



DEPARTMENT ORDER

Douglas Dynamics, L.L.C. d/b/a
Fisher Engineering
Knox County
Rockland, Maine
A-727-71-Q-A

Departmental
Findings of Fact and Order
Air Emission License
Amendment # 4

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 6/25/15 for the operation of emission sources associated with their steel fabrication and coating facility. The license was subsequently amended on 9/4/15 (A-727-71-N-M), 4/26/18 (A-727-71-O-A), and 8/4/20 (A-727-71-P-A).

Fisher has requested an amendment to their license in order to add a new laser cutter (Laser #8) and remove the Whitney High Definition Plasma cutter (Whitney #1).

The Department is also updating the visible emissions limit for Plasma #1, Shot Blast #1, the Wash System, Paint #1-5, and Lasers #1-7 to be consistent with equipment classifications as found in 06-096 C.M.R. ch. 101, *Visible Emissions*.

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	Flow Rate	Pollution Control Equipment	Control Efficiency *	Date of Manuf.	Date of Install.
Laser #8	3,000 CFM	6 Pleated Filters and 3 HEPA Filters	99.97%	2021	2021

* Based on manufacturer data

Whitney #1 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 date this license was issued.

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.

D. Facility Classification

With the annual fuel limit on the propane heaters and the process equipment VOC limits, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because Fisher is subject to license restrictions that keep facility emissions below major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

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 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. Process Equipment

Fisher has requested to add a new piece of process equipment to their license, designated as Laser #8. Laser #8 was manufactured in 2021 and will be installed at the facility in 2021.

Similar to Lasers #1-7, this unit will be used to cut carbon steel and stainless steel. For control of particulate matter from the cutting of steel, Laser #8 will utilize a Camfil dust collection system with 6 pleated filters and 3 HEPA filters with a collection efficiency of 99.97% and a maximum exhaust air flow rate of 3,000 cubic feet per minute. 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 high 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.

BACT for Laser #8 shall be the operation, maintenance, and routine inspection of the dust collection system, replacement of the filters as necessary based on the three factors listed above, and the following visible emissions limit for each filter outlet.

Visible emissions from each filter outlet associated with Laser #8 shall not exceed 20% opacity on a six-minute block average basis.

The visible emissions limits for Plasma #1, Shot Blast #1, the Wash System, Paint #1-5, and Lasers #1-7 shall not exceed an opacity of 20 percent on a six (6) minute block average basis. This standard has been updated to the correct standards as found in 06-096 C.M.R. ch. 101 as part of this license amendment, as the filtration systems were misclassified as baghouses in amendment A-727-71-P-A.

C. Annual Emissions

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

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-Q-A subject to the conditions found in Air Emission License A-727-71-M-R/M; in amendments A-727-71-N-M, A-727-71-O-A, and A-727-71-P-A; and the following conditions.

Severability. 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.

SPECIFIC CONDITIONS

The following shall replace Condition (16) of Air Emission License Amendment A-727-71-P-A (8/4/2020):

(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, Plasma #1, and Lasers #1-8; 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

Visible emissions from Plasma #1, Shot Blast #1, the Wash System, Paint #1-5, and Lasers #1-8 shall not exceed an opacity of 20 percent on a six (6) minute block average basis. [06-096 C.M.R. ch. 101 (3)(B)(4) and 06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 20th DAY OF MAY, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, 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: 4/27/21

Date of application acceptance: 4/27/21

Date filed with the Board of Environmental Protection:

This Order prepared by Chris Ham, Bureau of Air Quality.

