

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

DEPARTMENT ORDER

Eurovia Atlantic Coast LLC Penobscot County Hermon, Maine A-257-71-V-A 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

The Lane Construction Corporation was issued Air Emission License A-257-71-R-R/A on December 19, 2016, for the operation of emission sources associated with their hot mix asphalt plant and crushed stone and gravel facility. The license was subsequently amended on February 2, 2017, (A-257-71-S-M), and the license was transferred to Eurovia Atlantic Coast LLC (Eurovia) on April 18, 2019 (A-257-71-T-T). The license was further amended on October 16, 2020 (A-257-71-U-A) to add a bulk asphalt storage terminal to the facility.

The equipment addressed in this license amendment is located at 1067 Odlin Road, Hermon, Maine.

Eurovia has requested an amendment to their license in order to make the following changes:

- 1. Revise the size of the bulk storage terminal hot oil heaters;
- 2. Add two additional asphalt blending tanks (Blending Tanks #5 and #6);
- 3. Renumber the previously licensed Tanks #4 and #5 to Tanks #8 and #9;
- 4. Reducing the annual throughput limit for Tanks #8 and #9 from 5.25 million gallons per year to 3.15 million gallons per year;
- 5. Clarify the emissions testing deadline for all asphalt tanks;
- 6. Add a natural gas-fired emergency generator;
- 7. Address potential VOC/HAP emissions from the polymer blending operation; and
- 8. Lower the asphalt production limit for Batch Mix Asphalt Plant #26 from 444,000 ton/year to 435,000 ton/year.

Eurovia Atlantic Coast LLC
Penobscot County
Hermon, Maine
A-257-71-V-A

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

B. Emission Equipment

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

Asphalt Plant

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	Process	Max.			~	
Equipment	Rate (tons/hour)	Capacity (MMBtu/hr)	Fuel Type, % sulfur	Firing Rate	Control Device	Date of Manuf.
			Distillate Fuel, 0.0015% Spec. waste oil, 0.7%	1,071.4 gal/hr		Plant:
Asphalt	420	150	Propane, negl.	1,657.5 gal/hr	Baghouse	Pre-1973 Burner:
r 1aint #20			Natural Gas, negl.	145,631 scf/hr		1998

Heating Equipment

-	Max. Capacity	Maximum	Fuel Type,	Date of	
Equipment	(MMBtu/hr)	Firing Rate	% sulfur	Manuf.	Stack #
Terminal HOH #1	11.1	11,700 scf/hr	Natural Gas, negl.	2020	3
Terminal HOH #2	11.1	11,700 scf/hr	Natural Gas, negl.	2020	4
Terminal HOH #3	11.1	11,700 scf/hr	Natural Gas, negl.	2020	5

Asphalt Tanks

	Capacity	Product			Date
Equipment	(gallons)	Stored	Roof Type	Temperature	Installed
Tank #1	2,350,000			$275-310\ ^\circ F$	2021
Tank #2	2,350,000	Asphalt		$275-310\ ^\circ F$	2021
Tank #3	2,350,000			$275-310\ ^\circ F$	2021
Blending Tank #5 ^a	10,000	D 1	Fixed	360 °F	2021
Blending Tank #6 ^a	10,000	Polymer		360 °F	2021
Tank #8 ^b	60,000	Asphalt		330 °F	2021
Tank #9 ^b	60,000	rispitati		330 °F	2021

^a Blending Tanks #5 and #6 are new to this license.

^b Tanks #8 and #9 were previously licensed as Tanks #4 and #5. These units have been renamed.

Stationary Engines

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Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (scf/hr)	Date of Manf.	Date of Install.
Emergency Generator #1	1.8	150	Natural gas, Negligible	1,778	2021	2021

C. Definitions

<u>Continuously</u> means equally spaced data points with at least one valid data point in each successive 15-minute period. A minimum of three valid 15-minute periods constitutes a valid hour. This definition is used with respect to operation of monitors required by this license.

<u>Records</u> or <u>Logs</u> mean either hardcopy or electronic records.

D. 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.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

	Current License	Future License	Net Change	Significant
Pollutant	(TPY)	(TPY)	(TPY)	Emission Levels
PM	16.0	16.4	+0.4	100
PM ₁₀	16.0	16.4	+0.4	100
SO_2	19.5	19.1	-0.4	100
NO _x	40.3	41.4	+1.1	100
CO	99.9	99.7	-0.2	100
VOC	18.7	19.4	+0.7	50

This modification is determined to be a minor modification and has been processed as such.

E. Facility Classification

With the annual production limit on the asphalt batch plant and the annual facility-wide limits on volatile organic compounds (VOC) and hazardous air pollutants (HAP), the facility is licensed as follows:

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- As a synthetic minor source of air emissions for VOC, because Eurovia 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.

Emissions of carbon monoxide (CO) are licensed above 80% of the major source threshold. Therefore, this facility is classified as an "80% Synthetic Minor" for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine's Compliance Monitoring Strategy.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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

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. Batch Mix Asphalt Plant #26

Batch Mix Asphalt Plant #26 was given a production limit of 444,000 tons of hot mix asphalt (HMA) per year on a 12-month rolling total basis in Air Emission License A-257-71-U-A (dated October 16, 2020). As part of this minor modification, Eurovia has requested to decrease this limit to 435,000 tons of HMA per year on a 12-month rolling

total basis. This change will not affect the BPT emission limits established in Air Emission License A-257-71-R-R/A (dated December 19, 2016).

