



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISION

PERMITTEE

International Paper Company
Attn: Michael Carter
3001 Otto Street
Belleville, Illinois 62226

Application No.: 90090035

I.D. No.: 163010AEZ

Applicant's Designation:

Date Received: September 18, 2023

Subject: Box Manufacturer

Date Issued: January 8, 2025

Expiration Date: August 10, 2032

Location: 3001 Otto Street, Belleville, St. Clair County 62226

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

- One (1) 16.8 mmBtu/Hour Natural Gas-Fired Boiler and Heating System;
- One (1) Scrap/Trim Reclamation System with nine (9) Pick Up Points to one (1) Cyclone;
- One (1) Corrugator (#0982);
- One (1) Die Preparation Room;
- One (1) Corn Starch Storage Silo with Baghouse;
- One (1) Three-Color Flexo Folder Gluer (#5117);
- One (1) Three-Color Die Cutter; and
- One (1) Four-Color Flexo Folder Gluer (EVOL),

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This Federally Enforceable State Operating Permit (FESOP) is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons per year for Volatile Organic Material (VOM), 10 tons/year for any single Hazardous Air Pollutant (HAP), and 25 tons/year for any combination of such HAPs). As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission

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Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK.

- iii. To establish federally enforceable production and operating limitations, which restrict the maximum theoretical emissions of VOM to less than 100 tons per year so that the flexographic presses at this source are not subject to the control requirements of 35 Ill. Adm. Code 219.401 (Flexographic and Rotogravure Printing) and 35 Ill. Adm. Code Part 219 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes).
 - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permit(s) for this location.
- 2a. The 16.8 mmBtu/Hour Natural Gas-fired Boiler and Heating System, Scrap/Trim Reclamation System, Corrugator #0982, Die Preparation Room, Corn Starch Storage Silo are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
 - c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.
 - d. The Scrap/Trim Reclamation System, Corrugator #0982, Die Preparation Room, and Corn Starch Storage Silo are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification

commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

- e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
 E = Allowable emission rate; and,

- i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
 E = Allowable emission rate in kg/hr or lbs/hr.

3. The 16.8 mmBtu/Hour Natural Gas-fired Boiler is subject to 35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources). Pursuant to 35 Ill. Adm. Code 216.121, no person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hour) to exceed 200 ppm, corrected to 50 percent excess air.

4a. The use of cleaning solvents associated with the Die Preparation Room at this source is subject to material and control requirements of 35 Ill. Adm. Code 219.187 (Industrial Solvent Cleaning Operations). Pursuant to 35 Ill. Adm. Code 219.187(a) (1), on and after January 1, 2012:

Except as provided in 35 Ill. Adm. Code 219.187(a) (2), the requirements of 35 Ill. Adm. Code 219.187 apply to all cleaning operations that use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of VOM, in the absence of air pollution control equipment, from cleaning operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 219.187(a) (2). For purposes of 35 Ill. Adm. Code 219.187, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

b. Pursuant to 35 Ill. Adm. Code 219.187(b), no owner or operator of a source subject to 35 Ill. Adm. Code 219.187, other than manufacturers of coatings, inks, adhesives, or resins, must not perform any cleaning operation subject to 35 Ill. Adm. Code 219.187 unless the owner or operator meets the requirements in 35 Ill. Adm. Code 219.187(b) (1), (b) (2), or (b) (3). An owner or operator of a source that manufactures coatings, inks, adhesives, or resins must not perform any cleaning operation subject to 35 Ill. Adm. Code 219.187 unless the owner or

operator meets the requirements in at least one of the following subsections: 35 Ill. Adm. Code 219.187(b) (1), (b) (2), (b) (3), (b) (4), or (b) (5).

- i. The VOM content of the as-used cleaning solutions does not exceed the following emissions limitations:

	<u>kg/l</u>	<u>lb/gal</u>
All other cleaning operations not subject to a specific limitation in 35 Ill. Adm. Code 219.187(b) (1) (A) through (b) (1) (C)	0.050	0.42

- ii. The composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20°C (68°F);

