



DEPARTMENT ORDER

**Eurovia Atlantic Coast LLC
Knox County
Washington, Maine
A-173-71-N-R/M**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal and Amendment**

FINDINGS OF FACT

After review of the air emission license renewal and 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 (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

Eurovia Atlantic Coast LLC (Eurovia) has applied to renew their Air Emission License for the operation of their stationary hot mix asphalt plant and crushed stone and gravel facility located at 837 Waldoboro Rd., Washington, Maine. Eurovia has also requested an amendment to their license in order to remove crusher SECSANH48 and generators CAT 3412 (725 kW) and CAT 3508.

The main office is located at 953 Odlin Rd., Bangor, Maine.

B. Emission Equipment

The following equipment is addressed in this Air Emission License Renewal and Amendment:

Asphalt Plant

Equipment	Process Rate (tons/hour)	Design Capacity (MMBtu/hr)	Fuel Type	Control Device(s)	Date of Manuf.
Drum Plant #70	300	100	Distillate fuel Spec. waste oil Natural gas Propane	Baghouse	2008

Heating Equipment

Equipment	Max. Capacity (MMBtu/hr)	Fuel Type	Maximum Firing Rate	Date of Manuf.
HYCO 200 (hot oil heater)	2.0	Distillate fuel Natural gas Propane	14.6 gal/hr 1941.75 scf/hr 21.9 gal/hr	2008

Rock Crushers

Designation	Powered	Process Rate (tons/hour)	Date of Manufacture	Control Device
TER1260AC	generator	300	Pre-1973	Spray Nozzles
SECSANH48*	N/A	300	2008	Spray Nozzles

*Removed from license

Generator Units

Unit ID	Max. Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Max. Firing Rate (gal/hr)	Fuel Type	Date of Manuf.
CAT 3412*	3.8	545	28.0	Distillate fuel	1985
CAT 3508**	8.8	910	64.4	Distillate fuel	2001
CAT 3412 (725 kW)**	6.6	725	48.2	Distillate fuel	1995

* Formerly CAT 3412 (545 kW)

** Removed from license

Eurovia may operate other nonmetallic mineral processing equipment not explicitly listed including grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading stations. Requirements for this equipment are included in sections of this license for Nonmetallic Mineral Processing Plants.

Eurovia may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, Eurovia may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

C. Definitions

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants (not including concrete batch plants), or any other facility processing nonmetallic minerals.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or Logs mean either hardcopy or electronic records.

Specification Waste Oil means a petroleum-based oil which, through use or handling, has become unsuitable for its original purpose due to the presence of impurities or loss of original properties, and meets all of the following requirements:

- It has sufficient liquid content to be free flowing;
- It meets all of the constituent and property standards as specified in *Waste Oil Management Rules*, 06-096 C.M.R. ch. 860;
- It does not otherwise exhibit hazardous waste characteristics; and
- It has not been mixed with a hazardous waste.

Virgin oil means any petroleum derived oil, including petroleum fuels, unused motor oils, hydraulic fluids, lubrication oils, and other industrial oils, that are not characterized as waste oil.

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 application for Eurovia includes both the license renewal for existing equipment and the amendment as described in Section I(A). This amendment will not increase licensed emissions of any pollutant. Therefore, this license renewal and amendment is considered to be a renewal with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115 (Chapter 115).

E. Facility Classification

With the annual asphalt tonnage limit on Drum Plant #70 and the annual fuel limits on HYCO 200 CAT 3412, the facility is licensed as follows:

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

II. BEST PRACTICAL TREATMENT

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. Asphalt Plant

Eurovia operates a stationary asphalt drum mix plant (Drum Plant #70) with a maximum hourly throughput of 300 ton/hr of asphalt and a 100 MMBtu/hr burner which fires distillate fuel, specification waste oil, natural gas, and propane. Drum Plant #70 was manufactured in 2008.

