

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Douglas Dynamics, L.L.C. d/b/a Fisher Engineering Knox County Rockland, Maine A-727-71-O-A (SM) Departmental
Findings of Fact and Order
Air Emission License
Amendment #2

FINDINGS OF FACT

After review of the air emission license amendment 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 (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Douglas Dynamics, L.L.C. d/b/a Fisher Engineering (Fisher) was issued Air Emission License A-727-71-M-R/M on June 25, 2015, for the operation of emission sources associated with their steel fabrication and coating facility. The license was subsequently amended on September 4, 2015 (A-727-71-N-M).

Fisher has requested an amendment to their license in order to remove plasma cutter Plasma #3 from their license and add three additional laser units (Lasers #4-6) for cutting plate steel to their license.

The equipment addressed in this license amendment is located at 50 Gordon Drive, Rockland, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Process Equipment

Equipment	Production Rate	Pollution Control <u>Equipment</u>	Control Efficiency*	Manuf. Date	Install. Date
Laser #4		1 Pleated Filter	99.9%	2017	2017
Laser #5	2,400 CFM [each]	1 Pleated Filter	99.9%	2018	2018
Laser #6		1 Pleated Filter	99.9%	2018	2018

^{*}Based on manufacturer data

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Plasma #3 has been removed from the facility and is hereby removed from this air emission license.

C. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

This amendment will not increase licensed emissions of any pollutant, but will include the installation of new equipment; therefore, this modification is determined to be a minor modification as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100 and has been processed as such.

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.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 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. Lasers #4-6

Fisher has requested to add three new pieces of process equipment to their license, designated as Lasers #4, #5, and #6. Laser #4 was manufactured and installed at the facility in 2017, and Lasers #5 and #6 were manufactured in 2018 and will be installed at the facility in April 2018 and July 2018, respectively.

Similar to Lasers #1-3, these units will be used to cut A36 carbon steel and stainless steel. For control of particulate matter from the cutting of steel, each unit will include a 99.9% efficient pleated filter with a maximum flow rate of 2,400 cubic feet per minute of exhaust air. The filters will be replaced as appropriate based on three factors: changes in the pressure differential, the filter being compromised by water or other liquids, or the failure of the filter. Fisher will change the filters when the pressure differential becomes too large and the filters can no longer be cleaned per the manufacturer's recommendation as documented in the applicant's file, when they get wet, and/or when they blow out or fail.

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BACT for Lasers #4, #5, and #6 shall be the operation, maintenance, and routine inspection of the dust collection system for each unit, replacement of the filters as necessary based on the three factors listed above, and the following visible emissions limit for each filter outlet:

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Visible emissions from Lasers #4, #5, and #6 shall each not exceed 10% opacity on a six-minute block average basis.

C. Annual Emissions

This amendment will not change the facility's licensed annual emissions.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year	
PM ₁₀	25	
SO_2	50	
NO _x	50	
CO	250	

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this 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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Amendment A-727-71-O-A subject to the conditions found in Air Emission License A-727-71-M-R/M, in amendment A-727-71-N-M, and the following condition.

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

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SPECIFIC CONDITIONS

The following shall replace Condition (16) of Air Emission License Amendment A-727-71-N-M (9/4/2015):

(16) Process Equipment

- A. The VOC emissions from the Wash System, Paint #1-5, and the Parts Washers shall be calculated monthly and on a calendar year total basis to ensure compliance with the 5.0 tons per year VOC emission limit for VOC emitting process equipment. [06-096 C.M.R. ch. 115, BPT]
- B. Fisher shall operate and maintain the filters on Paint #1-5, Shot Blast #1, Mazak #1, Whitney #1, Plasmas #1 and #2, and Lasers #1-6, shall inspect them at least once a month, and shall document the inspections in a maintenance log. The maintenance log shall contain information on maintenance and filter replacement. Fisher shall also replace the filters when the pressure differential becomes too large and the filters can no longer be cleaned per the manufacturer's recommendation, when the filters have been compromised by water or other liquids, or when there is failure of the filters. [06-096 C.M.R. ch. 115, BPT & 06-096 C.M.R. ch. 115, BACT]

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C. Visible Emissions

- 1. Visible emissions from Plasmas #1-2, Mazak #1, Whitney #1, Shot Blast #1, the Wash System, Paint #1-5, and Lasers #1-3 shall each not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 C.M.R. ch. 101]
- 2. Visible emissions from Lasers #4-6 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS

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DAY OF April

, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-727-71-M-R/M.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 7, 2018

Date of application acceptance: February 8, 2018

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

Filed

APR 2 7 2018

State of Maine
Board of Environmental Protection