- c. The Corrugator #0982, Three-Color Flexo Folder Gluer #5117, Three-Color Die Cutter, and Four-Color Flexo Folder Gluer EVOL are subject to 35 Ill. Adm. Code Part 219 Subpart F (Coating Operations). Pursuant to 35 Ill. Adm. Code 219.204(c) (2), except as provided in 35 Ill. Adm. Code 219.205, 219.207, 219.208, 219.212, 219.215 and 219.216, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for Paper Coating. Except as otherwise provided in 35 Ill. Adm. Code 219.204(a), (c), (g), (h), (j), (l), (n), (o), (q), and (r), compliance with the emission limitations is required on and after March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code Part 219 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 219.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 219.211(c) except where noted. (Note: The equation presented in 35 Ill. Adm. Code 219.206 shall be used to calculate emission limitations for determining compliance by add-on controls, credits for transfer efficiency, emissions trades and cross-line averaging.) The emission limitations are as follows:

	kg VOM/kg (lb VOM/lb) solids applied	kg VOM/kg (lb VOM/lb) coatings applied
On and after May 1, 2011		
i. Pressure sensitive tape and label surface coatings	0.20	(0.067)
ii. All other paper coatings	0.40	(0.08)

- d. The Die Preparation Room is subject to 35 Ill. Adm. Code Part 219 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code

219.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 219.302, 219.303, 219.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 219 Subpart G shall apply only to photochemically reactive material.

- 5a. This permit is issued based on the Corrugator #0982, Three-Color Flexo Folder Gluer #5117, Three-Color Die Cutter, and Four-Color Flexo Folder Gluer EVOL at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK because this source is not a major source of HAP, as defined in 40 CFR 63.2. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual HAP and 25 tons/year of any combination of such HAPs.
- b. This permit is issued based on the Corrugator #0982, Three-Color Flexo Folder Gluer #5117, Three-Color Die Cutter, and Four-Color Flexo Folder Gluer EVOL source not being subject to the NESHAP for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ. Pursuant to 40 CFR 63.3330(b), any web coating line that is a product and packaging rotogravure or wide-web flexographic press under 40 CFR 63 Subpart KK (National Emission Standards for The Printing and Publishing Industry) which is included in the affected source under 40 CFR 63 Subpart KK are not part of the affected source of 40 CFR 63 Subpart JJJJ.
- c. This permit is issued based on the Natural Gas-Fired Boiler and Heating System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD because this source is not or is part of, a major source of HAP as defined in 40 CFR 63.2.
- d. This permit is issued based on the Natural Gas-Fired Boiler at this source not being subject to the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ. Pursuant to 40 CFR 63.11195(e), a gas-fired boiler as defined in 40 CFR 63 Subpart JJJJJJ are not subject to 40 CFR 63 Subpart JJJJJJ and to any requirements in 40 CFR 63 Subpart JJJJJJ.
6. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

- 7a. This permit is issued based on the use of cleaning solvents associated with the Corrugator #0982, Three-Color Flexo Folder Gluer #5117, Three-Color Die Cutter, and Four-Color Flexo Folder Gluer EVOL at this source not being subject to the material and control requirements under 35 Ill. Adm. Code 219.187. Pursuant to 35 Ill. Adm. Code 219.187(a) (2), notwithstanding 35 Ill. Adm. Code 219.187(a) (1):
- i. The following cleaning operations are exempt from the requirements of Ill. Adm. Code 219.187(b), (c), (d), (e), (f), and (g):
 - A. Janitorial cleaning;
 - B. Stripping of cured coatings, inks, or adhesives;
 - C. Cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning.
 - ii. Cleaning operations for emission units within the following categories are exempt from the requirements of 35 Ill. Adm. Code 219.187(b), (c), (d), (e), (f), and (g):
 - A. Paper, film, and foil coating;
 - B. Miscellaneous industrial adhesives;
- b. This permit is issued based on the Corrugator #0982, Three-Color Flexo Folder Gluer #5117, Three-Color Die Cutter, and Four-Color Flexo Folder Gluer EVOL at this source not being subject to 35 Ill. Adm. Code Part 219 Subpart G. Pursuant to 35 Ill. Adm. Code 219.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 219.204 is required to meet the limitations of 35 Ill. Adm. Code Part 219 Subpart G (35 Ill. Adm. Code 219.301 or 219.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 219.204.
- c. This permit is issued based on the Three-Color Flexo Folder Gluer #5117 and Four-Color Flexo Folder Gluer EVOL at this source not being subject to the requirements of 35 Ill. Adm. Code 219.401 (Flexographic and Rotogravure Printing) because of the federally enforceable production and operating limitations, which restrict the maximum theoretical emissions of VOM from this source to less than 100 tons per year. Pursuant to 35 Ill. Adm. Code 219.402(a), except as otherwise provided in 35 Ill. Adm. Code 219.401, the limitations of 35 Ill. Adm. Code 219.401 apply to all flexographic and rotogravure printing lines at a subject source. Sources with flexographic and/or rotogravure printing lines are subject sources unless:
- i. Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines), at the source never exceed 90.7 Mg (100 tons)

per calendar year before the application of capture systems and control devices, or

