



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

DARRYL N. BROWN  
COMMISSIONER

**PIONEER PLASTICS CORPORATION )  
ANDROSCOGGIN COUNTY )  
AUBURN, MAINE )  
A-448-77-5-M )** **DEPARTMENTAL  
FINDING OF FACT AND ORDER  
AIR EMISSION LICENSE  
NEW SOURCE REVIEW #5**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

Pioneer Plastics Corporation (Pioneer) operates a manufacturing plant in Auburn, Maine. Pioneer has requested a minor revision to modify their air emissions license to include the ability to burn natural gas in the Boiler #5/Thermal Oxidizer as an alternative fuel.

<b>FACILITY</b>	<b>Pioneer Plastics Corporation (Pioneer)</b>
LICENSE NUMBER	A-448-77-5-M
LICENSE TYPE	Chapter 115 Minor Revision
NAICS CODES	325211, 322222, 326130
NATURE OF BUSINESS	Manufacturer of decorative laminate, melamine coated paper, and specialty resins
FACILITY LOCATION	Auburn, Maine
DATE OF MINOR REVISION ISSUANCE	March 21, 2011

**II. APPLICATION CLASSIFICATION**

Pioneer's application was submitted pursuant to the minor revision procedures in 06-096 CMR 115. The application for Pioneer does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing or record keeping. This modification is determined to be a minor revision (emission increase of less than four tons/year for each single pollutant and less than eight tons/per year for all pollutants combined) under 06-096 CMR 115 (as amended) and has been processed as such.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04679-2094  
(207) 764-0477 FAX: (207) 760-3143

### III. REVISION DESCRIPTION

#### Boiler #5/Thermal Oxidizer fuels fired

Pioneer operates a VOC Incinerator referred to at the facility as the Thermal Oxidizer. The Thermal Oxidizer is used primarily to destroy volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) from the manufacturing process. The Thermal Oxidizer is also referred to as "Boiler #5" because it has a separate heat recovery component which produces steam for the facility. The Thermal Oxidizer was manufactured by Hirt in 1982. The maximum heat input capacity from No. 6 fuel oil fired in the Thermal Oxidizer is 39.5 MMBtu/hr.

Pioneer has requested to include the ability to burn natural gas in Boiler #5/Thermal Oxidizer as an alternative fuel. The facility has proposed to install a gas burner assembly capable of burning 50 MMBtu/hr of natural gas. The existing 39.5 MMBtu/hr #6 fuel oil system will be kept and maintained to have the flexibility to combust either fuel which will allow the unit to operate on either natural gas or #6 oil depending on availability.

The following emission estimates have been provided to show the emissions difference when the unit combusts natural gas and when the unit combusts #6 fuel oil:

Pollutant	Lb/hr (natural gas)	Lb/hr (existing license on #6 oil)	Tons/yr (natural gas)	Tons/yr (existing license on #6 oil)
PM	2.5 <sup>a</sup>	11.9	10.9	52.1
PM <sub>10</sub>	2.5 <sup>a</sup>	11.9	10.9	52.1
SO <sub>2</sub>	0.1 <sup>b</sup>	88.1	0.2	385.9
NO <sub>x</sub>	5.0	23.7	21.9	103.8
CO	4.2	60.0	18.4	262.8
VOC	0.3	30.0	1.2	131.4

<sup>a</sup> based on a BACT emission limit of 0.05 lb/MMBtu

<sup>b</sup> SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC emissions based on AP-42 emission factors

PIONEER PLASTICS CORPORATION )  
ANDROSCOGGIN COUNTY )  
AUBURN, MAINE )  
A-448-77-5-M 3

DEPARTMENTAL  
FINDING OF FACT AND ORDER  
AIR EMISSION LICENSE  
NEW SOURCE REVIEW #5

All criteria pollutants will be reduced when the unit operates on natural gas instead of #6 fuel oil. Pioneer has proposed a burner capable of burning 50 MMBtu/hr when operating on natural gas. Currently the unit is licensed to fire #6 fuel oil with a maximum sulfur content of 2.0 % by weight and a maximum design heat input capacity of 39.5 MMBtu/hr. The unit was manufactured in 1982 and therefore is not subject to 40 CFR Part 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial Steam Generating Units which applies to units that commenced operation after June 9, 1989. The Department and EPA have determined that this change does not trigger the unit applicable to this subpart since the definition of "modification" per 40 CFR Part 60 states, "*any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.*" Whereas all pollutants from combusting natural gas in lieu of #6 fuel oil will decrease, this request does not make Boiler #5/Thermal Oxidizer applicable to 40 CFR Part 60 Subpart Dc.

**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, and
- will not violate applicable ambient air quality standards, or increment standards either alone or in conjunction with emissions from other sources.

The Department hereby grants this minor revision, A-448-77-5-M, subject to the following conditions:

PIONEER PLASTICS CORPORATION )  
ANDROSCOGGIN COUNTY )  
AUBURN, MAINE )  
A-448-77-5-M 4

DEPARTMENTAL  
FINDING OF FACT AND ORDER  
AIR EMISSION LICENSE  
NEW SOURCE REVIEW #5

(1) Pioneer has the flexibility to combust natural gas in Boiler #5/Thermal Oxidizer.

DONE AND DATED IN AUGUSTA, MAINE THIS *21st* DAY OF *March* 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *James P. Brooks Jr.*  
DARRYL N. BROWN, COMMISSIONER

*PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES*

Date of initial receipt of application: November 29, 2010

Date of application acceptance: December 13, 2010

Date filed with Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Edwin Cousins, Bureau of Air Quality

