



DEPARTMENT ORDER

**Pioneer Plastics Corporation  
Androscoggin County  
Auburn, Maine  
A-448-77-11-A**

**Departmental  
Findings of Fact and Order  
New Source Review  
NSR #11**

**FINDINGS OF FACT**

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

**I. REGISTRATION**

A. Introduction

FACILITY	Pioneer Plastics Corporation (Pioneer)
LICENSE TYPE	06-096 C.M.R. ch. 115, Minor Modification
NAICS CODES	325211, 322222, 326130
NATURE OF BUSINESS	Manufacturer of decorative laminate, melamine coated paper, and specialty resins
FACILITY LOCATION	One Pionite Rd, Auburn, Maine

B. NSR License Description

Pioneer Plastics Corporation (Pioneer) has applied to install a new Digital Printing System.

C. Emission Equipment

The following equipment is addressed in this NSR license:

**Process Equipment**

<b>Equipment</b>	<b>Pollution Control Equipment</b>
Digital Printers (6)*	none

\*One new printer and five existing printers.



### 3. Emissions Increases

Emissions increases are calculated by subtracting BAE and excludable emissions from the PAE. The emission increase is then compared to the significant emissions increase levels.

Pollutant	Baseline Actual Emissions (ton/year)	Projected Actual Emissions (ton/year)	Emissions Increase (ton/year)	Significant Emissions Increase Levels (ton/year)
PM	0	0	0	25
PM <sub>10</sub>	0	0	0	15
PM <sub>2.5</sub>	0	0	0	10
SO <sub>2</sub>	0	0	0	40
NO <sub>x</sub>	0	0	0	40
CO	0	0	0	100
VOC	0	4.4	4.4	40

### 4. Classification

Since emissions increases do not exceed significant emissions increase levels, this NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115. An application to incorporate the requirements of this NSR license into the Part 70 air emission license shall be submitted no later than 12 months from commencement of operations associated with the new digital printing system.

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Digital Printers

Pioneer currently operates five digital printers. This equipment has historically been considered an insignificant activity per 06-096 C.M.R. ch. 115, Appendix B, § B.1 as the PTE from this equipment has been less than 1.0 tpy of volatile organic compounds (VOC) and less than the applicable quantity of hazardous air pollutant (HAP) as specified in Appendix B, § C.

Pioneer has proposed the installation of a new digital printing system to supplement the existing five digital printers. The new printer will have a larger capacity which will result in the PTE of all six printers combined to exceed the significance threshold.

Although it is unlikely the digital printers will be operated in this manner, PTE was conservatively estimated assuming maximum throughput and operating the printers 8,760 hours per year. Using this method, PTE for the digital printing operation was calculated to be 4.4 tpy for VOC and 4.4 tpy of HAP.

To minimize emissions, Pioneer intends to use mostly water-based inks. No add-on pollution control equipment is offered by the printer manufacturer. The printers will be operated inside and exhausted through the room exhaust system.

The Department finds an annual emission limit of 4.4 tpy on a 12-month rolling total basis to represent BACT for VOC and HAP emissions from the digital printing operations.

Compliance shall be demonstrated by recordkeeping, including tracking the VOC and HAP content and volume of inks used on a monthly basis.

C. Incorporation Into the Part 70 Air Emission License

The requirements in this 06-096 C.M.R. ch. 115 New Source Review license shall apply to the facility upon issuance. Per *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140 § 1(C)(8), for a modification at the facility that has undergone NSR requirements or been processed through 06-096 C.M.R. ch. 115, the source must apply for an amendment to their Part 70 license within one year of commencing the proposed operations, as provided in 40 C.F.R. Part 70.5.

D. Annual Emissions

1. Emission Totals

Pioneer shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on licensed fuel limits, 100 hr/yr of operation for each engine, operation of process equipment 8,760 hr/yr, and applicable emission caps.

**Total Licensed Annual Emissions for the Facility**  
**Tons/year**  
 (used to calculate the annual license fee)

Equipment	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boiler #4	33.0	33.0	368.0	99.0	66.0	2.0
Boiler#5/TO & Process VOC	52.1	52.1	385.9	103.8	329.0	131.4
Boiler #6	27.7	27.7	135.3	86.6	98.3	6.9
Boilers #7 and #8	1.5	1.5	4.3	6.8	13.7	0.4
Fire Pump and Generators	0.3	0.3	0.7	9.9	2.2	0.8
RTO #1	1.4	1.4	0.3	4.3	1.0	17.5
CPL Line #1	*	*	–	–	–	2.4
Thermal Oil Heater #1	0.1	0.1	–	1.1	0.9	0.1
Digital Printers	–	–	–	–	–	4.4
<b>Totals</b>	<b>116.1</b>	<b>116.1</b>	<b>894.5</b>	<b>311.5</b>	<b>511.1</b>	<b>165.9</b>

\* Particulate emissions from process equipment is not quantified for fee purposes.

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through ‘Tailoring’ revisions made to EPA’s *Approval and Promulgation of Implementation Plans*, 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100 are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO<sub>2</sub>e).

The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility’s fuel use;
- worst case emission factors from the following sources: U.S. EPA’s AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

### III. AMBIENT AIR QUALITY ANALYSIS

Pioneer previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this NSR license.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants New Source Review License A-448-77-11-A pursuant to the preconstruction licensing requirements of 06-096 C.M.R. ch. 115 and subject to the standard and special conditions below.

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

### SPECIFIC CONDITIONS

#### (1) **Digital Printers**

- A. Emissions from the Digital Printers shall not exceed 4.4 tpy of VOC and 4.4 tpy of HAP on a 12-month rolling total basis. Compliance shall be demonstrated by the recordkeeping requirements of this license. [06-096 C.M.R. ch. 115, BACT]
- B. Pioneer shall maintain the following records:
  - 1. Monthly records of the amount of each VOC/HAP-containing ink used in the Digital Printers.
  - 2. Records of the VOC and HAP content for each ink used.
  - 3. Monthly calculations demonstrating compliance with the VOC and HAP emission limits.

[06-096 C.M.R. ch. 115, BACT]

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(2) **Part 70 Incorporation**

Pioneer shall submit an application to incorporate this NSR license into the facility's Part 70 air emission license no later than 12 months from commencement of the requested operation. [06-096 C.M.R. ch. 140 § 1(C)(8)]

DONE AND DATED IN AUGUSTA, MAINE THIS 19 DAY OF November, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Core for  
MELANIE LOYZIM, ACTING COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/19/18

Date of application acceptance: 10/22/19

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