- ii. A federally enforceable permit or SIP revision for all flexographic and rotogravure printing lines at a source requires the owner or operator to limit production or capacity of these printing lines to reduce total VOM emissions from all flexographic and rotogravure printing lines to 90.7 Mg (100 tons) or less per calendar year before the application of capture systems and control devices.
- d. This permit is issued based on the Corrugator #0982, Three-Color Flexo Folder Gluer #5117, Three-Color Die Cutter, and Four-Color Flexo Folder Gluer EVOL at this source not being subject to 35 Ill. Adm. Code Part 219 Subpart JJ (Miscellaneous Industrial Adhesives). Pursuant to 35 Ill. Adm. Code 219.900(b) (1) (E), notwithstanding 35 Ill. Adm. Code 219.900(a):

The requirements of this 35 Ill. Adm. Code Part 219 Subpart JJ shall not apply to miscellaneous industrial adhesive application operations associated with the following:

Paper, film, and foil coatings.

- e. This permit is issued based on the corrugators and ink blender not being subject to the control requirements of 35 Ill. Adm. Code 219 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes) because the source has maximum theoretical emissions of less than 100 tons per calendar year of VOM. This is a result of the federally enforceable production and operating limitations of this permit, which restrict the maximum theoretical emissions of VOM emissions to less than 100 tons per year.
- 8a. Pursuant to 35 Ill. Adm. Code 219.187(c), the owner or operator of a subject source shall demonstrate compliance with 35 Ill. Adm. Code 219.187 by using the applicable test methods and procedures specified in 35 Ill. Adm. Code 219.187(g) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 219.187(e).
- b. Pursuant to 35 Ill. Adm. Code 219.187(d), the owner or operator of a source subject to 35 Ill. Adm. Code 219.187 shall comply with the following for each subject cleaning operation. Such requirements are in addition to work practices set forth in 35 Ill. Adm. Code 219.187(b) (4) and (b) (5), as applicable:
 - i. Cover open containers and properly cover and store applicators used to apply cleaning solvents;
 - ii. Minimize air circulation around the cleaning operation;
 - iii. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;

iv. Utilize equipment practices that minimize emissions.

- c. Pursuant to 35 Ill. Adm. Code 219.206, limitations in terms of kg (lbs) of VOM emissions per l (gal) of solids as applied at each coating applicator shall be determined by the following equation:

$$S = \frac{C}{1 - (C/D)}$$

where:

S = The limitation on VOM emissions in terms of kg VOM/l (lbs VOM/gal) of solids;

C = The limitation on VOM emissions in terms of kg/l (lbs/gal) of coating (minus water and any compounds which are specifically excluded from the definition of VOM) specified in 35 Ill. Adm. Code 219.204;

D = The density of VOM in the coating. For the purposes of calculating S, the density is 0.882 kg VOM/l VOM (7.36 lbs VOM/gal VOM).

- d. Pursuant to 35 Ill. Adm. Code 219.218(a), on and after May 1, 2011, every owner or operator of a source subject to the requirements of 35 Ill. Adm. Code 219.204(c) shall:
- i. Store all VOM-containing cleaning materials in closed containers;
 - ii. Ensure that mixing and storage containers used for VOM-containing materials are kept closed at all times except when depositing or removing those materials;
 - iii. Minimize spills of VOM-containing cleaning materials;
 - iv. Convey VOM-containing cleaning materials from one location to another in closed containers or pipes; and
 - v. Minimize VOM emissions from the cleaning of storage, mixing, and conveying equipment.
- e. Pursuant to 35 Ill. Adm. Code 219.402(e), any owner or operator of any flexographic or rotogravure printing line that is exempt from any of the limitations of 35 Ill. Adm. Code 219.401 because of the criteria in 35 Ill. Adm. Code 219.402 is subject to the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 219.404(b) and (f), as applicable.
- 9a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.

- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse associated with the corn starch storage silo such that the baghouse is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
 - c. The Boiler and Heating System shall only be operated with natural gas as the fuel. The use of any other fuel in the Boiler or Heating System may require that the Permittee first obtain a construction permit from the Illinois EPA and perform stack testing to verify compliance with all applicable requirements.
- 10a. Emissions from and operation of the Boiler and Heating System shall not exceed the following limits:

<u>Item of Equipment</u>	<u>(mmBtu/Hr)</u>	<u>Pollutant</u>	<u>Emission Factor (lb/mmBtu)</u>	<u>Emissions (Tons/Mo)</u>	<u>(Tons/Yr)</u>
Boiler	16.8	CO	0.082	0.60	6.03
		NO _x	0.098	0.72	7.21
		PM	0.007	0.06	0.55
		SO ₂	0.001	0.01	0.07
		VOM	0.005	0.04	0.40

These limits are based on the maximum firing rate (16.8 mmBtu/hour), natural gas heat content of 1,000 Btu/scf, 8,760 hours of operation, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, July 1998).

- b. Emissions from and operations of the two (2) Flexo Folder Gluers and the Three-Color Die Cutter (DC) shall not exceed the following limits (combined):

<u>Materials</u>	<u>Coverage (lbs/MMin²)</u>	<u>Throughput (Msf/Yr)</u>	<u>Pollutant</u>	<u>Weight Percent (%. by Wt.)</u>	<u>Emissions (Tons/Mo)</u>	<u>(Tons/Yr)</u>
Printing Ink	2.5	5,150,880	VOM	0.69	1.46	6.40
			HAPs	0.51	1.08	4.73
Adhesives	1.0	5,150,880	VOM	2.10	1.78	7.79
			HAPs	0.00	0.0	0.00
Totals:			VOM			14.19
			HAPs			4.73

These limits are based on the maximum operating rate and the maximum VOM contents of the inks, coatings, and adhesives. The VOM and HAP emissions from printing operations shall be determined from the following equation:

$$E = \sum(M_i \times C_i),$$

Where:

E = VOM or HAP emissions (tons);

M_i = VOM or HAP-containing materials usage (tons);

C_i = VOM or HAP content of the materials (% by weight).

- c. Emissions from and operation of the Corrugator (#0982) shall not exceed the following limits:

	Throughput		HAP Emissions		VOM Emissions	
	(Msf/Mo)	(Msf/Yr)	(lbs/hr)	(Tons/Yr)	(lbs/hr)	(Tons/Yr)
	429,240	5,150,880	1.43	6.27	4.45	19.5

Process	Throughput		Pollutant	Emission Factor (lbs/Msf)	Emissions	
	(Msf/Mo)	(Msf/Yr)			(Lbs/hr)	(Tons/Yr)
Corrugator	429,240	5,150,880	VOM	0.0047	2.76	12.1
			Combined HAPS	0.000065	1.62	7.08
			Single HAP	0.000078	1.18	5.15*

* Methanol

These limits are based on the maximum operating rate of the corrugator, operating 8,760 hrs/yr, and emission factors developed through an emissions study conducted at another similar source, which is owned by the Permittee.

- d. Emissions from and operation of the Scrap/Trim Reclamation System (Cyclone Separator) shall not exceed the following limits:

Process	Throughput		Pollutant	Emission Factor (lbs/Ton)	Emissions	
	(Tons/Mo)	(Tons/Yr)			(Lbs/hr)	(Tons/Yr)
Scrap Reclamation	4,000	48,000	PM	2.10	11.5	50.4
			PM ₁₀	0.36	1.97	8.64
			PM _{2.5}	0.006	0.329	1.44

These limits are based on the maximum throughput and the manufacturer's emission factor.

- e. This permit is issued based on negligible emissions of particulate matter from cornstarch storage silo. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- f. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

- 11a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Conditions 12 and 13 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
12. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 13a. Pursuant to 35 Ill. Adm. Code 219.187(g) (1), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 219.187 must be conducted by the owner or operator within 90 days after a request by the Illinois EPA, or as otherwise specified in 35 Ill. Adm. Code 219.187. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during the testing;

- b. Pursuant to 35 Ill. Adm. Code 219.187(g) (2), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 219.187 (b) (1), and to determine the VOM content of cleaning solvents and cleaning solutions, must be conducted, as follows:
 - i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 219.105(a) must be used, provided; however, Method 24, must be used to demonstrate compliance; or
 - ii. The manufacturer's specifications for VOM content for cleaning solvents may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 219.105(a); provided, however, Method 24 must be used to determine compliance; In the event of any inconsistency between a Method 24 test and the manufacturer's specifications, the Method 24 test must govern;
- c. Pursuant to 35 Ill. Adm. Code 219.187(g) (3), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions must be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 219.110.
- d. Pursuant to 35 Ill. Adm. Code 219.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 219.105 to establish the records required under 35 Ill. Adm. Code 219.211.
- 14. Pursuant to 40 CFR 63.10(b) (3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA

guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

15. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 16a. Pursuant to 35 Ill. Adm. Code 219.187(e)(3), all sources complying with 35 Ill. Adm. Code 219.187 under 35 Ill. Adm. Code 219.187(b)(1) must collect and record the following information for each cleaning solution used:
 - i. For each cleaning solution that is prepared at the source with automatic equipment:
 - A. The name and identification of each cleaning solution;
 - B. The VOM content of each cleaning solvent in the cleaning solution;
 - C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
 - D. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - E. The VOM content of the as-used cleaning solution, with supporting calculations; and
 - F. A calibration log for the automatic equipment, detailing periodic checks;
 - ii. For each batch of cleaning solution that is not prepared at the source with automatic equipment:
 - A. The name and identification of each cleaning solution;
 - B. Date, time of preparation, and each subsequent modification of the batch;
 - C. The VOM content of each cleaning solvent in the cleaning solution;

- D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
 - E. The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 219.105(a).
- b. Pursuant to 35 Ill. Adm. Code 219.187(e)(4), all sources complying with 35 Ill. Adm. Code 219.187 under 35 Ill. Adm. Code 219.187(b)(2) must collect and record the following information for each cleaning solution used:
- i. The name and identification of each cleaning solution;
 - ii. Date, time of preparation, and each subsequent modification of the batch;
 - iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 219.110;
 - iv. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
 - v. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 219.110;
- c. Pursuant to 35 Ill. Adm. Code 219.187(e)(10), all records required by 35 Ill. Adm. Code 219.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.
- d. Pursuant to 35 Ill. Adm. Code 219.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 219.204 other than 35 Ill. Adm. Code 219.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), (a)(2)(D), or (r) and complying by means of 35 Ill. Adm. Code 219.204 must comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 219.106, or on and after the initial start-up date, the owner or operator of a subject coating line must collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:

- i. The name and identification number of each coating as applied on each coating line;

- ii. The weight of VOM per volume of each coating (minus water and any compounds that are specifically exempted from the definition of VOM) as applied each day on each coating line;
 - iii. For coating lines subject to the limitations of 35 Ill. Adm. Code 219.204(c) (2), the weight of VOM per weight of solids (or the weight of VOM per weight of coatings, as applicable) in each coating as applied each day on each coating line, and certified product data sheets for each coating;
- e. Pursuant to 35 Ill. Adm. Code 219.211(g) (3), on and after a date consistent with 35 Ill. Adm. Code 219.106(c), or on and after the initial startup date, whichever is later, the owner or operator of a coating line subject to the requirements of 35 Ill. Adm. Code 219.218 must comply with the following:

Maintain at the source all records required by 35 Ill. Adm. Code 219.211(g) for a minimum of three years from the date the document was created and make those records available to the Illinois EPA upon request.

- 17a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the baghouse associated with the corn starch storage silo:
 - A. Records for periodic inspection of the baghouse associated with the corn starch storage silo with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Amount of usage of inks, additives, clean-up solvents and other VOM or HAP-containing materials used (tons/month and tons/year);
 - iii. VOM and HAP content of materials used (weight %);
 - iv. Natural gas usage, (million ft³/month and million ft³/year);
 - v. Amount of Scrap Reclaimed (tons/month and tons/year);
 - vi. Corrugator throughput (ft²/month and ft²/year); and
 - vii. Monthly and annual CO, NO_x, PM, PM10, SO₂, VOM and HAP emissions from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by Condition 16(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for

inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

18. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

19a. Pursuant to 35 Ill. Adm. Code 219.187(e) (2) (B), all sources subject to 35 Ill. Adm. Code 219.187 must:

At least 30 calendar days before changing the method of compliance between 35 Ill. Adm. Code 219.187(b) (1), (b) (2), (b) (4), or (b) (5) and 35 Ill. Adm. Code 219.187(b) (3), notify the Illinois EPA in writing of the change. The notification must include a demonstration of compliance with the newly applicable subsection;

b. Pursuant to 35 Ill. Adm. Code 219.187(e) (9), all sources subject to 35 Ill. Adm. Code 219.187(b) and (d) must notify the Illinois EPA of any violation of 35 Ill. Adm. Code 219.187(b) or (d) by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation;

c. Pursuant to 35 Ill. Adm. Code 219.211(c) (3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 219.204 other than 35 Ill. Adm. Code 219.204(a) (1) (B), (a) (1) (C), (a) (2) (B), (a) (2) (C), (a) (2) (D), or (r) and complying by means of 35 Ill. Adm. Code 219.204 must comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 219.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:

i. Any record showing violation of 35 Ill. Adm. Code 219.204 must be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.

ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 219.204 to 35 Ill. Adm. Code 219.205 or 35 Ill. Adm. Code 219.207, the owner or operator must comply with all requirements of 35 Ill. Adm. Code 219.211(d) (1) or (e) (1), as applicable. Upon changing the method of compliance from 35 Ill. Adm. Code 219.204 to 35 Ill. Adm. Code 219.205 or 35 Ill. Adm. Code 219.207, the owner or operator must comply with

all requirements of 35 Ill. Adm. Code 219.211(d) or (e), as applicable.

- d. Pursuant to 35 Ill. Adm. Code 219.211(g) (2), on and after a date consistent with 35 Ill. Adm. Code 219.106(c), or on and after the initial startup date, whichever is later, the owner or operator of a coating line subject to the requirements of 35 Ill. Adm. Code 219.218 must comply with the following:

Notify the Illinois EPA of any violation of 35 Ill. Adm. Code 219.218 by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation.

- e. Pursuant to 35 Ill. Adm. Code 219.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code Part 219 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 219.208(b) shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.
- 20a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

i. Via mail or overnight delivery:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. In addition to the paper copy of the test notifications, written test plan and final test report, an electronic copy of the test notifications, written test plan and final test report shall be sent to:

epa.boa.smu@illinois.gov

It should be noted this permit has been revised so as to incorporate Construction Permit #23090012, as well as the removal of one (1) Two-Color Die Cutter (#2444), one (1) Three-Color Die Cutter (#2415), and one (1) Three-Color Flexo Folder Gluer (#5054). The existing Cyclone Separator also reflects a new PM emissions factor.

If you have any questions on this permit, please call Alicia Huntley at 217/785-0392.

William D. Marr / AR

William D. Marr
Manager, Permit Section
Bureau of Air

WDM:ALH:tan

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corrugated Paper Products Manufacturing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (100 tons/year for VOM, 10 tons/year for any single HAP and 25 tons/year for any combination of such HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is used, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)							Single <u>HAP</u>	Comb. <u>HAPs</u>
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>PM₁₀</u>	<u>PM₂₅</u>	<u>SO₂</u>	<u>VOM</u>		
Natural Gas Unit (Boiler)	6.03	7.21	0.55	0.55	0.55	0.70	0.40		
Flexo Folder Gluers and Die-Cutter							14.19	----	4.73
Corrugator							12.10	5.15*	7.08
Scrap/Trim Reclamation System (Cyclone Separator)			50.4	8.64	1.44				
Starch Storage Silo	--	--	0.44	----	----	--	--	--	--
Totals	6.03	7.21	51.39	8.64	1.44	0.70	26.69	5.15	11.81

* Methanol

ALH:tan



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS
FOR
OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or with applicable local laws, ordinances and regulations.
2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under 35 Ill. Adm. Code 201.166.
3.
 - a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.
 - b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.
4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:
 - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;
 - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;
 - d. To obtain and remove samples of any discharge or emission of pollutants; and
 - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring or recording any activity, discharge or emission authorized by this permit.
5. The issuance of this permit:
 - a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are located;

- b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the facilities;
 - c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and
 - d. In no manner implies or suggests that the Illinois EPA (or its officers, agents, or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.
 7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.
 8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. These records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.
 9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur, which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:
 - a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;
 - b. Maintain the following records for a period of no less than two (2) years:
 - i. Date and duration of malfunction, breakdown, or startup,
 - ii. Full and detailed explanation of the cause,
 - iii. Contaminants emitted and an estimate of quantity of emissions,
 - iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and
 - v. Measures taken to reduce future occurrences and frequency of incidents.
 10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.
 11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

PERMIT CALCULATION SHEET

Facility: International Paper Company	I.D. 163010AEZ
Anal. Eng.: ALH Date: 09/28/2023	P.N.: 90090035
Rev. Eng.: Date:	Date Rec.: 09/18/2023

Section 1: Identify noted File Traveler Sheet and ICEMAN source information that may affect permit issuance; if active VN indicate if Compliance is ok with issuance of a permit or NOI/Denial letter:

**The facility indicates that there be increase in capacity of the corrugator, and by looking at table B-1, there are significant increases for several pollutants. Source has completed modeling; IEPA memo dated 11/7/2024.

LEGAL:	None
FOS FLAG:	None
CROPA:	None
Other	This is an EJ source- EJ Review Request #6478

Section 2: Identify type of permit and brief summary of application/permit history if submitted in response to a NOI/Denial letter or to request revision to an existing permit:

This source has submitted an application for a FESOP Revision to incorporate Construction Permit #23090012. The current FESOP Revision was issued 08/10/2022 and expires on 8/10/2032.

