

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

PERMITTEE

Georgia Pacific Corrugated II, LLC  
Attn: Mike Augustine  
900 S. Old Route 66  
Mount Olive, Illinois 62069

Application No.: 12080011

I.D. No.: 117823AAD

Applicant's Designation:

Date Received: August 7, 2012

Subject: Corrugated Box Manufacturing

Date Issued:

Expiration Date:

Location: 900 S. Old Route 66, Mount Olive, Macoupin County

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) Starch Silo (EP-1) Controlled by a Baghouse  
Two (2) 14.645 mmBtu/hour Natural Gas/Distillate Fuel Oil-Fired Boilers (No. 1 and 2);  
Six (6) Converting Lines with Flexographic Printing Presses; and  
One (1) Paper Scrap Collection System (EP-4) with Baler and Cyclone Collection System

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 is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/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 requirements 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 Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK and the NESHAP for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.
- 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. 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. Pursuant to 35 Ill. Adm. Code 212.206, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lbs/mmBtu).
- d. 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).
4. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
5. Pursuant to 35 Ill. Adm. Code 215.301, 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 source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K (Use of Organic Material) shall apply only to photochemically reactive material.
6. 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/hr) to exceed 200 ppm, corrected to 50 percent excess air.

- 7a. This permit is issued based upon the flexographic printing not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63 Subpart KK. This is a result of the federally enforceable limitations of this permit restricting potential HAP emissions to below major source threshold levels defined in 40 CFR 63.2.
- b. This permit is issued based upon the source not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ. Pursuant to 40 CFR 63.3290, the provisions of 40 CFR 63 Subpart JJJJ apply to each new and existing facility that is a major source of HAP, as defined in 40 CFR 63.2, at which web coating lines are operated.
- c. This permit is issued based on the boilers at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (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. Pursuant to 40 CFR 63.11237, gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- 8a. Pursuant to note to 35 Ill. Adm. Code 215.204(c), the limitations of 35 Ill. Adm. Code 215.204(c) shall not apply to equipment used for both printing and paper coating
- b. This permit is issued based upon the flexographic printing and coating operations performed on the printing press not being subject to 35 Ill. Adm. Code 215.401 (Flexographic and Rotogravure Printing). Pursuant to 35 Ill. Adm. Code 215.402, , the limitations of 35 Ill. Adm. Code 215 Subpart P shall not apply to any facility whose aggregate uncontrolled rotogravure and/or flexographic printing press emissions of volatile organic material are limited by operating permit conditions to 907 Mg (1000 tons) per year or less in the absence of air pollution control equipment or whose actual emissions in the absence of air pollution control equipment would be less than or equal to 907 Mg (1000 tons) per year when averaged over the preceding three calendar years.
- 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 starch silo and the cyclone associated with the paper scrap collection system such that the baghouse and cyclone are kept in proper working condition and not cause a violation of the

Illinois Environmental Protection Act or regulations promulgated therein.

- c. Boilers No.1 and No. 2 shall only be operated with natural gas or distillate fuel oil as the fuel. The use of any other fuel in Boiler No.1 or No. 2 requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
  - d. The Permittee shall not keep, store or use distillate fuel oil (Grades No. 1 and 2) at this source with a sulfur content greater than the larger of the following two values:
    - i. 0.28 weight percent, or
    - ii. The wt. percent given by the formula: Maximum wt. percent sulfur = (0.00015) x (Gross heating value of oil, Btu/lb).
  - e. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.
  - f. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 10a. Emissions from and operation of the corrugating and converting lines (including flexographic printing/folding/gluing) shall not exceed the following limits:

VOM Usage		VOM Emissions	
<u>Ton/Month</u>	<u>Ton/Year</u>	<u>Ton/Month</u>	<u>Ton/Year</u>
3.20	32.00	3.20	32.00

These limits are based on the maximum production capacity and maximum VOM content of materials. The VOM emissions shall be determined from the following equation:

$$E = \Sigma(P_i \times C_i)$$

where:

E = VOM/HAP emissions (tons);

P<sub>i</sub> = Each VOM, HAP-containing material usage (tons); and

C<sub>i</sub> = VOM/HAP content of each VOM, HAP-containing material (weight fraction)

- b. Operations and emissions of the paper scrap collection system with baler and cyclone shall not exceed the following limits:

	Process Rate			(lbs/Hour)	PM Emissions	
	(Tons/Hour)	(Tons/Month)	(Tons/Year)		(Tons/Month)	(Tons/Year)
	2.90	2,521	25,209	4.	2.00	19.60

These limits are based on the maximum production rate and allowable PM emission rate by 35 Ill. Adm. Code 212.321.