Emission factors for asphalt plants are based on tons of asphalt produced, and there is no linear relationship between plant output and burner firing rate. Therefore, to ensure annual emissions are limited to less than major source thresholds, asphalt throughput is limited instead of fuel consumption. Accordingly, the annual throughput of the asphalt plant shall not exceed 300,000 tons of asphalt per year on a 12-month rolling total basis.

1. BPT Findings

The BPT emission limits for the asphalt plant were based on the following:

- PM/PM₁₀/PM_{2.5} – 0.03 gr/dscf and the use of a baghouse pursuant to 06-096 C.M.R. ch. 115, BPT
- SO₂ – 1.1 x 10⁻² lb/ton while burning distillate fuel based on AP-42 Table 11.1-7 dated 3/04
5.8 x 10⁻² lb/ton while burning specification waste oil based on AP-42 Table 11.1-7 dated 3/04
3.4 x 10⁻³ lb/ton while burning natural gas and propane based on AP-42 Table 11.1-8 dated 3/04
- NO_x – 5.5 x 10⁻² lb/ton while burning distillate fuel and specification waste oil based on AP-42 Table 11.1-7 dated 3/04
2.6 x 10⁻² lb/ton while burning natural gas and propane based on AP-42 Table 11.1-7 dated 3/04
- CO – 0.13 lb/ton based on AP-42 Table 11.1-7 dated 3/04
- VOC – 3.2 x 10⁻² lb/ton based on AP-42 Table 11.1-8 dated 3/04
- Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for the asphalt plant are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Drum Plant #70 <i>Distillate fuel</i>	11.91	11.91	11.91	3.30	16.50	39.00	9.60
Drum Plant #70 <i>Spec. waste oil</i>	11.91	11.91	11.91	17.40	16.50	39.00	9.60
Drum Plant #70 <i>Natural gas and propane</i>	11.91	11.91	11.91	1.02	7.80	39.00	9.60

Visible emissions from the asphalt plant baghouse shall not exceed 20% opacity on a six-minute block average basis. This is consistent with the 20% opacity limit in *Standards of Performance for Hot Mix Asphalt Facilities*, 40 C.F.R. Part 60, Subpart I.

General process emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis.

State statute directs that, with limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Drum Plant #70 shall not exceed 0.0015% by weight (15 ppm).

The sulfur content of the specification waste oil fired in Drum Plant #70 shall not exceed 0.7% sulfur by weight. At least once per calendar year, Eurovia shall have the specification waste oil analyzed to demonstrate compliance with the 0.7% sulfur content limit or maintain supplier certifications including sulfur content of the specification waste oil fired in the asphalt plant.

2. New Source Performance Standards

The asphalt plant was manufactured in 2008 and is therefore subject to the federal Environmental Protection Agency's (EPA) New Source Performance Standards (NSPS) *Standards of Performance for Hot Mix Asphalt Facilities*, 40 Code of Federal Regulation (C.F.R.) Part 60, Subpart I (Subpart I) for facilities constructed or modified after June 11, 1973.

a. Particulate Matter (PM)

The asphalt plant shall not exceed an emission limit of 0.04 gr/dscf. [40 C.F.R. § 60.92(a)(1)]

The Department has determined that the proposed BPT particulate matter emission limit is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart I. Therefore, the particulate matter limit for the asphalt plant has been streamlined to the more stringent BPT limit, and only this more stringent limit shall be included in the air emission license.

b. Opacity

Visible emissions from the asphalt plant shall not exceed 20% opacity on a 6-minute block average basis. [40 C.F.R. §§ 60.92(a)(2) and 60.93(b)(2)] This standard applies at all times. [06-096 C.M.R. ch.115, BPT]

3. Initial Compliance Requirements

Drum Plant #70 was first included in an air emission license in 2009 (A-173-71-I-R/A, issued 5/14/2009). Although Subpart I requirements include initial performance testing for PM and visible emissions, the records retention requirement of Subpart I is two years following the date of such measurements, maintenance, reports, and records (see 40 C.F.R. § 60.7(f)), and the records retention requirement of Chapter 115 and Standard Condition (8) of this license is six years. Since both records retention periods have passed for initial testing requirements, the requirements are not addressed further in this license.

