

PERMIT AMENDMENT NO. 2759-085-0004-S-03-2
ISSUANCE DATE:



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality – Permit Amendment

In accordance with The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to or in effect under that Act, Permit No. 2759-085-0004-S-03-0 issued on June 7, 2017, to:

Facility Name: Fort Dearborn Company
Facility Address: 103 Lumpkin Campground Road North
Dawsonville, Georgia 30534 (Dawson County)
Mailing Address: 103 Lumpkin Campground Road North
Dawsonville, Georgia 30534
Facility AIRS Number: 04-13-085-00004

for the following: Operation of a commercial printing facility

is hereby amended as follows: Shutdown of press P6; Construction and operation of a new flexographic press P10.

Reason for Amendment: Application No. 29210 dated February 26, 2024

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 6 page(s).

This Permit Amendment is hereby made a part of Permit No. 2759-085-0004-S-03-0 and compliance herewith is hereby ordered. Except as amended hereby, the above referenced Permit remains in full force and effect.



Jeffrey W. Cown, Director
Environmental Protection Division

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4. Process & Control Equipment

Modified Condition

- 4.2 The Permittee shall operate the regenerative thermal oxidizer (RTO, ID No. 8ES) at all times during the operation of any printing presses.
[391-3-1-.02(2)(a)10]

Modified Condition

- 4.5 The Permittee shall take all reasonable precautions to minimize spills and evaporation of VOC-containing cleaning solutions and shall store all VOC-laden cleaning materials – including shop towels, rags, and mop heads – in covered containers immediately after use and dispose of the materials by acceptable means. The covered containers must be designed to adequately contain vapors and must be in good working condition.
[391-3-1-.02(2)(a)10]

5. Monitoring

Modified Condition

- 5.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1.]

- a. The combustion chamber temperature of regenerative thermal oxidizer (RTO, ID No. 8ES) at a position prior to any substantial heat loss/exchange. The Permittee shall use this data to determine and record the consecutive three-hour average temperature for every hour of operation of Oxidizer 8ES.

Such monitoring devices shall have a required accuracy of +/- 2% Fahrenheit degrees.

Modified Condition

- 5.2 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1]

- a. Pressure differential across the enclosure for each press operating in a permanent total enclosure. Data shall be recorded at least once per day that any one of the applicable presses is operating; or
- b. Natural draft opening (NDO) face velocity for each press operating in a permanent total enclosure. Data shall be recorded at least once per day that any one of the applicable presses is operating.

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New Condition

- 5.3 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

6. Performance Testing

Modified Condition

- 6.2 Within 180 days after the initial startup of Emission Unit P10, the Permittee shall use Method 204 of the Division's Procedures for Testing and Monitoring Sources of Air Pollutants to verify that the total enclosure housing Emission Unit P10 is a Permanent Total Enclosure (PTE), as defined in the Method. The results of the verification(s) shall be submitted to the Division.
[391-3-1-.02(6)(b)1.]

Modified Condition

- 6.3 Within 180 days after the initial startup of Emission Unit P10, the Permittee shall conduct VOC destruction efficiency testing on the RTO (ID No. 8ES) while the associated flexographic presses are operating. Subsequent RTO VOC destruction tests shall be conducted at approximately 5-year intervals thereafter, not to exceed 61 months. During this performance test, the Permittee shall establish the minimum combustion zone temperature for operation of the RTO. The VOC destruction efficiency of the RTO shall be at least 90%.
[391-3-1-.02(6)(b)1.]

7. Notification, Reporting and Record Keeping Requirements

Modified Condition

- 7.3 The Permittee shall use the records required in Condition 7.2 and the calculation procedure in Condition 7.8 to determine the total monthly emissions of VOCs from the entire facility. All demonstration calculations, including any Division-approved emission factor, control efficiency and/or coating transfer efficiency used in the calculations, shall be kept as part of the records required in Condition 7.2. Until the performance test for press P10 is completed, the Permittee shall use the most recently tested destruction efficiency and a capture efficiency of 100% for the permanent total enclosure. The Permittee shall notify the Division in writing if emissions of VOCs exceed 8.33 tons from the entire facility, during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 2.1.
[391-3-1-.02(6)(b)1]

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Modified Condition

- 7.5 The Permittee shall use the records required in Condition 7.2 and the calculation procedure in Conditions 7.9 to determine the total monthly emissions of combined hazardous air pollutants and the total monthly emissions of each listed hazardous air pollutant from the entire facility. All demonstration calculations, including any Division-approved emission factor, control efficiency and/or coating transfer efficiency used in the calculations, shall be kept as part of the records required in this Condition. Until the performance test for press P10 is completed, the Permittee shall use the most recently tested destruction efficiency and a capture efficiency of 100% for the permanent total enclosure. The Permittee shall notify the Division in writing if emissions of any individual hazardous air pollutant exceed 0.83 tons from the entire facility, or if emissions of all listed hazardous air pollutants combined exceed 2.08 tons from the entire facility, during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 2.2.
[391-3-1-.02(6)(b)1]

