



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Douglas Dynamics, L.L.C.
d/b/a Fisher Engineering
Knox County
Rockland, Maine
A-727-71-M-R/M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal and Minor Revision**

FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §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) has applied to renew and amend their Air Emission License permitting the operation of emission sources associated with their steel fabrication and coating facility. The company is a manufacturer of steel snowplows and associated attachments for various types of vehicles.

Fisher has requested a minor revision to their license in order to remove a plasma cutting table (Plasma #4), a paint booth (Paint #6) and two ovens (Ice Wash #1 and Ice Oven #1), add 2 new laser equipped units for cutting plated steel, and raise their annual fuel limit from 625,000 gallons of propane per year to 1,000,000 gallons of propane per year based on a calendar year basis in order to allow for increased production and winter heating needs.

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

B. Emission Equipment

The following equipment is addressed in this air emission license:

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 04769
(207) 764-0477 FAX: (207) 760-3143

Stationary Fuel Burning Equipment

<u>Equipment</u>	<u>Type of Equipment (boiler, water heater, etc.)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>
Make-up Air Heater #1	Air heater	1.5	13.7	Propane	1999
Make-up Air Heater #2	Air heater	1.5	13.7	Propane	1999
Make-up Air Heater #3	Air heater	1.5	13.7	Propane	1999
Make-up Air Heater #4	Air heater	1.5	13.7	Propane	1999
Make-up Air Heater #5	Air heater	1.5	13.7	Propane	1999
Make-up Air Heater #6	Air heater	1.5	13.7	Propane	1999
Make-up Air Heater #7	Air heater	1.25	13.5	Propane	2009
Make-up Air Heater #8	Air heater	1.25	13.5	Propane	2009
Make-up Air Heater #9	Air heater	1.25	13.5	Propane	2009
Make-up Air Heater #10	Air heater	1.25	13.5	Propane	2009
Cure Oven #1	Oven heater	3.2	31.5	Propane	2000
Cure Oven #2	Oven heater	3.2	31.5	Propane	2010
Washer #1 (heater)	Water heater	2.3	23.5	Propane	2000
IR Oven #1	IR heater – air	1.2	13.0	Propane	2008

Process Equipment

<u>Equipment</u>	<u>Pollution Control Equipment</u>	<u>Efficiency*</u>
Plasma #1	2 Pleated filters	99.9%
Plasma #2	2 Pleated filters	99.9%
Plasma #3	2 Pleated filters	99.9%
Laser #1	1 Pleated filter	99.9%
Laser #2	1 Pleated filter	99.9%
Mazak #1	1 Pleated filter	99.9%
Whitney #1	1 Pleated filter	99.9%
Shot Blast #1	Pleated Filter	99.9%
Paint #1	4 Pleated filters, 2 corrugated filters	99.9%
Paint #2	4 Pleated filters, 2 corrugated filters	99.9%
Paint #3	4 Pleated filters, 2 corrugated filters	99.9%
Paint #4	4 Pleated filters, 2 corrugated filters	99.9%
Paint #5	4 Pleated filters, 2 corrugated filters	99.9%

*Based on manufacturer data

C. Application Classification

The application for Fisher does include the licensing of increased emissions and the installation of new equipment in addition to the existing emissions and equipment. Therefore, the license is considered to be a renewal of currently licensed emission units with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). The increased emissions are due to the increase in Fisher's annual fuel allowance from 625,000 gallons of propane per year to 1,000,000 gallons of propane per year to allow them to increase production and heat the building better during the winter. The installation of new equipment includes Laser #1 and Laser #2, which are both Mitsubishi laser cutting units used to cut A36 carbon steel and are both subject to Best Available Control Technology (BACT) analysis. Fisher is also removing one paint booth (Paint #6) because it has been dismantled and sold as well as one plasma cutter (Plasma #4) because it has been disconnected and will be sold. With the annual fuel limit on the Make-up Air Heaters (MUAH) #1-10, Cure Ovens #1 and #2, IR Oven #1, and Washer #1, and the VOC limits associated with the powder coat booths, solvents, degreasers, and wash unit, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual fuel limit on MUAH #1-#10, Cure Ovens #1 and #2, Washer #1, and IR Oven #1, and the HAP limits associated with the powder coat booths, solvents, degreasers, and wash unit, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

This amendment will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined. Therefore, this amendment is determined to be a minor revision 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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving BACT, as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Process Description

Fisher Engineering is a manufacturer of steel snowplows and associated attachments for various types of vehicles. Finished plows range from 6.5 feet to 10 feet wide. Fisher processes 1/4" – 5/16" steel raw material in various forming machinery (cutting, bending, and stamping) to make the plow blade and its attachments. All scrap waste steel from this process is collected and sent for recycling. Torch plasma tables and laser cutting tables are used for cutting A36 carbon steel or stainless steel and use a downdraft table system. Dust collectors are used to control particulate matter emissions from the cutting process.

Once the steel is formed into the pieces, the individual pieces are welded together to form the plow. The plow is sent through an automated shot blast line to create a rough surface for coating. Emissions from the shot blasting process vent to a dust collection unit, which then vents indoors. After the plow is shot blasted it goes through an 8-stage Wash System where the parts are cleaned prior to being coated. Fisher had previously operated spray booths for coating parts, which were a source of process VOC emissions; however, all coating has now been converted from liquid to powder coating, which has much lower associated VOC emissions. The powder coating line is an automated conveyor system. The first step in the powder coating process is preheating. This heating aids in the powder curing process. Fisher operates propane fired preheat ovens. From the preheat process, the second step is to convey the plows into the coating booths. Powder coating is sprayed manually onto the plows using high-pressure air guns. The coating booths first impart a primer, and then after curing the primer, a colored coating that is based on the product being produced. The booths are enclosed and equipped with filters to control particulate matter emissions. Then, the coating is cured using propane-fired powder coating cure ovens. There is a one-hour residence time in the cure ovens. The parts are then allowed to cool, and Fisher logo stickers are affixed. The finished plows are stored until they are shipped to retail stores.

Fisher also operates a pre-heat oven used solely for two purposes; burning off powder coating on hooks used to hang product in preparation for coating and burning-off powder coating on defective plow parts in order to rework and recoat. This unit has a maximum heat input of 0.9 MMBtu/hr and is considered an insignificant activity per 06-096 CMR 115, Appendix B.

C. New Process Equipment

Fisher has requested to add two new pieces of process equipment; Laser #1 and Laser #2. These units are Mitsubishi laser cutters used to cut A36 carbon steel and stainless steel. They both include 99.9% efficient pleated filters with a maximum flow rate of 1500 cubic feet per minute. The filters are changed based on changes in the pressure differential. When the pressure differential becomes too large and the filters can't be cleaned anymore they are changed in addition to when they get wet or blow out/fail. BACT for Laser #1 and #2 is the operation, maintenance, and routine inspection of the dust collection systems. BACT for visible emissions from the Laser #1 and #2 filter outlets fall under 06-096 CMR 101, *Visible Emission Regulation*. Visible emissions from the Laser #1 and Laser #2 filters shall not exceed an opacity of 20 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

D. Existing Process Equipment

Fisher has several pieces of existing process equipment at their facility. Their process equipment includes three high definition plasma tables (Plasma #1-3), one laser cutting table (Mazak #1), one Whitney table (Whitney #1) which cuts and stamps the metal, a shot blast unit (Shot Blast #1), and five powder coating booths (Paint #1-5). Each machine has its own ventilation with 99.9% efficient filters. The filters are changed based on changes in the pressure differential. When the pressure differential becomes too large and the filters can't be cleaned anymore they are changed. They are also changed when they get wet or when they blow out/fail.

The Mazak #1 laser cutting table is used for cutting A36 carbon steel and includes a downdraft table system. Dust collectors are used to control particulate matter emissions from the cutting process. BPT for the laser cutting table is the operation, maintenance, and routine inspection of the dust collection systems.

Plasma #1-3 and Whitney #1 plasma cutting tables are used for cutting A36 carbon steel and stainless steel (if Laser #1 and #2 are down) and use a downdraft table system. Dust collectors are used to control particulate matter emissions from the cutting process. BPT for the plasma cutting tables is the operation, maintenance, and routine inspection of the dust collection systems. The dust collectors (labeled #4 and #5) are vented inside for approximately six months of the year (winter months) to help maintain heat within the building.

Shot Blast #1 is used for surface preparation prior to coating. Fisher has found that the powder coat adheres better to a rough surface. Fisher operates a dust collection system on this unit to control particulate matter emissions from the shot blast process. The dust collection system vents indoors, therefore there are no associated fugitive emissions for

this process. BPT for the steel shot blast unit is the continued operation and maintenance of their dust collection systems.

The Wash System was manufactured and installed in 2000 and includes a 2.3 MMBtu/hr heater as mentioned below under Fuel Burning Equipment. The washer consists of a pre-treatment system with 8 stages and is used to clean the metal parts in preparation for final paints and coating applications. Fisher has found that after the plows have been sandblasted, a dust film is usually present. The Wash System is used to remove this dust and further clean the plow before it goes to the next stage of powder coating. The adhesion of the powder coating is enhanced if the Wash System cleans the plow after the shot blasting. The cleaning solutions used in the Wash System consist of low VOC concentrations, with chemical to water ratios of less than two percent. Due to the amount of chemicals used, the VOC emissions are small. BPT for the Wash System is the use of low VOC cleaners.

Paint #1-5 powder coating booths are enclosed and include filters. The parts go through an initial prime coat booth (Paint #1) where primer is sprayed on the parts, and then into IR Oven #1, where the primer is cured. After IR Oven #1 the parts are sent to a top coat booth (Paint #2-5) and then into either Cure Oven #1 or Cure Oven #2. Once the parts are coated and have cooled they are then sent to their respective business units to be packaged for shipping. There are no fugitive emissions associated with this process. BPT for powder coating booths is the continued operation and maintenance of their filter system. VOC emissions from powder coating are inherently much lower than painting with spray guns.

The VOC emissions from the Parts Washer, Wash System, and Paint #1-5 shall be calculated monthly and on a calendar year total basis to ensure compliance with the process equipment 5.0 ton per year VOC emission limit. The emissions shall be calculated by using the VOC content of the solvents, paints, and cleaning chemicals.

BPT for visible emissions from the existing process equipment (Plasma #1-3, Mazak #1, Whitney #1, Shot Blast #1, Wash System, Paint #1-5) fall under 06-096 CMR 101, *Visible Emissions Regulation*. Visible emissions from the existing process equipment shall not exceed an opacity of 20 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

E. Fuel-Burning Equipment

Fisher operates MUAH #1-6 each with a maximum design heat input capacity rating of 1.5 MMBtu/hr and a maximum firing rate of 13.7 gal/hr of propane for the purpose of providing building heat in the original portion of their factory building, MUAH #7-10 each with a maximum design heat input capacity of 1.25 MMBtu/hr and a maximum firing rate of 13.5 gal/hr of propane for the purpose of providing building heat in their 2010 addition, Cure Ovens #1 and #2 with a maximum design heat input capacity of 3.2

MMBtu/hr and a maximum firing rate of 31.5 gal/hr of propane for the purpose of curing the powder coating onto the parts, IR Oven #1 with a maximum design heat input capacity of 1.2 MMBtu/hr and a maximum firing rate of 13.0 gal/hr of propane for the purpose of heating, drying, and/or curing requirements in its process of making plows, and Washer #1 with a maximum design heat input capacity of 2.3 MMBtu/hr and a maximum firing rate of 23.5 gal/hr of propane for the purpose of cleaning parts prior to powder coating.

The regulated pollutants emitted from the fuel-burning equipment (MUAH #1-10, Cure Ovens #1-2, IR Oven #1, and Washer #1) are particulate matter (PM), particulate matter with a particle diameter smaller than 10 microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC). Based on the relatively small size of the fuel-burning equipment, and the quantity of pollutants that could potentially be emitted, it is determined by the Bureau of Air Quality that any add on pollution control device would be economically unjustified. BPT for these six units is the use of propane which emits fewer pollutants when compared to the combustion of other traditional fossil fuels. Overall, propane use for the facility is limited to 1,000,000 gallons per year based on a calendar year total.

1. PM and PM₁₀
Fisher has proposed combustion of propane and good combustion practices as BPT for particulate matter. MUAH #1-10, IR Oven #1, and Washer #1 are not subject to 06-096 CMR 103, *Fuel Burning Equipment Particulate Emission Standard*, due to being smaller than 3.0 MMBtu/hr. Cure Ovens #1 and #2 are subject to 06-096 CMR 103, *Fuel Burning Equipment Particulate Emission Standard*, due to being larger than 3.0 MMBtu/hr. Compliance with 06-096 CMR 103 is considered BPT.
2. SO₂
Fisher has proposed combustion of propane, which inherently has a low sulfur fuel content associated with it, as BPT. Fisher shall keep fuel records for compliance with applicable fuel limits.
3. NO_x
Fisher has proposed combustion of propane and good combustion practices as BPT for NO_x.
4. CO
Fisher has proposed combustion of propane and good combustion practices as BPT for CO.
5. VOC
Fisher has proposed combustion of propane and good combustion practices as BPT for VOC.

6. Opacity

In accordance with 06-096 CMR 101, *Visible Emissions Regulation*, visible emissions from MUAH #1-10, Cure Ovens #1 and #2, IR Oven #1, and Washer #1 shall not exceed 10% opacity on a six minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

7. Periodic Monitoring

Periodic monitoring for the heaters shall include recordkeeping of propane use in the facility on a monthly and calendar year basis.

The BPT emission limits for the fuel-burning equipment are based on the following:

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.018 lb/1000 gal based on AP-42, Table 1.5-1, dated 7/08
- NO_x – 13 lb/1000 gal based on AP-42, Table 1.5-1, dated 7/08
- CO – 7.5 lb/1000 gal based on AP-42, Table 1.5-1, dated 7/08
- VOC – 1.0 lb/1000 gal based on AP-42, Table 1.5-1, dated 7/08
- Opacity – 06-096 CMR 101

The BPT emission limits for Cure Ovens #1 and #2 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Cure Ovens #1 and #2 [each]	PM	0.05

The BPT emission limits for the fuel burning equipment are the following:

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
MUAH #1-6 [each]	0.08	0.08	0.01	0.22	0.12	0.02
MUAH #7-10 [each]	0.06	0.06	0.01	0.18	0.1	0.01
Cure Ovens #1 and #2 [each]	0.16	0.16	0.01	0.46	0.27	0.04
IR Oven #1	0.06	0.06	0.01	0.17	0.1	0.01
Washer #1	0.12	0.12	0.01	0.33	0.19	0.03

F. Parts Washers

Fisher operates two safety-kleen parts washers. One at 20 gallons and one at 40 gallons. Fisher maintains covers and labels on the safety-kleen units and meets the requirements of 06-096 CMR 130, *Solvent Cleaners*. Compliance with 06-096 CMR 130 for the parts washing units and meeting the combined VOC emission limit of 5.0 tons per year for VOC-process equipment shall be considered BPT.

G. Annual Emissions

1. Total Annual Emissions

Fisher shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on an annual fuel use limit of 1,000,000 gal/yr of propane and an annual VOC emission limit for all of the VOC-process equipment of 5.0 tons/yr:

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
All propane-fired equipment (MUAH #1-10, Cure Ovens #1-2, IR Oven #1, Washer #1)	2.3	2.3	0.1	6.5	3.75	0.5
All VOC-process equipment (Wash System, Paint #1-5, Parts Washer)	-	-	-	-	-	5.0
Total TPY	2.3	2.3	0.1	6.5	3.8	5.5

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 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), 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 (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

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

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

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 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 A-727-71-M-R/M subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 CMR 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

- A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - 2. pursuant to any other requirement of this license to perform stack testing.
 - B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.
[06-096 CMR 115]
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[06-096 CMR 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the

air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Process Equipment**

- A. The VOC emissions from the Wash System, Paint #1-5, and the Parts Washer shall be calculated monthly and on a calendar year total basis to ensure compliance with the 5.0 ton per year VOC emission limit for VOC-process equipment.
- B. Fisher shall operate and maintain the filters on the Paint #1-#5, Shotblast #1, Mazak #1, Whitney #1, Plasma #1-#3, and Laser #1-#2 at least once a month and document the inspections in a maintenance log. The maintenance log shall contain information on maintenance and filter replacement. [06-096 CMR 115, BPT]
- C. Visible emissions from the process equipment (Plasma #1-3, Mazak #1, Whitney #1, Shot Blast #1, Wash System, and Paint #1-5) shall not exceed an opacity of 20 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

(17) **Facility-wide Fuel Use**

- A. Total fuel use for the facility shall not exceed 1,000,000 gal/yr of propane, based on a calendar year total basis. [06-096 CMR 115, BPT]
- B. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and a calendar year basis. [06-096 CMR 115, BPT]

(18) **MUAH #1-6**

- A. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
MUAH #1-6 [each]	0.08	0.08	0.01	0.22	0.12	0.02

B. Visible Emissions

Visible emissions from MUAH #1-6 shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

(19) **MUAH #7-10**

A. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
MUAH #7-10 [each]	0.06	0.06	0.01	0.18	0.1	0.01

B. Visible Emissions

Visible emissions from MUAH #7-10 shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

(20) **Cure Ovens #1 and #2**

A. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Cure Ovens #1-2	PM	0.05	06-096 CMR 103(2)(B)(1)(a)

B. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Cure Ovens #1-2 [each]	0.16	0.16	0.01	0.46	0.27	0.04

C. Visible Emissions

Visible emissions from Cure Ovens #1 and #2 shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

(21) **IR Oven #1**

A. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
IR Oven #1	0.06	0.06	0.01	0.17	0.10	0.01

B. Visible Emissions

Visible emissions from IR Oven #1 shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

(22) **Washer #1**

A. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Washer #1 (heater)	0.12	0.12	0.01	0.33	0.19	0.03

B. Visible Emissions

Visible emissions from Washer #1 heater shall not exceed 10% opacity on a 6-minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

(23) **Parts Washers**

Parts washers at Fisher are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

A. Fisher shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]

B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:

1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
2. Wipe cleaning; and,
3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are applicable sources under Chapter 130.

1. Fisher shall attach a permanent conspicuous label to each unit summarizing the

following operational standards [06-096 CMR 130]:

- (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
 - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
 - (vi) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - (viii) Work area fans shall not blow across the opening of the parts washer unit.
 - (ix) The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

(24) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(25) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

Douglas Dynamics, L.L.C.
d/b/a Fisher Engineering
Knox County
Rockland, Maine
A-727-71-M-R/M (SM)

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Departmental
Findings of Fact and Order
Air Emission License
Renewal and Minor Revision

- (26) Fisher shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605

DONE AND DATED IN AUGUSTA, MAINE THIS 25 DAY OF June, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Maureen Allen Robert Come for
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/11/2014
Date of application acceptance: 2/25/2014

Date filed with the Board of Environmental Protection:

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