4. Control Equipment

Emissions from the asphalt plant shall be controlled by a baghouse.

5. Periodic Monitoring

The performance of the baghouse shall be monitored by either one of the following at all times the asphalt plant is operating:

- a. Continuous PM detector: When the detector signals excessive PM concentrations in the exhaust stream, Eurovia shall take corrective action within 24 hours, or immediately if visible emissions exceed 20% opacity.
- b. Personnel available on-site with a current EPA 40 C.F.R. Part 60, Appendix A, Method 9 visible emissions certification: When any individual visible emissions reading exceeds 20% opacity, the hot mix asphalt plant is operating with insufficient control, and corrective action shall be taken immediately.

Eurovia shall keep records of baghouse failures, baghouse maintenance, and baghouse inspections.

To document maintenance of the baghouse, Eurovia shall keep records of the date and location of all bag failures, the date and a description of all routine maintenance, and the date and results of all inspections. These records shall be kept on-site at the asphalt plant location. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the unit.

Eurovia shall keep records of fuel use and tons of asphalt produced for Drum Plant #70, as well as the quantity and analyzed test results of all specification waste oil fired in the unit. Records shall be maintained for at least six years and made available to the Department upon request.

6. Contaminated Soils

The Department's Bureau of Remediation and Waste Management (BRWM) manages remediation of soils contaminated with petroleum substances. One method to address these contaminants is to process the contaminated soil through an aggregate dryer used in the production of hot mix asphalt, as authorized by M.R.S. § 608-A.

a. Soils Contaminated with Gasoline and Distillate Fuel

Eurovia may process up to 10,000 cubic yards per calendar year of soil contaminated by gasoline or distillate fuel without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

b. Soils Contaminated with Virgin Oil

Eurovia may process up to 5,000 cubic yards per calendar year of soil contaminated with virgin oil as defined in this license/amendment without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

c. General Requirements for Processing of Contaminated Soils

Eurovia shall not process soils which are classified as hazardous waste or which have unknown contaminants.

Eurovia shall notify the Department (regional air compliance inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating material and quantity, origin of the soil and contaminating material, and the disposition of the contaminated soil. This authorization to process contaminated soil does not absolve the facility of responsibility to comply with all other air emission license conditions and any other applicable state rules or statutes.

When processing contaminated soils, Eurovia shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing

contaminated soil, Eurovia shall maintain records on an hourly basis of processing temperature, asphalt feed rates, and dryer throughput.

Any approval from the Department's Bureau of Air Quality to process contaminated soil does not supersede requirements from other Department bureaus. Similarly, approvals to process contaminated soil granted by another Department bureau does not supersede the limits imposed by this air emission license.

Processing of contaminated soils may also require a solid waste processing facility license under *Maine Solid Waste Management Rules*, 06-096 C.M.R. ch. 409, before processing of contaminated soils may occur. The material shall be handled in accordance with the requirements of the Department's Bureau of Remediation and Waste Management.

C. Hot Oil Heater

Eurovia operates the hot oil heater, specified as HYCO 200, to prevent the asphalt from solidifying. It has a maximum design capacity of 2.0 MMBtu/hr and fires distillate fuel, natural gas, and propane. HYCO 200 was manufactured in 2008 and installed in 2009.

State statute directs that, with limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in HYCO 200 shall not exceed 0.0015% by weight (15 ppm).

