3	11.	16.	8.2	5.7	4.6	3.1	2.7
49	36	2.1	2.3	2.6	3.0	3.5	4.0	4.3	5.0	6.8	8.1	9.1	9.4	16.	7.8	6.2	3.9	3.3	2.8
53	35	2.3	2.5	2.7	2.8	3.0	3.3	3.7	4.3	5.4	6.5	7.2	8.4	12.	8.5	5.5	4.1	2.9	2.2
31	31	2.2	2.4	2.6	2.9	3.2	3.5	4.0	4.3	4.9	5.9	5.2	5.3	7.	4.0	3.4	2.8	2.4	2.0
31	25	1.8	2.0	2.1	2.2	2.4	2.7	2.9	3.3	3.6	4.9	4.4	5.2	4.3	5.5	4.4	3.0	1.9	1.5
51	57	1.6	1.7	1.9	2.1	2.4	2.7	3.1	3.7	4.3	4.9	5.0	5.0	6.4	6.0	7.0	5.2	3.7	2.9
86	71	1.8	2.0	2.1	2.3	2.7	3.1	3.4	3.7	3.8	3.3	3.7	5.1	6.6	5.5	4.8	6.0	5.1	3.8
85	80	1.8	2.0	2.2	2.5	2.7	2.8	3.1	3.2	3.3	3.4	4.5	4.9	6.3	4.9	4.2	4.4	4.9	4.6
49	67	2.0	2.2	2.3	2.4	2.6	2.7	2.8	2.9	3.0	3.7	4.4	5.0	6.0	4.6	4.2	3.3	3.8	4.2
43	40	2.0	2.1	2.2	2.3	2.4	2.5	2.7	4.0	4.1	4.5	5.6	4.5	3.9	3.4	3.0	3.3	3.7	3.7
49	44	1.9	2.0	2.1	2.0	2.1	2.2	2.1	2.4	2.9	3.7	3.8	4.1	4.9	4.4	3.8	3.4	2.6	2.8
51	32	1.8	1.8	1.8	1.9	1.9	1.8	2.1	2.3	3.0	3.4	3.6	3.9	4.3	4.1	3.6	3.2	2.7	2.3
55	43	1.6	1.5	1.7	1.7	1.6	1.8	2.0	2.4	2.8	3.2	3.3	3.6	3.9	3.8	3.2	2.9	2.8	2.2
42	45	1.4	1.5	1.5	1.5	1.7	2.0	2.5	2.7	3.1	3.1	3.4	3.6	3.5	2.8	2.7	2.6	2.3	1.9
29	44	1.4	1.4	1.3	1.4	1.5	1.7	2.1	2.3	2.5	2.9	2.9	3.2	3.3	3.3	2.5	2.6	2.3	2.2
31	41	1.3	1.2	1.3	1.5	1.8	2.0	2.2	2.4	2.7	2.7	3.0	3.0	3.1	2.3	2.4	2.1	2.1	1.9

X-UTM (km)

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD--ALL SOURCES AFTER CHANGE  
 1ST-HIGH 24-HOUR AVERAGE CONC. (ug/m3)

	39	40	44	42	43	42	64	62	53	64	73	101	86	74	65	45	55	39
7.	28	31	43	44	54	49	53	72	65	59	91	115	97	77	65	66	38	43
	32	29	31	34	46	61	57	63	83	71	73	115	106	68	60	63	57	52
	39	40	41	37	32	40	53	75	73	100	74	91	107	101	97	77	63	53
	26	29	36	41	44	45	42	48	63	100	112	85	109	94	89	81	49	36
	26	27	34	41	43	42	36	54	50	55	85	90	83	118	72	49	63	35
3.	34	37	40	44	49	54	57	60	60	55	61	78	9	87	62	37	31	31
	35	36	37	39	39	39	46	52	48	60	76	100	134	70	68	31	25	25
	31	36	42	47	51	50	49	61	53	51	49	79	87	100	136	74	91	57
	42	42	39	41	44	41	44	44	52	47	90	83	73	78	76	111	86	71
-1.	33	34	30	39	40	41	38	55	50	80	102	68	77	102	70	66	85	80
	28	41	35	36	33	43	44	48	63	71	65	51	73	88	58	54	49	67
	31	32	31	35	43	36	42	52	62	79	53	51	66	71	57	62	43	40
	29	27	36	40	30	37	47	61	67	52	46	54	60	58	64	64	49	44
-5.	30	34	34	27	33	41	54	48	65	43	44	51	56	54	62	40	51	32
	33	27	26	30	35	48	42	57	47	38	33	47	53	45	59	39	55	43
	24	24	27	30	43	39	46	50	41	37	37	43	49	43	55	44	42	45
	23	24	25	38	38	37	47	36	34	37	37	38	45	41	44	50	29	44
-9.	22	22	33	36	31	41	40	35	29	33	35	34	40	39	36	45	31	41

( E X ) X-UTM ( km )

9 10 11 12

X-UTM ( km )

IP CAMDEN PSD--ALL SOURCES AFTER CHANGE  
 2ND-HIGH 24-HOUR AVERAGE CONC. (UG/M3)

	29	36	44	41	38	35	48	56	51	61	60	81	66	53	56	39	29	32
7.	25	29	34	44	52	43	38	51	59	54	68	95	73	53	52	36	38	38
	29	26	29	32	39	53	57	47	57	65	68	100	87	67	51	41	46	33
	33	35	35	33	31	39	49	68	71	65	68	89	106	77	47	52	31	40
	24	26	34	40	41	44	37	44	61	70	75	84	106	81	67	45	41	35
	25	27	30	33	31	31	36	40	49	49	72	83	82	107	72	47	54	34
3.	33	36	39	40	44	47	49	49	49	52	60	70	8	83	42	27	29	26
	31	35	35	31	34	36	38	37	44	44	41	67	85	63	58	55	22	20
	28	26	25	26	27	32	43	38	40	43	48	67	82	92	103	68	63	52
	24	24	30	34	28	34	43	42	49	37	80	74	72	64	57	94	80	60
-1.	26	25	28	37	36	38	33	47	36	44	70	49	71	67	62	60	78	80
	26	31	30	33	31	42	42	32	39	64	61	45	70	55	53	36	47	65
	26	29	30	28	40	32	29	30	61	60	40	48	63	45	53	52	41	39
	29	27	32	36	28	26	28	47	45	51	37	44	55	45	44	40	29	39
-5.	22	33	32	24	23	26	39	45	44	41	33	45	51	45	44	39	44	32
	30	27	23	21	24	33	38	37	37	36	30	45	47	44	39	34	41	25
	20	24	20	22	26	38	30	35	34	29	30	42	44	41	33	32	29	36
	22	18	20	21	34	32	30	31	34	26	31	38	42	40	28	31	26	36
-9.	17	19	20	29	29	27	29	30	28	27	32	34	40	38	28	29	28	26

