STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0345-AR-4 AFIN: 58-00047

1. PERMITTING AUTHORITY:

Division of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

International Paper Company
3900 International Drive
Russellville, Arkansas 72802

3. PERMIT WRITER:

Jimmy Do

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Corrugated and Solid Fiber Box Manufacturing
NAICS Code: 322211

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
5/25/2023	Deminimis	Replace two fire pump engines and two fuel tanks with a fire pump and a tank

6. REVIEWER'S NOTES:

This de minimis is to replace two 283 hp fire water supply pumps (SN-07A and SN-07B) and two 150-gallon diesel fuel storage tanks with a 175 hp fire water supply pump (SN-09) and a 200-gallon diesel fuel storage tank.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The last inspection was conducted October 28, 2020. No areas of concern were identified. A review of ECHO revealed no additional CAA violations in the last twelve quarters.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N
If yes, were GHG emission increases significant? N

b) Is the facility categorized as a major source for PSD? N
- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
05	HAPs	NESHAP Subpart KK
08 and 09	HAPs	NESHAP Subpart ZZZZ
09	NOx, CO, and PM	NESHAP Subpart IIII

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
None				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N
(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Rule 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? N
If not, explain why.

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source

level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
None		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acrolein	0.23	0.0253	0.002	Y

c) H_2S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H_2S Standards Y
If exempt, explain: Facility does not emit H_2S

Pollutant	Threshold value	Modeled Concentration (ppb)	Pass?
H_2S	20 parts per million (5-minute average*)	N/A	N/A
	80 parts per billion (8-hour average) residential area	N/A	N/A
	100 parts per billion (8-hour average) nonresidential area	N/A	N/A

*To determine the 5-minute average use the following equation

$Cp = Cm\ (t_m/t_p)^{0.2}$ where

Cp = 5-minute average concentration
Cm = 1-hour average concentration
t_m = 60 minutes
t_p = 5 minutes

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	AP-42	Natural Gas: ($lb/10^6$ cf) PM: 14 SO_2: 0.6 NO_x: 140 CO: 35 VOC: 2.8 Diesel Fuel: ($lb/10^3$ gal) PM: 2 SO_2: 142S NO_x: 20 CO: 5	None	None	Emission factors are uncontrolled

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		VOC: .34 N_2O: .11 SO_3: 2S			
03	AP-42	2.2 lb/ton	Baghouse	99.9%	Emission factor uncontrolled
04	TANKS 3.1		None	None	
05	Material content	Material usage	None	None	
06	Vendor	0.005 gr/cf	Cyclone	not used	Emission factor controlled
08	AP-42	lb/MMBtu PM/PM_{10} = 0.0195 SO_2 = 0.000588 VOC = 0.0296 CO = 3.72 NO_x = 2.21			0.612 MMBtu/hr
09	AP-42	lb/MMBtu PM/PM_{10} = 0.20 SO_2 = 1.21E-05 VOC = 0.40 CO = 3.50 NO_x = 3.60			1.23 MMBtu/hr

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
None				

17. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
None				

18. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
05	VOC materials	93.3 tpy	Monthly	N
05	HAP materials	23 tpy	Monthly	Y
08 & 09	Hours of operation	500 hours	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01	5%	Reg.18. 501	Use of Natural Gas, Visual Inspection
	20%	Reg.19.503	Use of Diesel Fuel, Visual Inspection
03	5%	Reg.18.501	Visual Inspection
06 & 09	20%	Reg.19.503	Visual Inspection
08	5%	Reg.18.501	Visual Inspection

20. DELETED CONDITIONS:

Former SC	Justification for removal
15 and 21	SN-07A and SN-07B was removed

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
200-Gallon Diesel Storage Tank	A-2			<0.01				

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0345-AR-3

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name: International Paper Company
Permit Number: 0345-AR-4
AFIN: 58-00047

			Old Permit	New Permit
$/ton factor	28.14	Permit Predominant Air Contaminant	94.4	94.1
Minimum Fee $	400	Net Predominant Air Contaminant Increase	-0.3	
Minimum Initial Fee $	500			
		Permit Fee $	400	
Check if Administrative Amendment	☐	Annual Chargeable Emissions (tpy)	94.1	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	21.7	21.4	-0.3
PM_{10}	21.7	21.4	-0.3
$PM_{2.5}$	0	0	0
SO_2	38.7	38.4	-0.3
VOC	94.4	94.1	-0.3
CO	5	4.5	-0.5
NO_X	17.8	14.3	-3.5
Total HAPs	33.73	23.02	-10.71
Ammonia	8.41	8.41	0