1. BPT Findings

The BPT emission limits for HYCO 200 were based on the following:

Distillate Fuel

PM/PM ₁₀ /PM _{2.5}	– 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO ₂	– based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO _x	– 20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	– 5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	– 0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	– 06-096 C.M.R. ch. 101

Natural Gas

- PM/PM₁₀/PM_{2.5} – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO₂ – 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

Propane

- PM/PM₁₀/PM_{2.5} – 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
- SO₂ – 0.054 lb/1,000 gall based on AP-42 Table 1.5-1 dated 7/08
- NO_x – 13 lb/1,000 gall based on AP-42 Table 1.5-1 dated 7/08
- CO – 7.5 lb/1,000 gall based on AP-42 Table 1.5-1 dated 7/08
- VOC – 1 lb/1,000 gall based on AP-42 Table 1.5-1 dated 7/08
- Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for HYCO 200 are the following:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
HYCO 200 <i>Distillate fuel</i>	0.16	0.16	0.16	0.003	0.29	0.07	0.01
HYCO 200 <i>Natural gas</i>	0.10	0.10	0.10	0.001	0.19	0.16	0.01
HYCO 200 <i>Propane</i>	0.10	0.10	0.10	0.001	0.28	0.16	0.02

Eurovia shall be limited to a combined heat input of 6,000 MMBtu/yr of distillate fuel, natural gas, and propane in HYCO 200 on a calendar year total basis.

2. Visible Emissions

Visible emissions from HYCO 200 when firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from HYCO 200 when firing natural gas or propane shall not exceed 10% opacity on a six-minute block average basis.

3. Periodic Monitoring

Periodic monitoring for HYCO 200 shall include recordkeeping to document fuel use and heat input both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel, if applicable.

4. New Source Performance Standards

Due to its size, the HYCO 200 is not subject to the New Source Performance Standards (NSPS) *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]

5. National Emission Standards for Hazardous Air Pollutants

HYCO 200 does not heat water. It does not meet the definition of a “boiler” and therefore is 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 JJJJJ.

D. Nonmetallic Mineral Processing Plants

Rock Crusher TER1260AC is a portable unit that was manufactured before 1973 and has a rated capacity of 300 tons/hr. The nonmetallic mineral processing plant also consists of other equipment associated with Rock Crusher TER1260AC, such as screens and belt conveyors.

1. BPT Findings

The regulated pollutant from nonmetallic mineral processing plants is particulate matter. To meet the requirements of BPT for control of particulate matter emissions, Eurovia shall install and maintain water sprays on the nonmetallic mineral processing plant and operate as needed, when the unit is in operation, to control visible emissions.

2. Visible Emissions

Visible emissions from Rock Crusher TER1260AC shall be limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(2)]

Visible emissions from nonmetallic mineral processing plant equipment other than crushers (transfer points on belt conveyors, screening operations, etc.) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

3. New Source Performance Standards

The federal regulation *Standards of Performance for Nonmetallic Mineral Processing Plants*, 40 C.F.R. Part 60, Subpart OOO, applies to equipment at nonmetallic mineral processing plants with capacities greater than 25 ton/hr for fixed plants and 150 ton/hr for portable plants. The requirements of Subpart OOO apply to any crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, or enclosed truck or railcar loading station at a nonmetallic mineral processing plant greater than the sizes listed above which commenced construction, modification, or reconstruction after August 31, 1983.

Rock Crusher TER1260AC was manufactured prior to August 31, 1983, and has not undergone a modification or reconstruction as defined in 40 C.F.R. Part 60, Subpart OOO. Therefore, this equipment is not subject to this Subpart. [40 C.F.R. § 60.670(e)]

E. Generator

Eurovia operates one generator, CAT 3412, to operate the asphalt plant. CAT 3412 is a stationary generator unit. It has a maximum capacity of 3.8 MMBtu/hr (545 kW) firing distillate fuel. It was manufactured in 1985. The fuel fired in CAT 3412 shall be limited to 50,000 gallons/year on a calendar year total basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight).

1. BPT Findings

The BPT emission limits for CAT 3412 were based on the following:

Distillate Fuel

- PM/PM₁₀/PM_{2.5} – 0.12 b/MMBtu from 06-096 C.M.R. ch. 103
- SO₂ – Combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO_x – 4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- CO – 0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- VOC – 0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 10/96
- Visible Emissions – 06-096 C.M.R. ch. 101

The BPT emission limits for CAT 3412 are the following:

Unit	Pollutant	lb/MMBtu
CAT 3412	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
CAT 3412	0.46	0.46	0.46	0.01	16.93	3.65	1.38

Visible emissions from CAT 3412 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Eurovia shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

- a. The duration of the startup shall not exceed 30 minutes per event;
- b. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
- c. Eurovia shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

2. Chapter 169

CAT 3412 was installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and is therefore exempt from this rule pursuant to section 1.