Y-UTM (km)

X-UTM (km)

X-UTM (km)

IP CAMDEN PSD--ALL SOURCES AFTER CHANGE  
 1ST-HIGH 3-HOUR AVERAGE CONC. (ug/m3)

107	144	144	148	179	165	184	164	227	181	259	265	240	222	204	178	141	151	160
131	124	123	171	159	159	181	198	208	216	224	230	276	229	220	175	189	262	176
139	145	158	154	140	187	178	210	237	272	222	230	313	221	209	175	300	174	183
159	175	169	162	193	201	165	229	227	281	271	315	330	261	223	315	178	265	187
140	146	140	178	195	190	236	283	226	332	302	347	402	336	288	219	297	198	178
131	138	140	141	144	162	187	291	287	440	353	413	402	430	301	268	254	148	177
123	131	139	147	153	165	183	197	199	235	350	443	37	523	303	182	152	175	163
176	184	189	189	181	178	174	135	188	179	277	415	463	444	293	203	178	156	182
119	104	98	112	139	184	266	261	246	255	187	288	368	427	315	248	257	193	242
116	149	171	242	232	161	162	242	164	180	227	244	293	284	212	261	200	222	149
199	189	133	160	144	193	153	195	216	189	253	292	290	220	247	282	202	207	224
130	134	125	154	144	150	159	225	160	200	217	190	257	183	213	158	203	162	156
113	129	136	141	170	139	220	149	138	200	191	200	221	211	217	206	154	166	147
122	131	123	158	129	209	138	146	166	181	203	189	203	186	187	219	152	181	166
118	141	133	123	194	128	131	136	149	154	147	202	184	151	177	143	165	123	115
138	107	138	180	118	115	111	137	167	144	140	194	166	145	160	189	210	129	113
89	146	166	107	102	95	123	118	159	139	165	169	150	153	134	169	133	135	117
149	153	97	96	113	117	129	149	130	138	178	178	135	150	143	139	133	184	117
142	87	94	117	97	102	103	152	109	103	158	180	123	140	154	158	156	144	125

Y-UTM (km)

X-UTM (km)

IP CAMDEN PSD--ALL SOURCES AFTER CHANGE  
 2ND-HIGH 3-HOUR AVERAGE CONC.( $\mu\text{g}/\text{m}^3$ )

	103	130	132	142	179	160	172	160	169	177	211	202	211	204	163	155	140	148	
7.	111	115	117	144	148	158	177	193	186	194	207	211	242	209	208	172	167	163	150
	124	135	118	128	132	182	175	188	206	220	218	227	277	220	202	165	194	148	129
	128	145	135	159	151	153	162	188	227	241	245	314	320	253	221	238	167	178	127
	136	136	138	150	185	178	173	195	206	251	274	317	381	301	264	206	172	189	180
	110	127	135	124	136	161	171	192	249	198	273	364	397	413	283	223	241	145	148
3.	98	108	119	133	148	155	154	164	189	221	280	382	36	420	233	152	147	133	123
	98	104	123	143	164	161	126	134	177	161	248	398	392	429	278	178	115	134	129
	87	95	92	109	133	134	165	186	202	187	179	282	309	414	302	218	222	190	152
	114	100	158	119	120	150	159	159	149	176	212	227	247	246	210	246	195	196	160
-1.	97	107	129	149	138	148	152	129	170	181	229	242	256	209	177	213	191	189	147
	128	131	123	133	143	115	133	166	143	171	191	182	232	182	202	148	168	160	186
	112	119	118	117	100	129	158	120	136	181	178	190	220	152	180	137	149	143	151
	100	119	106	98	122	147	114	131	144	174	151	177	188	144	171	185	118	116	123
-5.	99	85	99	119	134	108	129	128	142	153	144	173	162	144	158	134	114	120	108
	80	89	117	121	102	112	91	134	137	121	134	153	150	143	147	154	141	110	111
	86	115	109	95	101	95	117	114	133	121	129	159	144	132	115	155	129	117	100
	124	104	88	91	96	105	115	110	115	113	127	140	129	134	113	134	124	109	107
-9.	99	82	81	94	89	102	97	113	108	102	146	122	114	131	116	138	121	116	113

Y-UTM (km)

X-UTM (km)

## PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973), the Arkansas Department of Pollution Control and Ecology gives the following notice:

International Paper Company (IP) at Camden proposes the replacement of power boilers No. 1 and No. 2 and the wood waste fired boiler with a boiler capable of burning five different fuels. Wood waste is expected to be the primary fuel, to be supplemented with lignite, coal, residual fuel oil, and natural gas. The electricity generated from the steam produced by the boiler will be consumed by the mill. The proposed modification will result in a decrease in particulate (PT) emissions, an increase in sulfur dioxide (SO<sub>2</sub>) emissions, and a possible increase in carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), and hydrocarbons (HC). As the proposed emission increases are greater than the "significant net emissions increase" given in the federal Prevention of Significant Deterioration (PSD) regulations, the application was prepared by IP and reviewed by the Department in conformance with the PSD regulations. Because the boiler would have the capacity to consume more than 250 million BTU per hour of fossil fuel, its operation would also be regulated by the federal New Source Performance Standards (NSPS).

As required by the PSD regulations, IP measured the ambient air concentrations of SO<sub>2</sub>, CO, NO<sub>2</sub>, HC, and PT in the area of the proposed modification from April 1980 to April 1981. All of the measured values, as expected, were well below the National Ambient Air Quality Standards (NAAQS). The applicant utilized the monitoring data and EPA dispersion models to predict the ambient air concentrations after the proposed modification for comparison with the PSD increments for TP and SO<sub>2</sub>, and the NAAQS for each of the pollutants. As the project would result in a net decrease in particulate emissions, and the measured particulate concentrations are below the NAAQS, no additional analysis was needed. When the predicted annual contribution of 2 ug/m<sup>3</sup> of NO<sub>x</sub> from the boiler is added to the measured existing value of 11 ug/m<sup>3</sup>, a conservative estimate of the maximum NO<sub>2</sub> concentration of 13 ug/m<sup>3</sup>, or 13 per cent of the NAAQS is obtained. The value is conservative, because the contribution of the existing boilers to be retired was not subtracted from the existing concentration. The screening model predicted a maximum CO concentration from the new boiler less than one third of the significant level given in the PSD regulations. Therefore, additional modelling of the CO emissions was not required. A refined modelling analysis of the SO<sub>2</sub> ambient concentrations using a year of meteorological data was performed. The PSD increment and NAAQS consumption is quite acceptable.

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The particulate emissions will be controlled by an electrostatic precipitator (ESP) with a removal efficiency of 99.5 percent. Mechanical collectors will be used for pre-treatment of the gas stream before it enters the ESP. As the designs of the boiler, ESP and fuel handling equipment have not been finalized, IP will submit the procurement specifications for the ESP, and the proposal of the selected vendor, as they are completed. The NSPS allowable SO<sub>2</sub> emission rate of 1.2 pounds per million BTU will be achieved by diluting the sulfur bearing fuels with wood waste which has a very low sulfur content. This is allowable under the NSPS regulations and has the same effect as burning low sulfur fuels. The in-stack SO<sub>2</sub> concentration will be continuously monitored. The carbon monoxide (CO) and hydrocarbon (HC) emissions are created when there is incomplete combustion of the carbon and hydrogen in the fuel. In other words, the reactions do not proceed to completion and create carbon dioxide and water. The CO and HC emissions will be minimized by the design and operation of the boiler such that good, or near complete, combustion will occur. Continuous O<sub>2</sub> and CO instruments will be used as a part of the control system for the boiler fuel feed and the combustion air flow.

The emissions of the oxides of nitrogen (NO<sub>x</sub>) are created by the combination of nitrogen, primarily supplied by the combustion air and secondarily by the fuel, and oxygen in the combustion air. The reaction is encouraged by higher temperatures. Therefore, all of the methods available for minimization of NO<sub>x</sub> formation depend upon lowering the quantity of excess air and directing the air such that the flame temperatures are reduced. Thus, it can be seen that efforts towards decreasing NO<sub>x</sub> emissions tends toward increasing CO and HC emissions. The data gathered during the performance tests will determine if the goal of achieving the best combustion possible will have to be subordinated to comply with the NSPS for NO<sub>x</sub>.

Fugitive emissions from the rail car unloading, the transfer house, and the crusher house will be controlled with wet suppression. The crusher house will also be totally enclosed. Loading to the storage silo will be controlled by a baghouse. Emissions caused by loading the active storage pile will be reduced by use of a telescopic chute. All conveyor systems will be enclosed.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit application and staff finding and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, (501) 562-7444, or

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 1st day of June, 1982.

Jarrell E. Southall  
Director

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MAILING LIST:

PUBLIC NOTICE - Mailed 6-1-82

International Paper - 78-A (Mod)  
Camden

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 W. 3rd St.  
Little Rock, AR 72201

Camden News  
113 Madison Ave., NE  
Camden, AR 71701

Harry Lindsey, Mayor of Camden  
P. O. Box 278  
Camden, AR 71701

The Hon. Howard Russell, Judge  
Ouachita County Courthouse  
Camden, AR 71701

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\* Mrs. Olvena Fisher  
Public Library of Camden and Ouachita County  
120 Harrison Ave. SW  
Camden, AR 71701

Scott Berdine, Manager Environmental Services (West)  
International Paper Co.  
# 3 Oaks Plaza  
6700 LBJ Freeway - P. O. Box 400650  
Dallas, TX 75240

Mr. Gus Von Bodungen, Chief  
Air Quality Division  
Office of Env. Affairs  
Dept. of Natural Resources  
P. O. Box 44066  
Baton Rouge, LA 70804

\* Ellen D. Greeney  
105 Project Officer  
Environmental Protection Agency  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Arkansas Aluminum Alloys, Inc.

Hot Springs, AR

CSN 26-0077 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL 4-2-82 AMENDED \_\_\_\_\_

SUMMARY:

Arkansas Aluminum Alloys proposes to install a CORECO Metal Separator at their Hot Springs mill for the purpose of reclaiming zinc and aluminum from each other and metals with higher melting points. The CORECO Metal Separator is a controlled temperature, continuous, indirectly heated, inclined, rotary sweat furnace. The furnace will operate at temperatures ranging from 1100 F to 1600 F. The furnace will have two emission points.

The raw scrap materials will contain combustible contaminants which will burn during the separation process. The smoky gases generated will be collected and passed through a cyclone to remove solid particles. The residual smoke particles and unburned hydrocarbons are then passed through the CORECO Hot Cyclone Afterburner. Here they are burned at temperatures of 1400 F to 1750 F. The retention time is 1.25 seconds.

At the discharge end of the furnace ashes, oxides, dirt, and other fine particulates will be collected and removed from the gas stream by a cyclone and bag house in series. The collected material will have a commercial value and will be sold.

Due to the low proposed emission rates, an opacity limit of no visible emissions will be placed on both emission points (SN-1 and SN-2). Demonstration of compliance with the opacity limit will be presumed to represent compliance with the mass emission rates. The permittee may operate this equipment 24 hours a day 365 days a year; however, the equipment may not be operated without the air pollution control equipment.

Presently Arkansas Aluminum operates three aluminum remelt reverb furnaces with only two furnaces operating simultaneously. Part-

ESTIMATED COST: \$ 90,000 TOTAL PROJECT: \$ 240,000

COMMENCEMENT OF INSTALLATION Apr. 1982 COMMENCEMENT OF OPERATION Aug. 1982

RECOMMENDATION Approval ASSIGNED PERMIT NUMBER 279-A (Mod)

AIR CODE X SIP X PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_

REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

- Continued -

iculate emissions from the furnaces are controlled by one baghouse. During chlorine fluxing operations, a bell is lowered over the furnace which collects virtually all chlorine fumes. The chlorine vapors are then scrubbed and clean air is emitted to the atmosphere.

Arkansas Aluminum also operates a turnings chip dryer. This unit removes some of the hydrocarbons before they are sent to the furnaces. Emissions are controlled by an after burner similar to the one proposed to control emissions from the separator.

#### EMISSION SUMMARY

Source	Composition	Allowable Rate
SN-1 afterburner	particulate hydrocarbons	6 pounds/hr trace
SN-2 separator baghouse	particulate	1 pound/hr
SN-3 furnace baghouse	particulate	3 pounds/hr
SN-4 scrubber	chlorine vapors	trace

MAILING LIST:

PUBLIC NOTICE - Mailed 5-21-82

Arkansas Aluminum Alloys, Inc. - 279-A (Mod)  
Hot Springs, AR

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 W. 3rd St.  
Little Rock, AR 72201

Sentimental-Record  
300 Spring  
Hot Springs, AR 71901

The Hon. T. J. Ellsworth, Mayor  
City of Hot Springs  
P. O. Box 700  
Hot Springs, AR 71901

The Hon. Earl R. Wells, Judge  
Garland County  
Garland County Courthouse  
Hot Springs, AR 71901

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\*Mrs. Jean Ledwidge  
Tri-Lakes Regional Library  
200 Woodbine  
Hot Springs, AR 71901

Anthony Pultz  
Executive Vice-President & Gen. Manager  
Arkansas Aluminum Alloys, Inc.  
P. O. Box 1410  
Hot Springs, AR 71901

\*Ellen D. Greeney  
105 Project Officer  
Environmental Protection Agency  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973), the Department of Pollution Control and Ecology gives the following notice:

Arkansas Aluminum Alloys proposes to install a CORECO Metal Separator at their Hot Springs mill for the purpose of reclaiming zinc and aluminum from each other and metals with higher melting points. The CORECO Metal Separator is a controlled temperature, continuous, indirectly heated, inclined, rotary sweat furnace. The furnace will operate at temperatures ranging from 1100 F to 1600 F. The furnace will have two emission points.

The raw scrap materials will contain combustible contaminants which will burn during the separation process. The smoky gases generated will be collected and passed through a cyclone to remove solid particles. The residual smoke particles and unburned hydrocarbons are then passed through the CORECO Hot Cyclone Afterburner. Here they are burned at temperatures of 1400 F to 1750 F. The retention time is 1.25 seconds.

At the discharge end of the furnace ashes, oxides, dirt, and other fine particulates will be collected and removed from the gas stream by a cyclone and bag house in series. The collected material will have a commercial value and will be sold.

Due to the low proposed emission rates, an opacity limit of no visible emissions will be placed on both emission points (SN-1 and SN-2). Demonstration of compliance with the opacity limit will be presumed to represent compliance with the mass emission rates. The permittee may operate this equipment 24 hours a day 365 days a year; however, the equipment may not be operated without the air pollution control equipment.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit applications and staff findings and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, or the Tri-Lakes Regional Library, 200 Woodbine, Hot Springs, AR.

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Public Notice  
Arkansas Aluminum Alloys, Inc., Hot Springs  
Page Two

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 21st day of May, 1982.

Jarrell E. Southall  
Director

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Frit Industries, Inc.

Walnut Ridge

CSN 38-0019 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL 2-5-82 AMENDED 4-5-82

SUMMARY:

Frit Industries of Walnut Ridge proposes to install two Dalamatric insertable filters and enclose the feed hopper on three sides at their granulated fertilizer process. This will reduce emissions from an estimated ten pounds per hour to less than one pound per hour. Each filter has 215 square feet of filter area and an air to cloth ratio of 8.1 to 1.0. Because of the low emission rates - both potential and proposed - no sampling program is required. Demonstration of compliance with a no visible emissions opacity limit will be presumed to represent compliance with the mass emission limits. Issuance of this permit will result in a reduction in emissions.

ESTIMATED COST: \$ 10,000 TOTAL PROJECT: \$ N/A

COMMENCEMENT OF INSTALLATION 5-31-82 COMMENCEMENT OF OPERATION 6-30-82

RECOMMENDATION Approval ASSIGNED PERMIT NUMBER 451-A (Mod)

AIR CODE \_\_\_\_\_ SIP X PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_

REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973), the Department of Pollution Control and Ecology gives the following notice:

Frit Industries of Walnut Ridge proposes to install two Dalamatric insertable filters and enclose the feed hopper on three sides at their granulated fertilizer process. This will reduce emissions from an estimated ten pounds per hour to less than one pound per hour. Each filter has 215 square feet of filter area and an air to cloth ratio of 8.1 to 1.0. Because of the low emission rates - both potential and proposed - no sampling program is required. Demonstration of compliance with a no visible emissions opacity limit will be presumed to represent compliance with the mass emission limits. Issuance of this permit will result in a reduction in emissions.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit applications and staff findings and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, or the County Clerk's office, Lawrence County Courthouse, Walnut Ridge, AR.

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 4th day of May, 1982.

Jarrell E. Southall  
Director

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MAILING LIST:

PUBLIC NOTICE - Mailed 5-4-82

Frit Industries, Inc. - 451-A (Mod)  
Walnut Ridge, AR

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 W. 3rd St.  
Little Rock, AR 72201

Walnut Ridge Times Dispatch  
120 Main  
Walnut Ridge, AR 72476

Tommy Holland, Mayor of Walnut Ridge  
P. O. Box 1  
Walnut Ridge, AR 72476

The Hon. Judge D. S. Foley  
Lawrence County Courthouse  
Walnut Ridge, AR 72476

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\*Vurnece Jones, County Clerk  
Lawrence County Courthouse  
Walnut Ridge, AR 72476

Frank M. Dabney, Plant Manager  
Frit Industries, Inc.  
P. O. Box 149  
Walnut Ridge, AR 72476

\*Ellen D. Greeney  
105 Project Officer  
Environmental Protection Agency  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Great Lakes Chemical Corp. - South Plant  
El Dorado

CSN 70-0037 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL 4-16-82 AMENDED \_\_\_\_\_

SUMMARY:

Great Lakes Chemical Corporation proposes to begin the manufacture of PHT<sub>4</sub> Diol, a brominated flame retardant, at their South Plant in El Dorado. They will make an initial production run lasting twenty-five days, and will make additional runs as required.

The process is based on the reaction of PHT<sub>4</sub> (tetrabromophthalic anyhydride) with DEG (diethylene glycol) and PO (propylene oxide) to form a diol. The existing PHT<sub>4</sub> facility will be modified and used to produce this product.

During the manufacturing of PHT<sub>4</sub> Dio1<sup>R</sup>, solvent vapors from the reaction and solvent strip phases of the diol process are condensed within a recovery system for recycle. During the reaction phase, residual gases from the recovery system are vented into a recirculating caustic scrubber (C-601) to control PO and solvent emissions. During the stripping phase, residual gases from the recovery system are exhausted directly to the atmosphere (SN-606 new). This phase will last 8.84 hours a day. There will be no emissions from SN-606 when the stripping phase is not operational.

The design of the PHT<sub>4</sub> facility enables Great Lakes to control discharges to surface water and major air emissions. The manufacturing area is curbed to contain spills and leaks. These materials together with housekeeping wash waters are collected and transferred to a waste sump where they are neutralized and pumped to an existing disposal well.

The tank farm is diked and sumped. Any material spilled or leaked is collected in the tank farm sump and pumped to the waste neutralization sump or recovered if this is possible.

Raw material unloading stations are curbed and sumped. Spills, leaks, and wash waters are collected and transported to the waste neutralization sump.

ESTIMATED COST: \$ N/A TOTAL PROJECT: \$ N/A

COMMENCEMENT OF INSTALLATION 5-28-82 COMMENCEMENT OF OPERATION 6-82

RECOMMENDATION Approval ASSIGNED PERMIT NUMBER 458-A (Mod)

AIR CODE X SIP \_\_\_\_\_ PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_

REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

- Continued -

The process has been designed to minimize organics contaminated aqueous process wastes. Moreover, the only product contaminated solid waste to be generated will result from cleanups, filter changes, and the like. Such solid waste will be disposed of in an off-site secure landfill. Empty raw material packaging such as PHT<sub>4</sub> bags will be disposed of in an off-site secure landfill.

Raw materials, PO and DEG, will be received and stored in rail cars. PHT<sub>4</sub> will be handled in 50# bags and stored in the existing central warehouse. The solvent will be received and stored in 55 gallon drums.

GREAT LAKES CHEMICAL CORPORATION -- SOUTH PLANT  
PHT<sub>4</sub> Diol Process  
EMISSION RATE SUMMARY

SOURCE	POLLUTANT	POTENTIAL EMISSIONS lb/hr	ALLOWABLE EMISSIONS lb/hr
SN-601	Toluene	0.25	0.11
	Nitrogen	12.30	12.30
	Propylene Oxide	trace*	trace*
	Diethelene Glycol	trace*	trace*
SN-606	Toluene	7.25	7.25
	Nitrogen	4.68	4.68
	Glycols	trace*	trace*

\* less than 0.1 pounds per hour

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Travenol Laboratories, Inc.

Mountain Home

CSN 03-0002 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL 3-15-82 AMENDED 4-5-82

SUMMARY:

Travenol Laboratories has proposed to begin manufacturing a product known as the CF Dialyzer, which is used in artificial kidney machines. The unit consists of a bundle of fibers sealed in a plastic casing. The fibers are purchased from an outside source and are wound and cut to size. The cut fibers are placed into a plastic case which is stamped with the date. The units are then dried to remove moisture and the fibers are sealed in place. The individual units are washed in a freon bath and then sent to the final assembly and packing area. The freon wash area is the major emission source in this process. The emissions from the washer will be controlled using a surface condenser and carbon absorber. The carbon absorber will remove 95% of the freon emissions. Travenol may operate this process twenty-four hours a day, three hundred and sixty-five days a year.

ESTIMATED COST: \$ N/A TOTAL PROJECT: \$ N/A  
COMMENCEMENT OF INSTALLATION 5-82 COMMENCEMENT OF OPERATION 11-82  
RECOMMENDATION Approval ASSIGNED PERMIT NUMBER 544-A (Mod)  
AIR CODE \_\_\_\_\_ SIP X PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_  
REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

EMISSION RATE SUMMARY  
 TRAVENOL LABORATORIES

Proposed Sources

<u>Pollutant</u>	<u>Source</u>	<u>Allowable Emission Rate</u>
Myristate Oil	Bundle Centrifuge	Trace
Cyclohexane	Capco Assembly Area	Trace
Methylene Chloride		Trace
Water Vapor	Vacuum Dryers	Trace
Hexamethylene Diisocyanate	Urethane Dispenser	0.0336 lb/hr
Methylene Chloride		0.54 lb/hr
Hexamethylene Diisocyanate	Orbital Centrifuge	0.000095 lb/hr
Myristate Oil	Drum Cutter Area	Trace
Freon TF	Freon Washer and Oven Area	6.0 lb/hr

Existing Sources

Freon 113	Degreaser	22.5 lb/hr
Ethylene Oxide	Sterilization Chamber	60 lb/hr for 1½ hrs three times a day
Particulate	Grinders	1.4 lb/hr
Particulate	#1 Boiler	2 lb/hr
Particulate	#2 Boiler	3 lb/hr

PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973), the Department of Pollution Control and Ecology gives the following notice:

Travenol Laboratories has proposed to begin manufacturing a product known as the CF Dialyzer, which is used in artificial kidney machines. The unit consists of a bundle of fibers sealed in a plastic casing. The fibers are purchased from an outside source and are wound and cut to size. The cut fibers are placed into a plastic case which is stamped with the date. The units are then dried to remove moisture and the fibers are sealed in place. The individual units are washed in a freon bath and then sent to the final assembly and packing area. The freon wash area is the major emission source in this process. The emissions from the washer will be controlled using a surface condensor and carbon absorber. The carbon absorber will remove 95% of the freon emissions. Travenol may operate this process twenty-four hours a day, three hundred and sixty-five days a year.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit applications and staff findings and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, or the Baxter County Public Library, West 7th St., Mountain Home, AR.

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 3rd day of May, 1982.

Jarrell E. Southall  
Director

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MAILING LIST:

PUBLIC NOTICE - Mailed 5-3-82

Travenol Laboratories, Inc. - 544-A (Mod)  
Mountain Home, AR

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 W. 3rd St.  
Little Rock, AR 72201

Baxter County Bulletin  
11 W. Seventh St.  
Mountain Home, AR 72653

The Hon. Ronald E. Pierce  
Mayor - City of Mountain Home  
City Hall  
720 S. Hickory  
Mountain Home, AR 72653

The Hon. Joe Dillard, Judge  
Baxter County Courthouse  
Mountain Home, AR 72653

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\*Ms. Margie Dahlke  
Baxter County Public Library  
West 7th St.  
Mountain Home, AR 72653

William A. Fennelly, Vice-Pres., Manuf.  
Travenol Laboratories, Inc.  
1900 Hwy. 201 N  
Mountain Home, AR 72653

\*Ellen D. Greeney  
105 Project Officer  
Environmental Protection Agency  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Sawyer Energy, Inc.

Shreveport, LA

CSN 46-0073 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL May 17, 1982 AMENDED \_\_\_\_\_

SUMMARY:

Sawyer Energy was granted Permit No. 660-A on May 24, 1981. This permit authorized Sawyer to construct and operate a gas treatment plant at their Fouke Field in Miller County. The allowable SO<sub>2</sub> emission rate was 50 lb/hr. Since the permit was issued, Sawyer has negotiated a contract to send the gas to a processing plant. They have never emitted any SO<sub>2</sub>.

Sawyer now proposes to install a flare at this field. This flare will burn vapors from the low pressure separator, stabilizer, and stock tanks. Once operation has begun the actual flow rates will be measured and a compressor will be sized to pick up the low pressure and stabilizer vapors for recovery.

ALLOWABLE EMISSION RATE: 10 LB/HR OF SO<sub>2</sub>

ESTIMATED COST: \$ N/A TOTAL PROJECT: \$ N/A

COMMENCEMENT OF INSTALLATION May 1982 COMMENCEMENT OF OPERATION May 1982

RECOMMENDATION Approval ASSIGNED PERMIT NUMBER 660-AR-1

AIR CODE X SIP \_\_\_\_\_ PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_

REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Charles F. Jones Contractors, Inc.  
Magnolia

CSN 88-0203 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL 4-21-82 AMENDED \_\_\_\_\_

SUMMARY:

Charles F. Jones Contractors, Inc. has applied for a permit to install a baghouse on the Cedar Rapids Hot Mix Asphalt Plant. The allowable emission rate from the baghouse will be 2.5 pounds per hour; the opacity limit will be no visible emissions. Demonstration of compliance with the opacity limit will be presumed to represent compliance with the mass emission limit. The asphalt plant shall not be allowed to operate without the control equipment functioning; no by-pass mechanism is allowed.

ESTIMATED COST: \$ 85,000 TOTAL PROJECT: \$ 225,000

COMMENCEMENT OF INSTALLATION 5-79 COMMENCEMENT OF OPERATION 6-82

RECOMMENDATION Approval/with qualifi- ASSIGNED PERMIT NUMBER 681-A  
cation

AIR CODE \_\_\_\_\_ SIP X PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_

REVIEWED BY MP APPROVED BY JDW APPROVAL DATE 5-28-82

PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973), the Department of Pollution Control and Ecology gives the following notice:

Charles F. Jones Contractors, Inc. has applied for a permit to install a baghouse on the Cedar Rapids Hot Mix Asphalt Plant. The allowable emission rate from the baghouse will be 2.5 pounds per hour; the opacity limit will be no visible emissions. Demonstration of compliance with the opacity limit will be presumed to represent compliance with the mass emission limit. The asphalt plant shall not be allowed to operate without the control equipment functioning; no by-pass mechanism is allowed.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit applications and staff findings and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, or the Magnolia Public Library, 220 E. Main, Magnolia, AR.

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 4th day of May, 1982.

Jarrell E. Southall  
Director

MAILING LIST:

PUBLIC NOTICE - Mailed 5-4-82

Charles F. Jones Contractor, Inc.  
Magnolia, AR

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 West 3rd St.  
Little Rock, AR 72201

Magnolia Banner-News  
134 S. Washington  
Magnolia, AR 71753

The Hon. Harry Kolb, Mayor  
City of Magnolia  
P. O. Box 361  
Magnolia, AR 71753

The Hon. R. W. Henderson, Judge  
Columbia County  
Columbia County Courthouse  
Magnolia, AR 71753

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\*Ms. Florence Bradley  
Magnolia Public Library  
220 E. Main  
Magnolia, AR 71753

Mr. Gus Von Bodungen, Chief  
Air Quality Division  
Office of Environmental Affairs  
Dept. of Natural Resources  
P. O. Box 44066  
Baton Rouge, LA 70804

Charles F. Jones  
Charles F. Jones Contractor, Inc.  
Rt. 1 Box 170  
Magnolia, AR 71753

\*Ellen D. Greeney  
105 Project Officer  
Environmental Protection Agency  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Riceland Foods, Inc., Stuttgart Soybean Division  
Stuttgart, AR

CSN 01-0051 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL 4-30-82 AMENDED \_\_\_\_\_

SUMMARY:

Riceland Foods proposes to build and operate a blending elevator at the Stuttgart Soybean Division. Soybeans will be delivered via a conveyor belt from a Riceland terminal elevator or they will be hauled by transport trucks and unloaded in a dump pit. After the beans are received, they will be classified according to their type, grade, and/or moisture content. The beans will be dried, cleaned, and/or blended and then sent to the processing plant.

All emissions from the blending elevator will be fugitive dust created by the handling of the soybeans. This dust will be controlled by thirteen (13) baghouses. These baghouses will be located on top of the elevator. The baghouses will draw contaminated air from 93 source points throughout the elevator. Duct work will be installed to direct the air to the proper baghouse.

Riceland will submit to this Department the actual design specifications of the baghouses as soon as they are available.

ESTIMATED COST: \$ 900,000 TOTAL PROJECT: \$ 1,267,000  
COMMENCEMENT OF INSTALLATION 6-1-82 COMMENCEMENT OF OPERATION 10-15-82  
RECOMMENDATION Approval ASSIGNED PERMIT NUMBER 682-A  
AIR CODE X SIP X PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_  
REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

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EMISSION RATE SUMMARY  
RICELAND FOODS -- STUTTART DIVISION

BLENDING ELEVATOR

SOURCE	POTENTIAL EMISSIONS lb/hr	ALLOWABLE EMISSIONS lb/hr	OPACITY
SN-A1	455	0.5	N.V.E.*
SN-A2	85	0.5	N.V.E.
SN-B1	230	0.5	N.V.E.
SN-B2	155	0.5	N.V.E.
SN-B3	500	0.5	N.V.E.
SN-C1	145	0.5	N.V.E.
SN-C2	145	0.5	N.V.E.
SN-C3	155	0.5	N.V.E.
SN-D1	270	0.5	N.V.E.
SN-D2	160	0.5	N.V.E.
SN-E1	380	0.5	N.V.E.
SN-E2	80	0.5	N.V.E.
SN-F	80	0.5	N.V.E.

\*No Visible Emissions

PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973), the Department of Pollution Control and Ecology gives the following notice:

Riceland Foods proposes to build and operate a blending elevator at the Stuttgart Soybean Division. Soybeans will be delivered via a conveyor belt from a Riceland terminal elevator or they will be hauled by transport trucks and unloaded in a dump pit. After the beans are received, they will be classified according to their type, grade, and/or moisture content. The beans will be dried, cleaned, and/or blended and then sent to the processing plant.

All emissions from the blending elevator will be fugitive dust created by the handling of the soybeans. This dust will be controlled by thirteen (13) baghouses. These baghouses will be located on top of the elevator. The baghouses will draw contaminated air from 93 source points throughout the elevator. Duct work will be installed to direct the air to the proper baghouse.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit applications and staff findings and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, or the Stuttgart Public Library, 404 S. Grand, Stuttgart, AR.

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 25th day of May, 1982.