Deleted Condition

- 7.7 Deleted

New Condition

- 7.8 The Permittee shall use the following equations when calculating the monthly VOC emissions from the presses in accordance with Condition 7.3. All calculations should be kept as part of the monthly record.
[391-3-1-.02(6)(b)1]

- a. $VOC_i \text{ (lbs./month)} = \text{Material use (lbs.)} * (\text{percent weight VOC}); \text{ or}$
- b. $VOC_i \text{ (lbs./month)} = \text{Material used (gallons)} * (\text{VOC Content lbs./gallon})$
- c. $VOC_w \text{ (lbs./month)} = \text{Waste Material (lbs.)} * (\text{percent weight VOC}); \text{ or}$
- d. $VOC_w \text{ (lbs./month)} = \text{Waste Material (gallons)} * (\text{VOC Content lbs./gallon})$
- e. $\text{Total VOC (lbs./month)} = (\sum_{i=1}^n VOC_i - \sum_{w=1}^n VOC_w)$
- f. For periods of time in which the VOC emissions are controlled by the RTO:

$$VOC_{\text{Month}} = (\sum_{i=1}^n VOC_i - \sum_{w=1}^n VOC_w) * [\%DT + (1 - CE * DE) * (1 - \%DT)] / 2,000$$

$$\%DT = (T_{DT} / T_{DR}) * 100\%$$

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Where:

VOC_{Month} = Monthly total VOC emission rate, in tons per month.

DE = Most recent Division approved VOC destruction efficiency of the RTO.

CE = Most recent Division approved VOC capture efficiency of the applicable flexographic printing press.

%DT = RTO percent down time, in percentage.

2,000 = Conversion factor, 2,000 lbs./ton.

T_{DT} = Total hours per month that (1) the three-hour rolling average RTO combustion zone temperature falls 50-degrees Fahrenheit below the minimum combustion zone temperature set point, determined and recorded in accordance with Condition 6.3; (2) exhausts from any of the flexographic press bypasses the RTO, as indicated by Condition 7.10c.; or (3) any failure to achieve permanent total enclosure as specified in Condition 7.10a.; combined, in hours per month.

T_{DR} = Total operating hours per month that any flexographic press is in operation, in hours per month.

New Condition

7.9 The Permittee shall use the following equations when calculating the monthly HAP emissions from the presses in accordance with Condition 7.5. All calculations should be kept as part of the monthly record.
[391-3-1-.02(6)(b)1]

a. HAP_i (lbs./month) = Material use (lbs.) * (percent weight HAP); or

b. HAP_i (lbs./month) = Material used (gallons) * (HAP Content lbs./gallon)

c. HAP_w (lbs./month) = Waste Material (lbs.) * (percent weight HAP); or

d. HAP_w (lbs./month) = Waste Material (gallons) * (HAP Content lbs./gallon)

e. Total Individual HAP (lbs./month) = $(\sum_{i=1}^n HAP_i - \sum_{w=1}^n HAP_w)$

f. For periods of time in which the HAP emissions are controlled by the RTO:

$$HAP_{Month} = (\sum_{i=1}^n HAP_i - \sum_{w=1}^n HAP_w) * [\%DT + (1 - CE * DE) * (1 - \%DT)] / 2,000$$

$$\%DT = (T_{DT} / T_{DR}) * 100\%$$

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Where:

- HAP_{Month} = Monthly total individual HAP emission rate, in tons per month.
DE = Most recent Division approved VOC destruction efficiency of the RTO.
CE = Most recent Division approved VOC capture efficiency of the applicable enclosure housing the associated flexographic printing presses.
%DT = RTO percent down time, in percentage.
2,000 = Conversion factor, 2,000 lbs./ton.
T_{DT} = Total hours per month that (1) the three-hour rolling average RTO combustion zone temperature falls 50-degrees Fahrenheit or more below the minimum combustion zone temperature set point, determined and recorded in accordance with Condition 6.3; or (2) exhausts from any of the flexographic press bypasses from applicable thermal oxidizer, as indicated by Condition 7.10c.; or (3) any failure to achieve permanent total enclosure as specified in Condition 7.10a.; combined, in hours per month.
T_{DR} = Total operating hours per month that any flexographic press is in operation, in hours per month.

New Condition

7.10 The following excursions shall be recorded along with the date and time and applicable process and/or control equipment.

[391-3-1-.02(6)(b)1.]

- a. For Permanent Total Enclosures associated with the presses, any two consecutive pressure readings that are higher than -0.007 inch of water column or any two consecutive NDO face velocity readings below 200 ft/min.
- b. Any instance, in which the consecutive three-hour average temperature for the combustion chamber temperature for the RTO is more than 50 degrees Fahrenheit below the minimum combustion chamber temperature established during the most recent Division approved VOC destruction performance test.
- c. The date and start/end time in which the RTO is not operating while one or more of the presses is/are operating. The records shall state whether this instance is during emergency repairs and/or preventative maintenance.

New Condition

7.11 The Permittee shall maintain records of the capture system monitoring measurements required by Condition 5.2.

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New Condition

- 7.12 The Permittee shall submit written notification of initial startup of press P10 to the Division within 15 days after such date. The notification shall be submitted to:

Mr. Sean Taylor
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta GA 30354