IP owns and operates a corrugated box manufacturing facility in Belleville, St. Clair County. Primary operations include corrugating, printing, folding, and gluing material. The source wishes to:

- Construct a new Three-Color Die Cutter (DC) - will replace 2 existing die cutters and a flexo folder gluer.
- Modify existing corrugator to increase production capacity.
- Update PTE to PM for existing Cyclone separator to reflect new PM emissions factor (no modifications to cyclone separator) - was exempt before b/c it was <0.1 lb/hr / 0.44 tons/yr.

The facility will have increases in emissions of PM₁₀ and PM_{2.5}, as well as hazardous air pollutants (HAPs).

Section 3: Description of the source with an itemized list of emission units and pollution control equipment included in the application. If for an operating permit, list all existing and proposed units and equipment that the operating permit will need to address:

Existing:

- One (1) 16.8 mmBtu/Hour Natural Gas-Fired Boiler and Heating System;
- One (1) Scrap/Trim Reclamation System with nine (9) Pick Up Points to one (1) Cyclone;
← update PM limit for cyclose separator to reflect new PM emission factor (no longer exempt)
- One (1) Corrugator (#0982); ← modified to increase production capacity from 900 to 1,200 ft/min
- One (1) Die Preparation Room;
- One (1) Corn Starch Storage Silo with Baghouse;
- One (1) Three-Color Flexo Folder Gluer (#5117);
- ~~One (1) Two-Color Die Cutter (#2444);~~
- ~~One (1) Three-Color Die Cutter (#2415);~~
- ~~One (1) Three-Color Flexo Folder Gluer (#5054);~~ and
- One (1) Four-Color Flexo Folder Gluer (EVOL)

New:

- One (1) Three-Color Die Cutter

Section 4: Identify the proposed type(s) and maximum actual operating quantities and rates of pollutant containing materials to be used/processed/produced that will be included in permit:

Natural Gas Throughput: 16.8 mmscf/hr
 Flexo Folder Gluers: 961,690 mmin²/yr ink and 961,690 mmin²/yr adhesives
 Die Cutter: 311,576 mmin²/yr ink and 311,576 mmin²/yr adhesives
 Corrugator: 2,580 10⁶ft²/yr
 Cyclone: 48,000 tons/yr

Section 5: Identify the proposed type(s), quantities and rates of maximum actual operating emissions for the source to be included in the permit including the units/controls proposed. Identify the source(s) of the emission factors used:

Cyclone Separator: The Facility requests that PM limits for the Scrap/Trim Reclamation System be increased to reflect the current PTE calculations. The use of newly published emissions factors from the National Council for Air and Stream Improvement (NCASI) results in an increase in PM potential emissions from the Cyclone Separator in excess of the permitted limit of 9.41 tpy.

Section 6: Identify the source's potential-to-emit (PTE) including any proposed additions/revisions. Show calculations or reference where in application or file PTE is satisfactorily presented. Emissions from 35 IAC 201.146 exempt units must be included in PTE calculations:

Existing Limits per 2022 FESOP:

Emission Unit	E M I S S I O N S (Tons/Year)						
	CO	NO _x	PM	SO ₂	VOM	Single HAP	Combined HAPs
Boiler and Heating System	6.03	7.21	0.55	0.07	0.40		
Flexo Folder Gluers					18.39	6.27	6.27
Die Cutters					5.96	2.04	2.04
Corrugator			7.31		9.75		
Scrap Reclamation (Cyclone Separator)			24.52				
Storage Silo	--	--	0.44	--	--	--	--
Totals	6.03	7.21	32.82	0.07	34.50	8.31	8.31

Proposed PTE, per Table B-1 in application:

Emission Unit	E M I S S I O N S (Tons/Year)						
	CO	NO _x	PM	SO ₂	VOM	Single HAP	Combined HAPs
Natural Gas Unit (Boiler)	6.03	7.21	0.55	0.70	0.40		
Flexo Folder Gluers					15.8	5.41	5.41
Die-Cutter					16.6	5.66	5.66
Corrugator					19.5	6.27	6.27
Cyclone Separator			50.4				
Starch Storage Silo			0.44				
Totals	6.03	7.21	51.39	0.70	52.30	17.34	17.34

Based on 8,760 hrs/yr

CALCULATION SHEET

Per Modeling, limits for Construction Permit have been revised as follows:

<u>Emission Unit</u>	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>PM₁₀</u>	<u>PM_{2.5}</u>	<u>SO₂</u>	<u>VOM</u>	<u>Single HAP</u>	<u>Comb. HAPs</u>
Natural Gas Unit (Boiler)	6.03	7.21	0.55	0.55	0.55	0.70	0.40		
Flexo Folder Gluers and Die-Cutter							14.19	----	4.73
Corrugator							12.10	5.15*	7.08
Scrap/Trim Reclamation System (Cyclone Separator)			50.4	8.64	1.44				
Starch Storage Silo	--	--	0.44	----	----	--	--	--	--
Totals	6.03	7.21	51.39	8.64	1.44	0.70	26.69	5.15	11.81

* Methanol

Section 7: List potentially applicable State and Federal (NSPS and NESHAP) regulations and indicate if application demonstrated those regulations would not be violated by construction and/or operation of equipment/units/processes in application:

- NSPS (New Source Performance Standards) - 40 CFR 60
Not subject.
- NESHAP (National Emission Standards for Hazardous Air Pollutants) - 40 CFR 61
Not subject.
The Facility is an area source of HAP, so is subject to 40 CFR Part 63 requirements.
- State - IPCB (Illinois pollution Control Board) - Title 35
Title 35 IAC Subtitle B Chapter I Part 201
35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions)
35 Ill. Adm. Code Part 212 Subpart.K (Fugitive Particulate Matter)
35 Ill. Adm. Code Part 212 Subpart L (PM Emissions from Process Emission Units)
35 Ill. Adm. Code Part 216 Subpart B (Fuel Combustion Emission Sources)
35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material)
35 Ill. Adm. Code Part 219 Subpart E (Solvent Cleaning)
35 Ill. Adm. Code Part 219 Subpart F (Coating Operations)

Section 8: Conclusions and recommendations. Indicate your final recommendation (e.g., NOI, denial, issue permit with conditions, etc.) and indicate reason(s) for that action:

It is recommended that this FESOP Revision to incorporate Construction Permit #23090012 be issued.

Permit Applicant: International Paper Company

ID#: 163010AEZ; Application#: 90090035 / 23090012

Date received: 09/18/2023; 30th day (NOI. deadline): 10/18/2023; 90th day: 12/17/2023

Analyst: ALH; Date Checklist Completed: 09/28/2023 – 11/12/2024

Permit Application Completeness Screening Questions	Yes/No/NA
1. Does the application include a cover letter or project narrative that describes what the applicant is requesting a permit for (e.g., construct/operate two tanks, etc.)?	Y
2. Have the applicable signature application forms (APC 200P/628/629, etc.) been completed and signed and dated by the applicant?	Y
3. For a construction permit application, was correct construction permit fee paid? a. If no fee or incorrect fee paid, call applicant, and tell them to submit it and revised 197-FEE Form within one week's time. If not received within one week, prepare an Additional Fee Letter.	Y
4. For a construction permit application, does the APC-200P/628/629 form indicate if the emission unit has already been constructed? If it does, does it indicate date constructed? Denial will be needed if already constructed.	N/A
5. If a construction permit required testing prior to issuance of an operating permit: a. Have the required test results been received by the IEPA? b. Has Compliance Section reviewed the test results or have you requested their review of the test results? c. Did the test results indicate compliance with limits?	N/A
6. For existing sources requesting revision, does ICEMAN show current permit(s) for source issued to the same applicant identified on the form(s) in 2 above?	Y
7. Does the application indicate or can you determine what the potential to emit (PTE) is for the source (including HAPs), including requested modifications?	Y
8. Does the application state or can you determine if the subject project's process, equipment or source is subject to the NSPS in 40 CFR Part 60, or NESHAP in 40 CFR Parts 61 and 63, or RACT in 35 IAC 218/219 Subparts AA-TT?	Y
9. Does the application propose and clearly identify the annual and short-term emission limits and associated material throughput/usage limits and emission factors to be included in their new/revised permit?	Y
10. a. Does application identify county and township and SIC code of source? If not, call applicant and tell them to submit that information. b. Is source subject to either 212.302(a) or (b)? If so, does application describe how source will comply with the additional PM requirements?	Y N/A
11. If source is in an EJ area, is EJ outreach complete and EJ outreach completion email from EJ officer in file?	Y
12. If permit was due today, could you write an enforceable permit with application?	Y
13. Does the application request a change of operating permit from a CAAPP Title V or FESOP to a Lifetime Operating Permit?	N

If a No answer in Boxes 1-12 or Yes answer in Box 13, or not clear what the appropriate response is to a question, discuss the application with your supervisor. 11022015.