Jarrell E. Southall  
Director

MAILING LIST:

PUBLIC NOTICE - Mailed 5-25-82

Riceland Foods, Inc., Stuttgart Soybean Div. - Permit No. 682-A  
Stuttgart

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 W. 3rd St.  
Little Rock, AR 72201

Stuttgart Daily Leader  
Box 531  
Stuttgart, AR 72160

The Hon. Leonard W. Cash  
Mayor - City of Stuttgart  
City Hall  
514 S. Main  
Stuttgart, AR 72160

The Hon. Bobby Ashcraft, Judge  
Arkansas County  
Arkansas County Courthouse  
Stuttgart, AR 72160

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\*Mrs. Sylvia Mills  
Stuttgart Public Library  
404 S. Grand  
Stuttgart, AR 72160

Mike Owens  
Riceland Foods, Inc.  
P. O. Box 927  
Stuttgart, AR 72160

\*Ellen D. Greeney  
105 Project Officer  
Environmental Protection Agency  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

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ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY  
DIVISION OF AIR POLLUTION CONTROL

SUMMARY REPORT RELATIVE TO PERMIT APPLICATION

SUBMITTED BY Archer-Daniels-Midland Company  
Little Rock

CSN 60-0061 CASE REFERENCES \_\_\_\_\_

FIRST SUBMITTAL Mar. 8, 1982 AMENDED Mar. 25, 1982

SUMMARY:

The Archer-Daniels-Midland Company has applied for a permit for their existing soybean processing plant located in Little Rock. The soybeans are unloaded into a receiving pit with emissions being controlled by a fabric filter at this stage. They are then taken to a storage tank and from the storage area they are moved to the grain dryer. Emissions from the dryer are controlled by an Aeroglide high efficiency cyclone with a 98% efficiency. The grain then goes through a cracker, dehull classifier, and a dehull aspirator. A combination cyclone and baghouse control emissions at this point. The grain leaves the aspirator and enters a conditioner and flaker. The high moisture of the grain at this stage keeps emissions to a minimum. The hulls leaving the aspirator are toasted and ground. Dust from the grinding stage is controlled by a cyclone and baghouse combination. After grinding, the hulls are sent to storage and are eventually sold and shipped out in trucks. After the grain is flaked it is sent to a soybean oil extraction unit. The extraction process uses hexane as a solvent. The solvent is recovered by evaporation and distillation. A small amount of solvent is vented to the atmosphere. After extraction the grain is dried in two dryers and then cooled. Cyclones control emissions during this stage. After cooling the grain passes through a size classifier and then a grinder. A baghouse controls emissions here. When the grinding is complete the grain is sent to storage to await shipment. Emissions from the loading of trucks and railcars are reduced by the use of a special spout which uses centrifugal force to trap the finer particles inside the stream of heavier particles. The loadout area will also be enclosed.

The opacity limit of SN-3 will be five percent. Opacity on all other sources will be no visible emissions. Demonstration of compliance with the opacity limits will be presumed to represent compliance with the mass emission limits.

ESTIMATED COST: \$ 212,000 TOTAL PROJECT: \$ 7,000,000  
COMMENCEMENT OF INSTALLATION Installed COMMENCEMENT OF OPERATION Operating  
RECOMMENDATION Approval/with qualification- ASSIGNED PERMIT NUMBER 683-A  
AIR CODE \_\_\_\_\_ SIP x PSD \_\_\_\_\_ NSPS \_\_\_\_\_ NESHAPS \_\_\_\_\_  
REVIEWED BY MAP APPROVED BY JDW APPROVAL DATE 5-28-82

ARCHER-DANIELS-MIDLAND COMPANY  
EMISSION SUMMARY

SOURCE	POLLUTANT	POTENTIAL		PROPOSED/EXISTING		OPACITY
		LB/HR	TON/YR	LB/HR	TON/YR	
SN-1 #1 Boiler	Part.	0.775	3.4	0.775	3.4	No visible emissions
	SO <sub>2</sub>	0.023	0.1	0.023	0.1	
	CO <sub>2</sub>	0.912	4.0	0.912	4.0	
	VOC	0.16	0.7	0.16	0.7	
	NO <sub>x</sub>	6.065	26.6	6.065	26.6	
SN-2 #2 Boiler	Part.	0.39	1.7	0.39	1.7	No visible emissions
	SO <sub>2</sub>	0.02	0.1	0.02	0.1	
	CO <sub>2</sub>	0.43	1.9	0.43	1.9	
	VOC	0.08	0.35	0.08	0.35	
	NO <sub>x</sub>	3.1	13.6	3.1	13.6	
SN-3 Grain Dryer	Part.	647	2838	32.4	142	5%
SN-4 Flaker	Part.	20.5	89.9	Less than 0.1	Less than 0.5	No visible emissions
SN-5 Hull Aspirator	Part.	4.3	18.8	0.71	0.162	No visible emissions
SN-6 Hull Transfer	Part.	3	13.2	0.025	0.108	No visible emissions
SN-7 #1 Meal Dryer	Part.	43.5	191	Less than 0.1	Less than 0.5	No visible emissions
SN-8 #2 Meal Dryer	Part.	43.5	191	Less than 0.1	Less than 0.5	No visible emissions
SN-9 Meal Cooler	Part.	52.3	229.5	2.4	10.5	No visible emissions
SN-10 Meal Grinder	Part.	58.14	255	0.07	0.3	No visible emissions
SN-11 Hexane Vent	VOC	0.13	0.57	0.13	0.57	No visible emissions

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SOURCE	POLLUTANT	POTENTIAL		PROPOSED/EXISTING		OPACITY
		LB/HR	TON/YR	LB/HR	TON/YR	
SN-12 Conditioner	Part.	3.6	15.8	Trace	Trace	No visible emissions
SN-13 Loadout	Part.	40.5	177.4	4.1	18.0	No visible emissions
SN-14 Onloading	Part.	160	700	0.16	0.7	No visible emissions

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PUBLIC NOTICE

Pursuant to Section 51.18, 40 CFR, Part 1 (Federal Register, Vol. 38, No. 116, Monday, June 18, 1973, the Department of Pollution Control and Ecology gives the following notice:

The Archer-Daniels-Midland Company has applied for a permit for their existing soybean processing plant located in Little Rock. The soybeans are unloaded into a receiving pit with emissions being controlled by a fabric filter at this stage. They are then taken to a storage tank and from the storage area they are moved to the grain dryer. Emissions from the dryer are controlled by an Aeroglide high efficiency cyclone with a 98% efficiency. The grain then goes through a cracker, dehull classifier, and a dehull aspirator. A combination cyclone and baghouse control emissions at this point. The grain leaves the aspirator and enters a conditioner and flaker. The high moisture of the grain at this stage keeps emissions to a minimum. The hulls leaving the aspirator are toasted and ground. Dust from the grinding stage is controlled by a cyclone and baghouse combination. After grinding, the hulls are sent to storage and are eventually sold and shipped out in trucks. After the grain is flaked it is sent to a soybean oil extraction unit. The extraction process uses hexane as a solvent. The solvent is recovered by evaporation and distillation. A small amount of solvent is vented to the atmosphere. After extraction the grain is dried in two dryers and then cooled. Cyclones control emissions during this stage. After cooling the grain passes through a size classifier and then a grinder. A baghouse controls emissions here. When the grinding is complete the grain is sent to storage to await shipment. Emissions from the loading of trucks and railcars are reduced by the use of a special spout which uses centrifugal force to trap the finer particles inside the stream of heavier particles. The loadout area will also be enclosed.

The opacity limit of SN-3 will be five percent. Opacity on all other sources will be no visible emissions. Demonstration of compliance with the opacity limits will be presumed to represent compliance with the mass emission limits.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice and the approval of the Commission on Pollution Control and Ecology.

Citizens wishing to examine the permit applications and staff findings and recommendations may do so by contacting the Department's central office, 8001 National Drive, Little Rock, or the Little Rock Public Library, 700 Louisiana, Little Rock, AR.

Interested or affected persons may also submit written comments on the proposal to the Department within thirty (30) days of this publication.

Dated this 21st day of May, 1982.

Jarrell E. Southall  
Director

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MAILING LIST:

PUBLIC NOTICE - Mailed 5-21-82

Archer-Daniels-Midland Co. - Permit No. 683-A  
Little Rock

The Arkansas Democrat  
E. Capitol & Scott Sts.  
Little Rock, AR 72201

The Arkansas Gazette  
112 West 3rd St.  
Little Rock, AR 72201

The Hon. Charles Bussey, Mayor  
City of Little Rock  
City Hall  
Markham at Broadway  
Little Rock, AR 72201

The Hon. William E. "Bill" Beaumont, Judge  
Pulaski County  
Pulaski County Courthouse  
Little Rock, AR 72201

Mark Johnson, Director  
Arkansas Dept. of Local Services  
#1 Capitol Mall  
Little Rock, AR 72201

\*Roberta A. Muelling  
Little Rock Public Library  
700 Louisiana  
Little Rock, AR 72201

Duane Stroh  
Archer-Daniels-Midland Co.  
Foot of East 9th Street & Bond Ave.  
Little Rock, AR 72203

\*Ellen D. Greeney  
105 Project Officer  
E.P.A.  
Region VI  
First International Bldg.  
1201 Elm St.  
Dallas, TX 75270

\*Receives Packet

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Arkansas Department of Pollution Control and Ecology  
Division of Air Pollution Control

Summary Report Relative to Permit Application

Submitted By: Fiber Resources, Inc.  
Pine Bluff

CSN: 350187

First Submittal: 5-19-82

Amended:

Summary: Fiber Resources (FR) proposes the installation of a fiber processing facility adjacent to the International Paper (IP) mill in Pine Bluff. Clarifier sludge, generated by IP and currently landfilled, would be transported to FR by truck. The first step in the process is the mechanical dewatering of the pulp from approximately 70 to 60 percent moisture. The removed water is returned to IP's water treatment facilities. The material is then fed to a natural gas fired dryer where the moisture is reduced to 20 percent. The dried pulp is then pelletized for use as boiler fuel, or hammer milled and bagged for use as mulch. The process contains only two emission points: cyclones which are used to collect the pulp discharge from the dryer, and a second one to control the pellet cooler.

ALLOWABLE EMISSION RATES  
(pounds per hour)

SN	Source	Particulate
1	Pulp Dryer Cyclone	2
2	Pellet Cooler Cyclone	1

Estimated Cost:

Total Project: \$350,000

Installation: 6-1-82

Operation: 9-1-82

Recommendation: Approval

Permit Number: 684-A

Code \*

Reviewed By: CDH Approved by: JDW Date Approved: 5-28-82

Arkansas Department of Pollution Control and Ecology  
Division of Air Pollution Control

Summary Report Relative to Permit Application

Submitted By: Fiber Resources, Inc.  
Pine Bluff

CSN: 350187

First Submittal: 5-19-82

Amended:

Summary: Fiber Resources (FR) proposes the installation of a fiber processing facility adjacent to the International Paper (IP) mill in Pine Bluff. Clarifier sludge, generated by IP and currently landfilled, would be transported to FR by truck. The first step in the process is the mechanical dewatering of the pulp from approximately 70 to 60 percent moisture. The removed water is returned to IP's water treatment facilities. The material is then fed to a natural gas fired dryer where the moisture is reduced to 20 percent. The dried pulp is then pelletized for use as boiler fuel, or hammer milled and bagged for use as mulch. The process contains only two emission points: cyclones which are used to collect the pulp discharge from the dryer, and a second one to control the pellet cooler.

ALLOWABLE EMISSION RATES  
(pounds per hour)

SN	Source	Particulate
1	Pulp Dryer Cyclone	2
2	Pellet Cooler Cyclone	1

Estimated Cost:

Total Project: \$350,000

Installation: 6-1-82

Operation: 9-1-82

Recommendation: Approval

Permit Number: 684-A

Code \*

Reviewed By: CDH Approved by: JDW

Date Approved: 5-28-82

Arkansas Department of Pollution Control and Ecology  
Division of Air Pollution Control

Summary Report Relative to Permit Application

Submitted By: Fiber Resources, Inc.  
Pine Bluff

CSN: 350187

First Submittal: 5-19-82

Amended:

Summary: Fiber Resources (FR) proposes the installation of a fiber processing facility adjacent to the International Paper (IP) mill in Pine Bluff. Clarifier sludge, generated by IP and currently landfilled, would be transported to FR by truck. The first step in the process is the mechanical dewatering of the pulp from approximately 70 to 60 percent moisture. The removed water is returned to IP's water treatment facilities. The material is then fed to a natural gas fired dryer where the moisture is reduced to 20 percent. The dried pulp is then pelletized for use as boiler fuel, or hammer milled and bagged for use as mulch. The process contains only two emission points: cyclones which are used to collect the pulp discharge from the dryer, and a second one to control the pellet cooler.

ALLOWABLE EMISSION RATES  
(pounds per hour)

SN	Source	Particulate
1	Pulp Dryer Cyclone	2
2	Pellet Cooler Cyclone	1

Estimated Cost:

Installation: 6-1-82

Recommendation: Approval

Code \*

Total Project: \$350,000

Operation: 9-1-82

Permit Number: 684-A

Reviewed By: CDH    Approved by: JDW    Date Approved: 5-28-82

Arkansas Department of Pollution Control and Ecology  
Division of Air Pollution Control

Summary Report Relative to Permit Application

Submitted By: Fiber Resources, Inc.  
Pine Bluff

CSN: 350187

First Submittal: 5-19-82

Amended:

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