

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

#### **DEPARTMENT ORDER**

Roehm America LLC York County Sanford, Maine A-393-71-AD-M Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

#### 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

Evonik Cyro LLC was issued Air Emission License A-393-71-V-R/M on May 7, 2013, for the operation of emission sources associated with their acrylic plastic resin and sheet products manufacturing facility. The license was subsequently amended on February 18, 2015 (A-393-71-AA-M) and on December 8, 2017 (A-393-71-AB-M).

In September 2019, Evonik Cyro LLC changed their name to Roehm America LLC (Roehm). This was a change in name only and no license transfer was required.

The equipment addressed in this license amendment is located at 1796 Main Street, Sanford, Maine.

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

- 1. Removal of the Giebel Building Generator;
- 2. Removal of the Framing and Lamination processes;
- 3. Removal of solvent-based parts washers; and
- 4. Lowering the facility-wide VOC limit from 39.9 tpy to 9.9 tpy.

This amendment will also update the facility's visible emission requirements and federal requirements pertaining to the facility's engines.

# B. Emission Equipment

The following equipment/processes have been <u>removed</u> from the facility or shut down:

### Generators

Equipment	Maximum Capacity (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, % sulfur	Manufacture Date
Giebel Building Generator	3.14	22.9	Distillate fuel, 0.0015%	1985

# **Process Equipment**

		<b>Pollution Control</b>	
Equipment	Pollutants	Equipment	Stack
Framing Operation	VOC/HAP	None	Fugitive
Lamination Process	HAP	None	Lamination Line Stack
Parts Washers	VOC	None	Fugitive

Roehm may operate aqueous-based parts washers if the cleaning solution contains less than 5% VOC. Such units do not meet the definition of solvent cleaning machine, and have no applicable requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

The following equipment/processes are addressed in this air emission license solely for completeness and the purposes of updating currently applicable requirements:

# **Fuel Burning Units**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel	Install. Date	Stack #
Giebel Boiler #1	12.7	12,451 scf/hr			Giebel Boiler Stack
Heater #1	1.1	1078.4 scf/hr	Notreal cos	2011	
Heater #2	1.1	1078.4 scf/hr	Natural gas	2011	
Heater #3	1.1	1078.4 scf/hr			
Heater #4	1.6	1568.6 scf/hr			
Thermal Oxidizer	2.5	27.6 gal/hr	Propane	2002	#6
Thermal Oxidizer	2.3	2451.0 scf/hr	Natural gas	2002	#0

# Departmental Findings of Fact and Order Air Emission License Amendment #3

#### Generators

3

Equipment	Maximum Capacity (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, % sulfur	Manufacture Date
Building #1 Generator	2.88	21.0	Distillate	1996
Fire Pump Generator	1.75	12.7	fuel, 0.0015%	1986

### **Process Equipment**

		Pollution Control	
Equipment	Pollutants	Equipment	Stack
Giebel Building			
		2 Condensers	Oxidizer 1
Sheet Lines	VOC/HAP	followed by	and
		2 Catalytic Oxidizers	Oxidizer 2
Acrylic Sheet Trimming	PM	Dust Collector	Giebel 3
Other			
Multi-Functional Coating	VOC/HAP	Thermal Oxidizer	#6
Laser Cutting Process	HAP	Carbon Adsorption	#7
Silo #7	PM	Baghouse	Silo #7

# 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

With the facility-wide limit on VOC and HAP, the facility is licensed as follows:

- · As a synthetic minor source of air emissions, because Roehm 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.

# Departmental Findings of Fact and Order Air Emission License Amendment #3

### 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.

### B. Revision Description

Roehm has requested the removal of the Giebel Building Generator from their air emission license. This unit was disconnected and removed from the facility in September 2018.

The Framing and Lamination operations are no longer operated at the facility, and Roehm no longer uses solvent-based parts washers. Therefore, Roehm has requested that these operations be removed from their air emission license.

Due to these changes in facility operations, Roehm requested their facility-wide limit of VOC be reduced from 39.9 tpy to 9.9 tpy. Reported emissions of HAP over the past three calendar years has been consistently less than 1.0 tpy.

The Department agrees with all of the proposed changes above. The reduction in VOC limit means that Roehm will no longer be subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. However, Roehm is required to submit an emission statement for calendar year 2020.

### C. Visible Emissions

Since Roehm's previous license, *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101, has been revised. This license amendment updates the visible emission requirements for the facility based on the current rule.

### D. Generators

The Building #1 Generator and the Fire Pump Generator are subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. On May 1, 2015, the U.S. Court of Appeals

Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

issued a decision specifically vacating  $\S$  63.6640(f)(2), which had allowed for limited operation for emergency demand response purposes. This license updates the applicable requirements for the facility's emergency generators to address this change to the federal rule.

5

### E. 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. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- Operating Giebel Boiler #1, the heaters, and the Thermal Oxidizer for 8,760 hours/year;
- Operating Building #1 Generator and the Fire Pump Generator for 100 hours/year; and
- A facility-wide VOC and HAP limit of 9.9 tpy.

Please note, this information provides the basis for fee calculation <u>only</u> and should not be construed to 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	$PM_{10}$	SO <sub>2</sub>	NO <sub>x</sub>	СО	VOC	Total HAP
Giebel Boiler #1	2.8	2.8	0.1	5.5	4.6	_	_
Heater #1	0.2	0.2	_	0.5	0.4	_	_
Heater #2	0.2	0.2	_	0.5	0.4	_	_
Heater #3	0.2	0.2	_	0.5	0.4	_	_
Heater #4	0.4	0.4	_	0.7	0.6	_	_
Thermal Oxidizer	0.2	0.2	0.2	1.6	0.9	_	-
Bldg #1 Generator	0.1	0.1	_	3.2	0.7	_	_
Fire Pump Generator	0.1	0.1	_	1.9	0.4	_	1
Facility-Wide	_	_	_	_		9.9	9.9
Total TPY	4.2	4.2	0.3	14.4	8.4	9.9	9.9

# Departmental Findings of Fact and Order Air Emission License Amendment #3

# 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
СО	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 amendment.

### **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-393-71-AD-M subject to 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.

Extensive changes have been made to the facility's Specific Conditions since the last renewal. Therefore, for clarity this license consolidates all currently applicable Standard and Specific Conditions in this Order. No changes to requirements are intended except where specifically addressed in the Findings of Fact.

Therefore, the following replaces all currently applicable Standard and Specific Conditions in air emission licenses previously issued to the facility.

# Departmental Findings of Fact and Order Air Emission License Amendment #3

### 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

# Departmental Findings of Fact and Order Air Emission License Amendment #3

- (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 C.M.R. ch. 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 the written test report by the Department, or another alternative timeframe approved by the Department, 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 C.F.R. 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

# Departmental Findings of Fact and Order Air Emission License Amendment #3

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 C.M.R. ch. 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 license requirement. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (16) The licensee 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. § 605). [06-096 C.M.R. ch. 115]

### **SPECIFIC CONDITIONS**

### (17) Giebel Boiler #1

- A. Giebel Boiler #1 shall fire natural gas. Roehm shall maintain recordkeeping to document fuel use on both a monthly and a 12-month rolling total basis. [40 C.F.R. § 60.48c(g)(2) and 06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following:

<b>Emission Unit</b>	Pollutant	lb/MMBtu	Origin and Authority
Giebel Boiler #1	PM	0.05	06-096 C.M.R. ch. 103 § (2)(B)(1)(a)

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

	PM	PM <sub>10</sub>	$SO_2$	$NO_x$	CO	VOC
<b>Emission Unit</b>	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Giebel Boiler #1	0.64	0.64	0.01	1.25	1.05	0.07

10

D. Visible emissions from Giebel Boiler #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch.101, § 3(A)(3)]

### (18) **Heaters #1, #2, #3, and #4**

- A. Heaters #1, #2, #3, and #4 shall fire natural gas. Roehm shall maintain recordkeeping to document fuel use on both a monthly and a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NOx	CO	VOC
Unit (firing natural gas)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Heater #1 1.1 MMBtu/hr	0.06	0.06	0.001	0.11	0.09	0.01
Heater #2 1.1 MMBtu/hr	0.06	0.06	0.001	0.11	0.09	0.01
Heater #3 1.1 MMBtu/hr	0.06	0.06	0.001	0.11	0.09	0.01
Heater #4 1.6 MMBtu/hr	0.08	0.08	0.001	0.16	0.13	0.01

C. Heaters #1, #2, #3, and #4 vent indoors; thus, they are not subject to opacity standards.

# (19) **Thermal Oxidizer**

- A. The Thermal Oxidizer shall fire either propane or natural gas. Roehm shall maintain recordkeeping to document fuel use on both a monthly and a 12-month rolling total basis. [06-096 C.M.R. ch.115, BPT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Thermal Oxidizer 2.5 MMBtu/hr	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)
Firing Propane	0.05	0.05	0.06	0.36	0.21	0.05
Firing Natural Gas	0.05	0.05	0.001	0.25	0.21	0.01

C. Visible emissions from the Thermal Oxidizer shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch.115, BPT]

# Departmental Findings of Fact and Order Air Emission License Amendment #3

# (20) **Emergency Generators**

A. The Building #1 Generator and the Fire Pump Generator shall each be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

11

- B. The fuel sulfur content for the fuel fired in the Building #1 Generator and the Fire Pump Generator shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BPT]
- C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

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)
Building #1 Generator	0.35	0.35	neg	12.70	2.74	1.04
Fire Pump Generator	0.21	0.21	neg	7.72	1.66	0.63

#### D. Visible Emissions

Visible emissions from the Building #1 Generator and the Fire Pump Generator shall each not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Roehm may comply with the following work practice standards in lieu of the numerical visible emissions standard.

[06-096 C.M.R. ch. 101, § 3(A)(4)]

- 1. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
- 2. Operate the Building #1 Generator and the Fire Pump Generator in accordance with the manufacturer's emission-related operating instructions.
- 3. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- 4. Operate the Building #1 Generator and the Fire Pump Generator, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance

Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

procedures, review of operation and maintenance records, and inspection of the unit.

E. The Building #1 Generator and the Fire Pump Generator shall each meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

12

- 1. Roehm shall meet the following operational limitations for the Building #1 Generator and the Fire Pump Generator:
  - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
  - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Records shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6603(a) and Table 2(d) and 06-096 C.M.R. ch. 115]

### 2. Oil Analysis Program Option

Roehm has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Roehm must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

#### 3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

- 4. Maintenance, Testing, and Non-Emergency Operating Situations
  - a. As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours.

[40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115]

# **Departmental** Findings of Fact and Order **Air Emission License** Amendment #3

b. Roehm shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

13

# 5. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Roehm shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]

6. Startup Idle and Startup Time Minimization

During periods of startup, the facility must minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

#### (21)**Process Emission Sources: Giebel Building**

- A. Visible emissions from the Bin Vent Filter on Silo #7 shall not exceed 20% opacity on a six-minute block average basis except for no more than one six-minute block average in a one-hour period. Roehm shall keep records of all baghouse maintenance on the Silo #7 Bin Vent Filter. [06-096 C.M.R. ch. 115, BPT]
- B. Roehm shall operate at least one condenser and catalytic oxidizer during all times the Polymerized MMA Extruding Sheet Lines are operating to control VOC and HAP emissions. Each condenser and catalytic oxidizer combination shall achieve a VOC/HAP destruction efficiency of at least 95%. [06-096 C.M.R. ch. 115, BPT]
- C. The total combined emissions from Catalytic Oxidizer Stacks #1 and #2 shall not exceed 1.5 tons MMA per month and 0.2 tons MA per month. [06-096 C.M.R. ch. 115, BPT]
- D. By May 7, 2018 and once every five calendar years, Roehm shall conduct performance testing on Condenser #1/Oxidizer #1 and Condenser #2/Oxidizer #2 (i.e., each control grouping) to demonstrate that each is achieving a destruction efficiency of at least 95%. Roehm shall conduct this performance testing separately on each condenser/oxidizer with the other condenser/oxidizer off-line to demonstrate that compliance shall be achieved through the use of either condenser/oxidizer alone.

[06-096 C.M.R. ch. 115, BPT]

# Departmental Findings of Fact and Order Air Emission License Amendment #3

E. By the 21<sup>st</sup> of each month and using the most recently recorded monthly and quarterly vent monitoring of the air velocity, temperature, MMA ppm, MA ppm, and run time hours, Roehm shall calculate the average daily emissions of MMA and of MA from Catalytic Oxidizer Stacks #1 and #2 for the previous month. [06-096 C.M.R. ch. 115, BPT]

14

- F. Roehm shall continue operational practices to minimize VOC and HAP emissions and monitoring practices to document monthly emissions from the Giebel Building process sources, including conducting monthly and quarterly vent monitoring of air velocity, temperature, MMA and MA concentrations in the exhaust, and run time hours. [06-096 C.M.R. ch. 115, BPT]
- G. Roehm shall monitor, record, and keep the following records, as applicable:
  - 1. Records for each oxidizer of all startups, shutdowns, and malfunctions including date, time, and duration. For malfunctions, the cause and the method utilized to minimize duration of the event and/or to prevent reoccurrence shall also be recorded.
  - 2. Continuously monitor and record during all operating times the inlet and outlet temperatures across the catalyst beds and take corrective action if temperatures are outside of the range between 450 °F and 1000 °F (1-hour block average basis), the appropriate temperature range for adequate VOC/HAP destruction.
  - 3. Records of the date of drum replacement for the accumulator associated with each condenser.

[06-096 C.M.R. ch. 115, BPT]

H. Visible emissions from the flat sheet extrusion process saw and grinder dust collector shall not exceed 10% on a six-minute block average basis. The facility shall take corrective action if visible emissions from the baghouses exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(3)]

# (22) Process Emission Sources: Multi-Functional Coating Facility

- A. Roehm shall continuously control VOC emissions from the coating facility by the use of a Thermal Oxidizer. [06-096 C.M.R. ch. 115, BPT]
- B. In the Thermal Oxidizer, Roehm shall maintain a minimum chamber average temperature of 1500 °F (1-hour block average basis) or the minimum temperature at which the most recently completed stack testing demonstrates a VOC destruction efficiency of at least 98%. Roehm shall use thermocouples in the combustion chamber and associated recording devices to continuously monitor and record the Thermal Oxidizer combustion chamber average temperature to document compliance. [06-096 C.M.R. ch. 115, BPT]
- C. Roehm shall maintain monthly records of the amount of coatings used and the VOC and HAP content, identity, and percentage of the coatings. These records, along with

Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

stack test results confirming at least 98% destruction of VOC and HAP, shall be used to calculate actual emissions, both on a monthly and a 12-month rolling total basis. Such records shall be maintained onsite and made available to the Department upon request. [06-096 C.M.R. ch. 115, BPT]

15

- D. Roehm shall conduct additional performance testing on the Thermal Oxidizer upon request by the Department.
- E. Emissions from the Thermal Oxidizer shall not exceed 7.2 tons/year of VOC/HAP. [06-096 C.M.R. ch. 115, BPT]

# (23) Process Emission Sources: Laser Cutting Process

Roehm shall include estimated emissions from the Laser Cutting Process, based on the following, in the documentation of compliance with the facility-wide VOC and HAP emission limits:

- A. Carbon bed manufacturer's control efficiency specification for the carbon bed.
- B. Roehm's monthly testing for emissions from the carbon bed exhaust flow.
- C. Upon detection of carbon bed breakthrough, Roehm shall replace the carbon bed within a reasonable timeframe for carbon bed replacement, not to exceed three months from the date of detected breakthrough. The Laser Cutting Process is not required to cease operation during this time. Before replacement of the carbon bed, Roehm shall measure ppm of MMA emissions from the Laser Cutting Process, then use this data and process run time records to quantify emissions from the Laser Cutting Process during the time from first detection of bed breakthrough to replacement with a new carbon bed.

[06-096 C.M.R. ch. 115, BPT]

# (24) Fugitive VOC/HAP

Roehm shall minimize fugitive VOC and HAP emissions by keeping all containers covered when not in immediate use, as appropriate, and managing materials in such a manner as to reduce the likelihood of spills. [06-096 C.M.R. ch. 115, BPT]

### (25) VOC RACT

Roehm shall control VOC emissions such that the total facility VOC emissions do not exceed, on a daily basis, 15% of the uncontrolled daily VOC emissions. The following are the controls and recordkeeping required by VOC RACT.

- A. Roehm shall operate the following:
  - 1. Two catalytic oxidizers to capture and control VOC emissions from Giebel Building process sources; and

Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

2. A Thermal Oxidizer to control VOC emissions from the Multi-Functional Coating Facility. [06-096 C.M.R. ch. 134, 06-096 C.M.R. ch. 115, BPT]

16

- B. Roehm shall maintain monthly records of the VOC destruction in the catalytic oxidizers and the Thermal Oxidizer. [06-096 C.M.R. ch. 134, 06-096 C.M.R. ch. 115, BPT]
- C. For facility VOC and HAP emissions tracking, fuel use at the facility shall be based on fuel supplier records or data from fuel flow meters, determined monthly and on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
- D. Roehm shall, by the 21<sup>st</sup> of each succeeding month, calculate and record the daily total facility-wide VOC emissions. Records shall indicate on a daily basis the percent control efficiency for VOC, the control equipment utilized, and all occasions when equipment from which emissions originate was operating but the associated control equipment (Catalytic Oxidizers or Thermal Oxidizer) was not concurrently operating. [06-096 C.M.R. ch. 134, 06-096 C.M.R. ch. 115, BPT]

### (26) Monitoring and Recordkeeping Requirements

- A. The following are identified as Parameter Monitors [06-096 C.M.R. ch. 115, BPT]:
  - 1. Temperature monitors on the catalytic oxidizers; and
  - 2. Temperature monitors on the Thermal Oxidizer.
- B. Parameter monitors must record accurate and reliable data. If a parameter monitor allows the recording of accurate and reliable data less than 98% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not providing accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to provide accurate and reliable data was due to the performance of the established quality assurance and quality control procedures or unavoidable malfunctions. [06-096 C.M.R. ch. 115, BPT]
- C. For the dust collector, Thermal Oxidizer, condensers, and catalytic oxidizers, Roehm shall keep maintenance logs recording the dates and reasons for all emission upsets as well as all routine and non-routine maintenance procedures. [06-096 C.M.R. ch. 115, BPT]

### (27) Facility-Wide VOC and HAP Annual Emission Limits

A. Roehm shall not exceed an emission limit of 9.9 tons per year of VOC based on a 12-month rolling total. This is a facility-wide limit. As such, emissions from all equipment and processes at the facility shall be included in calculations used to determine compliance with this limit. [06-096 C.M.R. ch. 115, BACT]

Roehm America LLC
<b>York County</b>
Sanford, Maine
A-393-71-AD-M

# Departmental Findings of Fact and Order Air Emission License Amendment #3

B. Roehm shall not exceed an emission limit of 9.9 tons per year for all HAPs combined based on a 12-month rolling total. This is a facility-wide limit. As such, emissions from all equipment and processes at the facility shall be included in calculations used to determine compliance with this limit, including HAP emissions from fuel burning equipment and all other HAP emission sources. HAPs are as identified in 06-096 C.M.R. ch. 115, Appendix B and in Section 112(b) of the CAA. [06-096 C.M.R. ch. 115, BACT]

**17** 

C. Roehm shall maintain monthly and 12-month rolling total documentation of all VOC and HAP emissions from the various sources throughout the facility, based on monitoring, recordkeeping, and calculations as necessary and as described in this license for each emission unit to quantify VOC and HAP emissions from individual units and from the facility as a whole. For facility VOC and HAP emissions tracking, fuel use at the facility shall be based on fuel supplier records or data from fuel flow meters, determined monthly and on a 12-month rolling basis. [06-096 C.M.R. ch. 115, BPT]

### (28) Annual Emissions Statement

With the issuance of this license amendment (A-393-71-AD-M), Roehm is no longer subject to *Emission Statements*, 06-096 C.M.R. ch. 137, except that the facility shall submit to the Department the information necessary to accurately update the State's emission inventory for calendar year 2020. [06-096 C.M.R. ch. 137]

### (29) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Department within 30 days after the end of each calendar quarter detailing the following for the control equipment and parameter monitors required by this license:

- A. All control equipment downtimes and malfunctions;
- B. All parameter monitor downtimes and malfunctions;
- C. All excess events of emission and operational limitations set by this Order, Statute, or state or federal regulations, as appropriate. The following information shall be reported for each excess event:
  - 1. Standard exceeded;
  - 2. Date, time, and duration of excess event;
  - 3. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
  - 4. A description of what caused the excess event;
  - 5. The strategy employed to minimize the excess event; and
  - 6. The strategy employed to prevent reoccurrence.

Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

D. A report certifying there were no excess emissions, if that is the case.

18

[06-096 C.M.R. ch. 115, BPT]

Done and dated in augusta, maine this  $19^{th}$  day of JANUARY, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

MELANIE LOYZIM, ACTING COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-393-71-V-R/M.

for

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 12/9/2020 Date of application acceptance: 12/9/2020

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Muzzey, Bureau of Air Quality.

# **FILED**

JAN 19, 2021

State of Maine Board of Environmental Protection