C. Polymer Modified Asphalt Tanks (Blending Tanks #5 and #6) and Polymer Blending

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Eurovia proposes to install two new emissions units (Blending Tanks #5 and #6) to blend liquid asphalt with one or more polymer materials to make polymer modified asphalt (PMA). The polymer materials enhance the mechanical properties of the asphalt to withstand heavy traffic and extreme weather conditions.

Asphalt will leave one of the large storage tanks and be sent through a heat exchanger that raises the temperature to roughly 350 °F. The asphalt will then be sent to the PMA skid inside the PMA production building where polymer is added and blended with the asphalt. The blended asphalt is then transferred to either Blending Tank #5 or #6 for digestion. When polymer digestion is complete, sulfur is added to the tank as a crosslinker to stabilize the blend. The PMA is then sent through a static blender where a zinc octoate scavenger is added that reacts with any remaining sulfur to form zinc sulfates thereby reducing emissions of hydrogen sulfide (H₂S). The finished product is sent to Tanks #8 and #9 for storage prior to delivery via truck.

Blending Tanks #5 and #6 will each have a capacity of 10,000 gallons and an expected throughput of 3.15 million gallons per year (both tanks combined) on a 12-month rolling total basis. Blending Tanks #5 and #6 will be held at approximately 360 °F. VOC emissions from these tanks is estimated to be the same as emissions from Tanks #8 and #9 since they will have the same throughput. Eurovia has requested the throughput limit for Tanks #8 and #9 combined be reduced from the previously licensed 5.25 million gallons per year (both tanks combined).

1. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Kb

Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 C.F.R. Part 60, Subpart Kb, applies to tanks which store volatile organic liquids which are greater than 151 cubic meters (~40,000 gallons) and store a product with a true vapor pressure greater than 3.5 kilopascals (kPa). Blending Tanks #5 and #6 are not subject to this regulation, because their capacity is less than 151 cubic meters.

2. BACT Findings

The main pollutant of concern from petroleum storage facilities is VOC. Emissions from fixed roof tanks are caused by changes in temperature, pressure, and liquid level. When the tank is filled, the vapor above the liquid is forced out of the tank as the space is taken up by the liquid product. These emissions from actively filling the tank are

known as "working losses." Working losses only occur when the tank is actively being filled. However, working losses may result in a large volume of VOC-laden air being exhausted from the tank over a relatively short period of time.

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Fixed roof tanks can also have emissions when no product is being added or removed. These emissions, known as "breathing losses" or "standing losses," occur when there is an increase in temperature inside the tank. The product and/or vapor space expand at increased temperatures, forcing vapor out of the tank. When the interior of the tank cools, the opposite occurs, and fresh air is drawn into the tank as the product and vapor inside the tank contracts. Breathing losses result in a much smaller flowrate of vapor from the tank, but the emissions occur more frequently (potentially daily).

Breathing losses from Blending Tanks #5 and #6 are expected to be minimal since material is only in these tanks for short periods of time. The majority of emissions from Blending Tanks #5 and #6 are expected to be working losses; emissions have been based on potential tank throughput.

Control strategies considered for control of VOC from Blending Tanks #5 and #6 include floating roofs, a Vapor Recovery Unit (VRU), and a Vapor Combustion Unit (VCU).

a. <u>Floating Roofs</u>

Emissions from petroleum tanks can be minimized by installing a floating roof that sits on the surface of the product stored. With all types of floating roof tanks, the roof rises and falls with the liquid level in the tank. They are equipped with a flexible rim seal system, which is attached to the deck perimeter and contacts the tank wall. The purpose of the floating roof and rim seal system is to reduce evaporative loss of the stored liquid. Some annular space remains between the seal system and the tank wall. The seal system slides against the tank wall as the roof is raised and lowered. The floating deck is also equipped with deck fittings that penetrate the deck and serve operational functions.

Floating roofs are not typically used for products such as asphalt. The roof has the potential to become compromised if the tank is allowed to cool and the product solidifies (e.g., shutting off the tank heaters in the winter). The reheating process could cause one side of the tank to become liquid before the other causing the roof to tilt and possibly submerge. Additionally, asphalt tanks typically use mixers to circulate product. Floating roofs are not designed to accommodate such systems. A review of EPA's RACT/BACT/LAER Clearinghouse found no instances where floating roofs were required for tanks storing asphalt. Therefore, the use of floating roofs for control of VOC from Tanks #5 and #6 is determined to not be technically feasible.

b. <u>Vapor Recovery Unit (VRU) and Vapor Combustion Unit (VCU)</u> Vapor recovery units (VRUs) route VOC-laden vapors to a device which separates the VOC from the exhaust stream. The most cost-effective system collects the tank vents and draws them through a mist eliminator followed by a non-regenerative carbon adsorber.

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Mist eliminators, also known as "demisters" or "entrainment separators," are designed to remove mist droplets from an air stream. Unlike condensers, mist eliminators do not involve a phase change. The product entrained in the air stream is already in a liquid form, but the droplets are so small as to become airborne.

Mist eliminators are relatively simple devices that involve passing the exhaust stream past or through some type of filter system (e.g., wire mesh, filters, baffles). They remove the liquid droplets from the air stream by three methods: initial impaction (forcing gases around a tight bend), direct interception (impacting the filter surface), and Brownian diffusion (causing chaotic and irregular movement of the particle such that it impacts other particles).

Mist eliminators have almost no control efficiency for more volatile products (e.g., gasoline) as they do not reduce emissions of product already in the gaseous phase. They do reduce emissions of aerosols or droplets of less volatile products (e.g., asphalt) at temperatures below the product's boiling point.

Carbon adsorption is the process of passing the VOC-laden air stream through a bed of adsorbent material, typically activated carbon, although other media may be suitable for certain applications. Hydrocarbons attach to the surfaces of the activated carbon particles. Carbon adsorbers are also referred to as "carbon beds."

With non-regenerative carbon adsorption, the adsorbent eventually becomes saturated and loses its effectiveness. The adsorbent needs to be periodically replaced and the spent material disposed of. Due to the cost to replace the spent media and the creation of an additional waste stream, non-regenerative carbon adsorption is best suited to low volume and/or low concentration streams (e.g., asphalt).

A similar VRU system at another facility cost approximately \$400,000 to install with expected annual operating costs of \$20,000/year. Amortizing the capital costs over five years, the cost of control is approximately \$100,000/year. The reduction efficiency of this system is unknown. However, even assuming a control efficiency of 100%, the cost of control is \$12,500/ton. Therefore, use of a VRU for control of VOC emissions from the facility's tanks has been determined to not be economically feasible.

Eurovia will collect the working emissions from Blending Tanks #5 and #6 and route them to a carbon bed. However, the carbon bed is specifically designed to

remove H_2S not VOC. Although the Department expects this equipment will reduce emissions of VOC to some extent, the effectiveness in reducing VOC emissions is unknown at this time. Therefore, the Department does not consider the carbon bed to be emissions control equipment for VOC, and its operation or efficiency shall not be relied upon to demonstrate compliance with emission limits contained in this license amendment. In other words, this equipment will be given no credit for VOC emissions reduction, and all emissions calculations and compliance demonstrations will be performed assuming no reduction of VOC emissions by the carbon bed.

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Similar to a VRU, a Vapor Combustion Unit (VCU) would collect emissions from tank vents and route them to a control device. Instead of trying to recover the VOC components, they are destroyed by burning, typically through use of a thermal oxidizer or regenerative thermal oxidizer (RTO). The cost to install and operate a VCU would be similar to, if not greater than, the cost of a VRU. Therefore, use of a VCU for control of VOC emissions from Blending Tanks #5 and #6 is determined to not be economically feasible.

c. BACT Determination

The Department finds the following to be BACT for control of VOC from Blending Tanks #5 and #6:

- Eurovia shall not exceed a throughput limit of 3.15 million gallons per year for Tanks #5 and #6 combined (based on a 12-month rolling total); and
- Eurovia shall not exceed a facility-wide VOC limit of 19.4 tpy (based on a 12-month rolling total).
- $3. \hspace{0.1in} H_2S \hspace{0.1in} Emissions$

The polymerization process has the potential to liberate hydrogen sulfide (H₂S) from the asphalt which can then be emitted from the facility's PMA blending tanks (Blending Tanks #5 and #6). H₂S is a regulated pollutant pursuant to 06-096 C.M.R. ch. 100, § 150(B), because there are several New Source Performance Standards that contain standards for H₂S.

The extent of these potential emissions is unknown. Eurovia intends to install a nonregenerative carbon bed to capture and control odor emissions from Blending Tanks #5 and #6 and as an employee health and safety measure. A scavenger system will also be installed between Blending Tanks #5/#6 and Tanks #8/#9 to neutralize any unreacted sulfur and thereby minimize emissions of H₂S.

Within 180 days of startup of the PMA blending operation, Eurovia shall conduct emissions testing for H_2S emissions from Blending Tanks #5 and #6 upstream of (e.g., prior to) the carbon bed and from the vents from Tanks #8 and #9 to determine the facility's potential to emit (PTE) for H_2S . If results of the initial emissions test

demonstrate the facility has potential emissions of H_2S which exceed 1.0 tpy, Eurovia shall apply to amend their license to address BACT for H_2S emissions. Any such amendment shall be submitted to the Department within 60 days of submission of the final emissions test report.

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4. Compliance Demonstration

Compliance with the tank throughput limits shall be demonstrated through monthly records of the gallons of asphalt received by the facility (combined throughput for Tanks #1, #2, and #3), the gallons of asphalt sent to Tanks #8 and #9 (combined throughput for Tanks #8 and #9), and the gallons of asphalt sent to Blending Tanks #5 and #6 (combined throughput for Blending Tanks #5 and #6).

Compliance with the facility-wide VOC emission limit shall be demonstrated by calculating actual emissions at least once annually as required by *Emission Statements*, 06-096 C.M.R. ch. 137. However, Eurovia shall maintain records necessary to calculate annual VOC emissions for any consecutive 12-month period and shall provide a demonstration of compliance with the facility-wide VOC emission limit for any consecutive 12-month period upon request by the Department.

Compliance with the facility-wide HAP emission limit shall be demonstrated by calculating actual emissions at least once annually and reporting emissions every three years as required by *Emission Statements*, 06 096 C.M.R. ch. 137.

Determination of actual VOC and HAP emissions to demonstrate compliance with the facility-wide limit shall be calculated as follows with all emissions summed to provide an annual total:

a. Heated Bulk Storage Tanks

Until site-specific emissions data is available, VOC emissions from Tanks #1 - #9 shall be calculated in accordance with the methodology contained in the most current version of EPA's Compilation of Air Emission Factors (AP-42), Fifth Edition, Volume 1, Chapter 7, *Liquid Storage Tanks*.¹

Site-specific emissions data for working losses (i.e., emissions during tank filling) shall be determined through performance testing conducted annually with no more than 14 months between tests, unless or until the Department notifies Eurovia in writing that testing is no longer required. Initial testing of Tanks #1 - #3 shall be performed within 180 days of startup (i.e., within 180 days of first taking delivery of asphalt). Startup of Tanks #1 - #3 occurred on December 7, 2021. Initial testing of Tanks #5 - #9 shall be performed within 180 days of startup of the PMA blending operation. Eurovia shall notify the Department's regional inspector within 30 days

¹ <u>https://www3.epa.gov/ttn/chief/ap42/ch07/index.html</u>

of the startup of the PMA blending operation. After three consecutive years of performance testing, Eurovia may request the Department reevaluate the testing frequency.

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Testing shall be performed on three representative tanks, one from Tanks #1 - #3, one from Blending Tanks #5 or #6, and one from Tanks #8 or #9. Test methods and procedures shall be worked out with the Department in the required test protocol.

b. Tank Maintenance

Emissions from tank maintenance (both planned and unplanned), including tank degassing and cleaning, shall be included when calculating the facility's annual facility-wide VOC emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7.

c. Facility Piping

Operation of the facility's equipment will result in fugitive emissions of VOC from the plant's piping. Eurovia shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and the number of each, and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.²

d. Batch Mix Plant #26

VOC emissions from Batch Mix Plant #26 shall be estimated based on the tons of HMA produced and an emission factor of 0.0082 lb/ton HMA based on AP-42 Table 11.1-6 dated 3/04.

e. Combustion Equipment

Other combustion equipment, including Terminal HOHs #1, #2, and #3, emit small amounts of VOC due to incomplete combustion. VOC emissions from this equipment shall be estimated based on the amount of fuel fired and the equipment's licensed emission limits.

² <u>https://www3.epa.gov/ttnchie1/efdocs/equiplks.pdf</u>

5. Recordkeeping Requirements

Eurovia shall keep the following records:

- a. Monthly throughput for Tanks #1, #2, and #3 (combined);
- b. Monthly throughput for Blending Tanks #5 and #6 (combined);

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- c. Monthly throughput for Tanks #8 and #9 (combined);
- d. The quantity (on a monthly basis) of any product(s) blended with the asphalt on site and subsequently stored in Tanks #1, #2, #3, #8, and #9;
- e. Safety Data Sheets (SDS) for any product(s) blended with the asphalt on site and subsequently stored in Tanks #1, #2, #3, #8, and #9;
- f. Equipment and product information necessary to calculate emissions from the heated asphalt tanks in accordance with AP-42, Chapter 7;
- g. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7;
- h. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*;
- i. Tons of HMA produced in Batch Mix Plant #26;
- j. Fuel use on a monthly basis for Terminal HOHs #1, #2, and #3 (either individually or combined); and
- k. Logs of inspections of each tank documenting any detected leaks, holes, tears, or other openings, and the corrective action taken including the date of the corrective action. If an inspection is not performed because the tank is empty, this should also be noted in the log.
- 6. Monitoring

Eurovia shall continuously monitor and record the hourly average liquid temperature for product stored in each heated bulk storage tank (Tanks #1, #2, #3, #8, and #9) through use of a thermocouple installed through the tank wall.

D. Emissions Test Protocol

For any emissions testing required by this license, Eurovia shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

The Department's Performance Testing Guidance is available online at: <u>https://www.maine.gov/dep/air/emissions/testing.html</u>

E. Chemical Usage

Eurovia has provided an updated list of chemicals to be used in the PMA blending process. The facility will include a tank which contains polyphosphoric acid (CAS 8017-16-1)

which is neither a VOC nor HAP. Although most other chemicals used in PMA blending are either solids and/or the Safety Data Sheet (SDS) state they contain no known VOC or HAP, some products do have components which are listed as VOC and/or HAP. Emissions after blending will be accounted for in the emissions testing of the PMA tanks.

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Eurovia shall continue to keep records of the quantity (on a monthly basis) of any product(s) blended with the asphalt and subsequently stored in Tanks #1, #2, #3, #8, and #9. Eurovia shall keep records of Safety Data Sheets (SDS) for any product(s) added to the asphalt on-site and subsequently stored in Tanks #1, #2, #3, #8, and #9.

VOC- and HAP-containing chemicals shall be stored in vapor-tight, non-leaking containers. The containers shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use.

F. <u>Terminal HOHs #1, #2, and #3</u>

In Air Emission License A-257-71-U-A (10/16/2020), Eurovia proposed the installation of three new hot oil heaters (HOH #1, #2, and #3) to provide heat to the facility's asphalt storage tanks. The natural gas-fired burners in the HOHs heat a thermal oil which is circulated around the shell of each asphalt storage tank to heat the asphalt. The thermal oil can also be sent to a steam generator that heats water to create steam to be used to heat the shells of railcars or trucks being used to transport the asphalt. However, the HOH burners do not directly heat water.

The exact size of the HOH was not known prior to the time of purchase, but Eurovia anticipated the maximum input of each HOH to be no more than 9.9 MMBtu/hr. However, the actual size of the HOHs installed ended up being 11.1 MMBtu/hr each. Eurovia has requested a change to their license to address the actual size of the HOHs installed.

1. BACT Findings

The minor change in size of the HOHs does not change the outcome of the BACT analysis performed. However, it necessitates updates to the lb/hr emission limits for each unit as outlined below.

The BACT emission limits for Terminal HOHs #1, #2, and #3 were based on the following:

PM/PM ₁₀	_	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
SO_2	_	0.6 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
NO _x	—	100 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
CO	_	84 lb/MMscf based on AP-42 Table 1.4-1 dated 7/98
VOC	_	5.5 lb/MMscf based on AP-42 Table 1.4-2 dated 7/98
Visible Emissions	_	06-096 C.M.R. ch. 101

The BACT emission limits for Terminal HOHs #1, #2, and #3 are the following:

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Unit	Pollutant	lb/MMBtu
Terminal HOH #1	PM	0.05
Terminal HOH #2	PM	0.05
Terminal HOH #3	PM	0.05

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Terminal HOH #1	0.56	0.56	0.01	1.08	0.91	0.06
Terminal HOH #2	0.56	0.56	0.01	1.08	0.91	0.06
Terminal HOH #3	0.56	0.56	0.01	1.08	0.91	0.06

Visible emissions from Terminal HOHs #1, #2, and #3 shall each not exceed 10% opacity on a six-minute block average basis.

2. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the increase in size, the HOHs are now subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c] The definition of *steam generating unit* includes units which heat transfer mediums other than water.

- a. Eurovia shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up for each HOH. This notification shall include the design heat input capacity of each HOH and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]
- b. Eurovia shall maintain records of the amounts of natural gas combusted in the HOHs during each calendar month. [40 C.F.R. § 60.48c(g)]
- c. The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I 5 Post Office Square, Suite 100 (OES04-2) Boston, MA 02109-3912 Attn: Air Compliance Clerk 3. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

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The Terminal HOHs #1, #2, and #3 do not heat water. As such, they do not meet the definition of a "boiler" and therefore are not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ.

G. Emergency Generator #1

Eurovia has proposed the installation of a new, 150-kW emergency generator for the asphalt storage terminal (Emergency Generator #1). An emergency generator is a generator set consisting of an engine and an electrical generator. Emergency Generator #1 has an engine with a heat input rating of 1.83 MMBtu/hr firing natural gas. It was manufactured in 2021 and is certified by EPA for emergency use only.

1. BACT Findings

The BACT emission limits for Emergency Generator #1 are based on the following:

PM/PM ₁₀	- 0.01 lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
SO_2	- negligible based on the firing of natural gas
NO _x	- 0.847 lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
CO	- 0.557 lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
VOC	- 0.118 lb/MMBtu based on AP-42 Table 3.2-2 dated 7/00
Opacity	- 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Emergency Generator #1 are the following:

	PM	PM ₁₀	NOx	СО	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Emergency Generator #1	0.02	0.02	1.55	1.02	0.22

Visible emissions from Emergency Generator #1 shall not exceed 10% opacity on a six-minute block average basis.

The Department has determined that the proposed BACT visible emission limit is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for the generator has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the air emission license.

2. 40 C.F.R. Part 60, Subpart JJJJ

Standards of Performance for Spark Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart JJJJ is applicable to Emergency Generator #1 since the unit was

ordered after June 12, 2006, and manufactured after January 1, 2009. [40 C.F.R. § 60.4230] By meeting the requirements of 40 C.F.R. Part 60, Subpart JJJJ, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

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A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart JJJJ requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart JJJJ, a stationary reciprocating internal combustion engine (ICE) is considered an emergency stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart JJJJ, resulting in the engine being subject to requirements applicable to non-emergency engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 60.4243(d) and 60.4248]

- b. 40 C.F.R. Part 60, Subpart JJJJ Requirements
 - Manufacturer Certification Requirement The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad spark ignition engines found in 40 C.F.R. Part 60, Subpart JJJJ, Table 1. [40 C.F.R. § 60.4233]
 - (2) Non-Resettable Hour Meter Requirement
 A non-resettable hour meter shall be installed and operated on the engine.
 [40 C.F.R. § 60.4237]
 - (3) Operation and Maintenance Requirement The engine shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Eurovia that are approved by the engine manufacturer. Eurovia may only change those settings that are permitted by the manufacturer. [40 C.F.R. § 60.4243]
 - (4) Annual Time Limit for Maintenance and Testing As an emergency engine, the unit shall be limited to 100 hours/year for maintenance and testing. The emergency engine may operate up to 50 hours per year in non-emergency situations, but those 50 hours are included in the 100 hours total allowed for maintenance and testing. The 50 hours for nonemergency use cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 60.4243(d)]

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(5) Recordkeeping

Eurovia shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for nonemergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4245(b)]

H. Emission Statements

Eurovia is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Eurovia shall maintain the following records in order to comply with this rule:

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- 1. The amount of each type of fuel fired in Batch Mix Plant #26, HYCGO-200 Hot Oil Heater, Terminal HOHs #1, #2, and #3, and Emergency Generator #1;
- 2. The sulfur content of the distillate fuel and specification waste oil fired in Batch Mix Plant #26 and HYCGO-200 Hot Oil Heater;
- 3. The amount (tons) of HMA produced by Batch Mix Plant #26;
- 4. Capacity of each heated asphalt tank (Tank #1 #9);
- 5. Monthly throughput for Tanks #1, #2, and #3 (combined);
- 6. Monthly throughput for Tanks #8 and #9 (combined);
- 7. Monthly throughput for Blending Tanks #5 and #6 (combined);
- 8. Calculations of the facility-wide VOC and/or HAP emissions on a calendar year total basis; and
- 9. Hours each emission unit was active or operating on a monthly basis.

In reporting year 2023 and every third year thereafter, Eurovia shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Eurovia shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

I. 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:

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- Processing 435,000 ton/year of HMA in Batch Mix Plant #26;
- A heat input limit for HYCGO-200 Hot Oil Heater of 15,000 MMBtu/year;
- Worst-case by pollutant emissions from HYCGO-200 Hot Oil Heater of firing either propane, natural gas, or distillate fuel with a sulfur content of 0.0015% by weight;
- Unlimited fuel use in Terminal HOHs #1, #2, and #3;
- Operating Emergency Generator #1 for 100 hours/year;
- Combined throughput for Tanks #1, #2, and #3 of 10.5 million gallons per year;
- Combined throughput for Tanks #8 and #9 of 3.15 million gallons per year;
- Combined throughput for Blending Tanks #5 and #6 of 3.15 million gallons per year; and
- Potential emissions from Tanks #1 #9 were estimated using the methodology contained in EPA's AP-42, Fifth Edition, Volume 1, Chapter 7, dated 3/2020 using #6 fuel oil as a surrogate for asphalt. These emission estimates are considered conservatively high.

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

	РМ	PM ₁₀	SO ₂	NO _x	СО	VOC	Total HAP
Batch Mix Plant #26	9.1	9.1	19.1	26.1	87.0	7.8	_
HYCGO-200 Hot Oil Heater	0.1	0.1	_	1.1	0.6	0.1	_
Terminal HOH #1	2.4	2.4	_	4.7	4.0	0.3	_
Terminal HOH #2	2.4	2.4	_	4.7	4.0	0.3	_
Terminal HOH #3	2.4	2.4	_	4.7	4.0	0.3	_
Emergency Generator #1	-	_	_	0.1	0.1	-	_
Tanks #1, #2, & #3	-	_	_	_	-	4.8	_
Blending Tanks #5 & 6	-	_	_	_	-	1.9	_
Tanks #8 and #9	-	_	_	_	-	1.9	_
Piping Fugitive		_	_	_		2.0	_
Total TPY	16.4	16.4	19.1	41.4	99. 7	19.4	9.9

(used to calculate the annual license fee)

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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:

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Pollutant	Tons/Year
PM10	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 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-257-71-V-A subject to the conditions found in Air Emission License A-257-71-R-R/A, in amendments A-257-71-S-M and A-257-71-U-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 Condition (16)(B) of Air Emission License A-257-71-U-A:

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(16) Batch Mix Asphalt Plant #26 (420 tons/hr)

B. The annual throughput of Batch Mix Asphalt Plant #26 shall not exceed 435,000 tons of HMA per year on a 12-month rolling total basis. Production records shall be kept on a monthly and 12-month rolling total basis and shall include the number of tons of asphalt produced using each fuel. [06-096 C.M.R. ch. 115, BPT]

The following shall Replace Condition (25) of Air Emission License A-257-71-U-A:

(25) Annual Emission Statement

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Eurovia shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.
- B. Eurovia shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. The amount of each type of fuel fired in Batch Mix Plant #26, HYCGO-200 Hot Oil Heater, Terminal HOHs #1, #2, and #3, and Emergency Generator #1;
 - 2. The sulfur content of the distillate fuel and specification waste oil fired in Batch Mix Plant #26 and HYCGO-200 Hot Oil Heater;
 - 3. The amount (tons) of HMA produced by Batch Mix Plant #26;
 - 4. Capacity of each heated asphalt tank (Tank #1 #9);
 - 5. Monthly throughput for Tanks #1, #2, and #3 (combined);
 - 6. Monthly throughput for Blending Tanks #5 and #6 (combined);
 - 7. Monthly throughput for Tanks #8 and #9 (combined);
 - 8. Calculations of the facility-wide VOC and/or HAP emissions on a calendar year total basis; and
 - 9. Hours each emission unit was active or operating on a monthly basis.
 - [06-096 C.M.R. ch. 137]
- C. In reporting year 2023 and every third year thereafter, Eurovia shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). Eurovia shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

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The following shall Replace Condition (26) of Air Emission License A-257-71-U-A:

(26) **Terminal HOHs #1, #2, and #3**

- A. Terminal HOHs #1, #2, and #3 shall each have a maximum heat input capacity not to exceed 11.1 MMBtu/hr. [06-096 C.M.R. ch. 115, BACT]
- B. Terminal HOHs #1, #2, and #3 shall fire only natural gas. [06-096 C.M.R. ch. 115, BACT]
- C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Terminal HOH #1	PM	0.05	06-096 C.M.R. ch. 115, BACT
Terminal HOH #2	PM	0.05	06-096 C.M.R. ch. 115, BACT
Terminal HOH #3	PM	0.05	06-096 C.M.R. ch. 115, BACT

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Emission Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Terminal HOH #1	0.56	0.56	0.01	1.08	0.91	0.06
Terminal HOH #2	0.56	0.56	0.01	1.08	0.91	0.06
Terminal HOH #3	0.56	0.56	0.01	1.08	0.91	0.06

- E. Visible emissions from Terminal HOHs #1, #2, and #3 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(A)(3)]
- F. Eurovia shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to the HOHs including, but not limited to, the following:
 - 1. Eurovia shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up for each HOH. This notification shall include the design heat input capacity of each HOH and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]
 - 2. Eurovia shall maintain records of the amounts of natural gas combusted in the HOHs during each calendar month. [40 C.F.R. § 60.48c(g)]

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The following shall Replace Condition (27) of Air Emission License A-257-71-U-A:

(27) **Asphalt Tanks (Tanks #1 - #9)**

- A. Eurovia shall store only asphalt or PMA in their heated petroleum storage tanks. [06-096 C.M.R. ch. 115, BACT]
- B. Eurovia shall keep records of the quantity (on a monthly basis) of any product(s) blended with the asphalt and subsequently stored in Tanks #1, #2, #3, #8, and #9. Eurovia shall keep records of Safety Data Sheets (SDS) for any product(s) added to the asphalt on-site and subsequently stored in Tanks #1, #2, #3, #8, and #9. [06-096 C.M.R. ch. 115, BACT]
- C. VOC- and HAP-containing chemicals shall be stored in vapor-tight, non-leaking containers. The containers shall be kept closed at all times except when the container is being filled, emptied, or is otherwise actively in use. [06-096 C.M.R. ch. 115, BACT]
- D. Tanks #1 #3 and Tanks 8 and #9 shall each be fully insulated including the roof. [06-096 C.M.R. ch. 115, BACT]
- E. Tanks #1, #2, and #3 combined shall not exceed an annual throughput of 10.5 million gallons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
- F. Blending Tanks #5 and #6 combined shall not exceed an annual throughput of 3.15 million gallons per year on a 12-month rolling total basis.
 [06-096 C.M.R. ch. 115, BACT]
- G. Tanks #8 and #9 combined shall not exceed an annual throughput of 3.15 million gallons per year on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]
- H. The asphalt stored in Tanks #1, #2, and #3 shall not exceed an hourly average liquid temperature of 310 °F. Compliance shall be demonstrated by the temperature monitoring required by this license. [06-096 C.M.R. ch. 115, BACT]
- I. Eurovia shall continuously monitor and record the hourly average liquid temperature for product stored in each heated bulk storage tank (Tanks #1, #2, #3, #8, and #9) through use of a thermocouple installed in the tank wall. [06-096 C.M.R. ch. 115, BACT]
- J. Eurovia shall conduct routine inspections of all asphalt tanks (Tanks #1 #9) at a minimum of once every month. Visual inspections shall include the roof and around the perimeter of the tank. [06-096 C.M.R. ch. 115, BACT]

K. Eurovia shall maintain logs of all inspections documenting any detected leaks, holes, tears, or other openings, and the corrective action taken including the date of the corrective action. Repairs shall be undertaken as soon as practicable. If an inspection is not performed because the tank is empty, this should also be noted in the log. [06-096 C.M.R. ch. 115, BACT]

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- L. Eurovia shall comply with all requirements of 40 C.F.R. Part 60, Subpart Kb applicable to Tanks #8 and #9 including, but not limited to the following:
 - Eurovia shall submit notification to EPA and the Department of the date construction commenced postmarked no later than 30 days after such date. [40 C.F.R. § 60.7(a)(1)]
 - Eurovia shall submit notification to EPA and the Department of the actual date of initial startup postmarked no later than 15 days after such date. [40 C.F.R. § 60.7(a)(3)]
 - Eurovia shall maintain readily accessible records showing the dimensions of each storage vessel (Tanks #8 and #9) and an analysis showing the capacity of each storage vessel. These records shall be kept for the life of the facility. [40 C.F.R. §§ 60.116b(a) & (b)]
 - 4. Eurovia shall maintain the following records for each storage vessel (Tanks #8 and #9):
 - a. Product stored;
 - b. Period of storage (i.e., note any time when the tank is empty); and
 - c. Maximum true vapor pressure of the product stored.

[40 C.F.R. § 60.116b(c)]

The maximum true vapor pressure is calculated based on the highest calendarmonth average of the storage temperature (i.e. by taking the average product temperature over the course of a calendar month). [40 C.F.R. § 60.116b(e)(1)]

 Eurovia shall notify DEP and EPA within 30 days if the maximum true vapor pressure of the liquid exceeds 5.2 kPa (expected at 348 °F). [40 C.F.R. § 60.116b(d)]

The following shall Replace Condition (28) of Air Emission License A-257-71-U-A:

(28) Facility-Wide Emission Limits

A. Eurovia shall not exceed a facility-wide emission limit of 19.4 tpy of VOC on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]

B. Eurovia shall not exceed a facility-wide emission limit of 9.9 tpy for all HAP combined on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]

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- C. Compliance with the facility-wide VOC emission limit shall be demonstrated by calculating actual emissions at least once annually. [06-096 C.M.R. ch. 115, BACT]
- D. Compliance with the facility-wide HAP emission limit shall be demonstrated by calculating actual emissions at least once annually. [06-096 C.M.R. ch. 115, BACT]
- E. Eurovia shall maintain records necessary to calculate annual VOC or HAP emissions for any consecutive 12-month period and shall provide a demonstration of compliance with the facility-wide VOC and HAP emission limits for any consecutive 12-month period upon request by the Department. [06-096 C.M.R. ch. 115, BACT]
- F. H₂S Emissions
 - 1. Within 180 days of startup of the PMA blending operation, Eurovia shall conduct emissions testing for H₂S emissions from Blending Tanks #5 and #6 upstream of (e.g., prior to) the carbon bed and from the vents from Tanks #8 and #9 to determine the facility's potential to emit (PTE) for H₂S.
 - 2. If results of the initial emissions test demonstrate the facility has potential emissions of H₂S which exceed 1.0 tpy, Eurovia shall apply to amend their license to address BACT for H₂S emissions. Any such amendment shall be submitted to the Department within 60 days of submission of the final emissions test report.

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

- G. Actual emissions of VOC and HAP shall be calculated as follows with all emissions summed to provide an annual total: [06-096 C.M.R. ch. 115, BACT]
 - 1. Heated Asphalt Tanks
 - a. Until site-specific emissions data is available, VOC and HAP emissions from Tanks #1 #9 shall be calculated in accordance with the methodology contained in the most current version of EPA's Compilation of Air Emission Factors (AP-42), Fifth Edition, Volume 1, Chapter 7, *Liquid Storage Tanks*.³
 - b. Site-specific emissions data for VOC and HAP emissions from working losses (i.e., emissions during tank filling) shall be determined through emissions testing conducted annually with no more than 14 months between tests, unless

³ <u>https://www3.epa.gov/ttn/chief/ap42/ch07/index.html</u>

or until the Department notifies Eurovia in writing that testing is no longer required.

c. Testing shall be performed on representative tanks, one from Tanks #1 - #3, one from Blending Tanks #5 or #6, and one from Tanks #8 or #9.

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- d. Initial testing of Tanks #1 #3 shall be performed within 180 days of startup (i.e., within 180 days of first taking delivery of asphalt).
- e. Initial testing of Tanks #5 #9 shall be performed within 180 days of startup of the PMA blending operation. Eurovia shall notify the Department's regional inspector within 30 days of the startup of the PMA blending operation.
- f. Emissions testing of VOC and HAP emissions from Blending Tanks #5 and #6 shall be performed upstream of (e.g., prior to) the carbon bed or other similar control device.
- 2. Tank Maintenance

VOC and HAP emissions from tank maintenance operations (both planned and unplanned), including tank degassing and cleaning, shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7.

3. Facility Piping

Eurovia shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and the number of each, and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.

4. Batch Mix Plant #26

VOC emissions from Batch Mix Plant #26 shall be estimated based on the tons of HMA produced and an emission factor of 0.0082 lb VOC/ton HMA based on AP-42 Table 11.1-6 dated 3/04. HAP emissions shall be estimated based on standard emission factors provided in AP-42 or other emission factors as approved by the Department.

5. Combustion Equipment

Other combustion equipment, including Terminal HOHs #1, #2, and #3 emit small amounts of VOC and HAP due to incomplete combustion. Emissions from this equipment shall be estimated based on the amount of fuel fired and the equipment's licensed emission limits or other emission factors as approved by the Department.

H. Eurovia shall keep the following records in order to calculate emissions as described above for compliance demonstration with the facility-wide annual VOC emission limit: [06-096 C.M.R. ch. 115, BACT]

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- 1. Monthly throughput for Tanks #1, #2, and #3 (combined);
- 2. Monthly throughput for Tanks #8 and #9 (combined);
- 3. Monthly throughput for Blending Tanks #5 and #6 (combined);
- 4. Equipment and product information necessary to calculate emissions from the heated asphalt tanks in accordance with AP-42, Chapter 7;
- 5. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7;
- 6. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*;
- 7. Tons of HMA produced in Batch Mix Plant #26; and
- 8. Fuel use on a monthly basis for Terminal HOHs #1, #2, and #3 (either individually or combined).

The following are New Conditions:

(29) **Emissions Test Protocol**

For any emissions testing required by this license, Eurovia shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 14th DAY OF FEBRUARY, 2022.

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-257-71-R-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:11/19/2021Date of application acceptance:11/29/2021

Date filed with the Board of Environmental Protection:

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

FILED	
FEB 14, 2022	

State of Maine Board of Environmental Protection