- c. This permit is issued based on negligible emissions of particulate matter from the starch silo controlled by a baghouse. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.44 tons/year.
- d. Emissions and operation of the two boilers combined shall not exceed the following limits:
- i. Emissions from the combustion of natural gas:

<u>Material</u>	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>Pollutant</u>	Emission	Emissions	
				<u>Factor</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Natural Gas	26	257	CO	84	1.09	10.79
			NO <sub>x</sub>	100	1.30	12.85
			PM	7.6	0.10	0.98
			SO <sub>2</sub>	0.6	0.01	0.08
			VOM	5.5	0.07	0.71

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- ii. Emissions from the combustion of fuel oil:

<u>Material</u>	<u>(kgal/Mo)</u>	<u>(kgal/Yr)</u>	<u>Pollutant</u>	Emission	Emissions	
				<u>Factor</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
#2 Fuel Oil	10.5	105	CO	5	0.03	0.26
			NO <sub>x</sub>	20	0.11	1.05
			PM	2	0.01	0.11
			SO <sub>2</sub>	39.76	0.21	2.09
			VOM	0.2	0.01	0.01

These limits are based on the maximum boilers operations and standard emission factors (Tables 1.3-1 and 1.3-3, AP-42, Fifth Edition, Volume I, Supplement E, September 1999, corrected May 2010).

- e. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.79 tons/month and 7.90 tons/year of any single HAP and 1.99 tons/month and 19.9 tons/year of any combination of such HAPs. As a result of this

condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA, NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK, and the NESHAP for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.

- f. Compliance with the annual limits of this permit 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 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.

13. 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.
14. 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.
- 15a. 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 starch silo and the cyclone associated with the paper scrap collection system:
    - A. Records for periodic inspection of the baghouse associated with the starch silo and the cyclone associated with the paper scrap collection system 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. Names and amounts of all VOM-containing raw materials used, including all clean-up solvents (tons/month, tons/year);
  - iii. VOM and HAP content of all VOM and HAP-containing raw materials used, including all clean-up solvents (weight %);
  - iv. Natural gas usage of the two boilers (mmscf/month, mmscf/year);
  - v. Distillate fuel oil usage of the two boilers (gallons/month, gallons/year)
  - vi. The sulfur content of the distillate fuel oil used in the boilers provided by the supplier fuel oil (weight %); and
  - vii. Paper Scrap Collection System throughput (tons/month, tons/year); and
  - viii. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM and HAPs from the source, with supporting calculations (tons/month, tons/year).
- b. All records and logs required by 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.
16. 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.
- 17a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:

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

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5407 North University  
Peoria, Illinois 61614

If you have any questions on this permit, please call Valeriy Brodsky at 217/785-1705.

Edwin C. Bakowski, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

Date Signed: \_\_\_\_\_

ECB:VJB

cc: Illinois EPA, FOS Region 2  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Corrugated Box Manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons/year for VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such HAP) 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 handled, 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	Combined
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>	<u>HAP</u>	<u>HAPs</u>	
Corrugating and Converting Lines					32.00			
Paper Scrap Collection System			19.60					
Starch Silo			0.44					
Natural Gas Combustion	10.79	12.85	0.98	0.08	0.71			
Fuel Oil Combustion	<u>0.26</u>	<u>1.05</u>	<u>0.11</u>	<u>2.09</u>	<u>0.01</u>	--	--	
Totals	<u>11.05</u>	<u>13.90</u>	<u>21.13</u>	<u>2.17</u>	<u>32.72</u>	<u>7.90</u>	<u>19.90</u>	

VJB: