

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

#### **DEPARTMENT ORDER**

Elmet Technologies LLC Androscoggin County Lewiston, Maine A-565-71-U-M 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

Elmet Technologies LLC (Elmet) was issued Air Emission License A-565-71-Q-R/M on July 15, 2015, for the operation of emission sources associated with their manufacturing facility. The license was subsequently amended as follows:

Amendment #	Date Issued	<b>Brief Description</b>
A-565-71-R-M	October 30, 2015	Correction of tune-up frequency for Bryan Boiler #2
A-565-71-S-M	January 21, 2022	Removing annual fuel limit and adding short term
		emission limits to fuel burning equipment
A-565-71-T-A	May 16, 2022	Replacing Bryan Boiler #1 with Avenger Boiler #1

The equipment addressed in this license amendment is located at 1560 Lisbon St., Lewiston, Maine.

Elmet has requested a minor revision to their license in order to make the following changes:

- 1. Remove the Tungsten Primary Reduction Furnaces;
- 2. Remove the Molybdenum Primary Reduction Furnaces and their associated baghouse;
- 3. Remove the Molybdenum Oxide Grinder and its associated baghouse;
- 4. Remove hydrogen emission tracking requirements; and
- 5. Update the visible emission standards for general process and fugitive emissions to conform with 06-096 C.M.R. ch. 101.

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# B. Emission Equipment

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

# **Process Equipment**

Equipment	MMBtu/hr	Fuel Type	Stack #
Tungsten Primary Reduction Furnaces	1.0	Natural Gas / Propane	7
Molybdenum Primary Reduction Furnaces	0.9	Natural Gas / Propane	8
Molybdenum Oxide Grinder	N/A	N/A	8

# 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. Therefore, this amendment is determined to be a minor revision and has been processed as such.

# D. Facility Classification

The facility is licensed as follows:

- As a natural minor source of criteria pollutants, because no license restrictions are necessary to 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 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.

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# B. Revision Description

1. Elmet has removed the Tungsten Primary Reduction Furnaces, the Molybdenum Primary Reduction Furnaces, and the Molybdenum Oxide Grinder from the facility. The Conditions of this air emission license will be updated to reflect this change.

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- 2. In Air Emission License A-565-71-Q-R/M as well as previous licenses dating back to 2003, the requirement for Elmet to track emissions of hydrogen was included to ensure that the facility does not emit at a rate that would require further regulatory action. As hydrogen is not a regulated pollutant under stationary source air emission licensing, this requirement is not warranted and will be removed as of this licensing action.
- 3. The following updates will also be made to the visible emissions requirements to conform with 06-096 C.M.R. ch. 101, which was updated on January 1, 2024.

#### a. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from any baghouse shall not exceed 10% on a six-minute block average basis.

# b. Fugitive Emissions

Elmet shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Elmet shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

#### C. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are

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not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Specific annual emissions for various production processes;
- Operating the boilers and fuel burning production equipment for 8,760 hr/yr each.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

# Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boilers (Burnham Boiler, Bryan Boiler #2, and Avenger Boiler #1)	4.90	4.90	0.06	6.27	3.54	0.23
Fuel Burning Process Equipment	1.63	1.63	0.02	3.17	2.66	0.17
Doping Tumblers				1.00		
Wastewater Evaporators			1	1	1	1.00
Total TPY	6.6	6.6	0.1	10.5	6.2	1.5

Note: Combustion emissions from the Molybdenum Sheet Annealing Furnace, Caustic Cleaning Tanks, and the Wastewater Evaporators are included in the Fuel Burning Process Equipment.

Pollutant	Tons/year		
Single HAP	9.9		
Total HAP	24.9		

# 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		
PM <sub>2.5</sub>	15		
$SO_2$	50		
$NO_x$	50		
CO	250		

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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.

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This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Elmet to submit additional information and may require an ambient air quality impact analysis at that time.

#### **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-565-71-U-M subject to the conditions found in Air Emission License A-565-71-Q-R/M; in amendments A-565-71-R-M, A-565-71-S-M, A-565-71-T-A; and the following conditions.

<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.

# **SPECIFIC CONDITIONS**

The following shall replace Specific Condition (17) of Air Emission License A-565-71-S-M.

# (17) Fuel Burning Process Equipment

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

Unit	Pollutant	lb/MMBtu	
Wastewater	PM	0.05	
Evaporators	FIVI	0.03	

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Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Molybdenum Sheet Annealing Furnace	0.10	0.10		0.19	0.16	0.01
Caustic Cleaning Tanks	0.05	0.05	1	0.10	0.08	0.01
Wastewater Evaporators	0.23	0.23		0.44	0.37	0.02

#### B. Visible Emissions

Visible emissions for the equipment listed above shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

Specific Condition (18) is removed from Air Emission License A-565-71-Q-R/M.

The following shall replace Specific Condition (19) of Air Emission License A-565-71-S-M.

# (19) General Process Sources

- 1. Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]
- 2. Visible emissions from any baghouse shall not exceed 10% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(3)]

The following is a new Specific Condition of Air Emission License A-565-71-Q-R/M.

# (22) **Fugitive Emissions**

A. Elmet shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

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B. Elmet shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

for

[06-096 C.M.R. ch. 101, § 4(C)]

DONE AND DATED IN AUGUSTA, MAINE THIS 6<sup>th</sup> DAY OF AUGUSTA, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:\_

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MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-565-71-Q-R/M (issued 06/15/2015).

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:  $\frac{5/31/24}{6/3/24}$ Date of application acceptance:  $\frac{6}{3}$ 

Date filed with the Board of Environmental Protection:

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

# **FILED**

AUG 06, 2024

State of Maine Board of Environmental Protection