3. New Source Performance Standards

CAT 3412 was manufactured prior to April 1, 2006. Therefore, this unit is not subject to *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart III. [40 C.F.R. § 60.4200]

4. National Emission Standards for Hazardous Air Pollutants

CAT 3412 is subject to 40 C.F.R. Part 63, Subpart ZZZZ. It is classified as an existing, non-emergency, stationary compression (CI) reciprocating internal combustion engine (RICE) located at an area source of HAP. [40 C.F.R. § 63.6585]

Per 40 C.F.R. Part 63, Subpart ZZZZ, CAT 3412 is subject to emission limits for CO. Eurovia will comply with the option to meet the 23 ppmvd CO at 15% O₂ emission limit or to reduce CO emissions by 70% or more through the use of an oxidation catalyst. Eurovia has elected to demonstrate compliance through a continuous parameter monitoring system (CPMS) instead of the use of a continuous emission monitoring system (CEMS).

The requirements of 40 C.F.R. Part 63, Subpart ZZZZ for CAT 3412 include, but are not necessarily limited to, the following:

a. Operation Requirements

- (1) Limit concentration of CO in the exhaust to 23 ppmvd at 15% O₂ or reduce CO emissions by 70% or more (Table 2d);
- (2) Minimize the engine's time spent at idle and minimize the engine's startup time at startup 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 apply (Table 2d);
- (3) Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test (Table 2b); and
- (4) Maintain the temperature of the exhaust so that the catalyst inlet temperature is 450 °F – 1,350 °F (Table 2b).

[40 C.F.R. § 63.6603, Tables 2b and 2d]

b. Crankcase Filtration

Eurovia shall operate on CAT 3412 an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. [40 C.F.R. § 63.6625(g)(2)]

c. Continuous Parameter Monitoring System (CPMS)

- (1) Eurovia shall install, operate, and maintain a CPMS on CAT 3412.
 - (2) Eurovia shall monitor the catalyst inlet temperature and reduce this data to 4-hour rolling averages to demonstrate compliance with the limitations on the catalyst inlet temperature range.
 - (3) Eurovia shall monitor the pressure drop across the catalyst once per month to demonstrate compliance with the operating limit established during the last performance test.
 - (4) Eurovia shall prepare a site-specific monitoring plan that addresses the requirements outlined in 40 C.F.R. § 63.6625(b)(1).
 - (5) The CPMS shall be continuously operated in accordance with the site-specific monitoring plan at all times that CAT 3412 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities.
 - (6) The CPMS shall collect data at least once every 15 minutes.
 - (7) The minimum tolerance for a CPMS measuring temperature is 5°F or 1% of the measurement range, whichever is larger.
 - (8) CPMS audit procedures shall be performed at least annually.
- [40 C.F.R. §§ 63.6625(b), 63.6635, and Table 6]

d. Performance Tests

- (1) Eurovia shall perform performance tests on CAT 3412 every 8,760 hours of operation or 3 years, whichever comes first. [40 C.F.R. § 63.6640(a), Table 3, and Table 6]
- (2) Eurovia shall conduct three separate test runs for each performance test. Each test run must be at least 1 hour, unless otherwise specified. [40 C.F.R. § 63.6620(d)]
- (3) The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The report shall contain the information specified in 40 C.F.R. § 63.6620(i).
- (4) During the performance test, the facility must establish the pressure drop across the catalyst to be used to demonstrate compliance per the CPMS. [40 C.F.R. § 63.6630(b)]
- (5) If the facility changes the catalyst, Eurovia shall reestablish the values of the operating parameters measured during the performance test. In order to reestablish the operating parameters, the facility shall conduct a performance test to demonstrate that the required emission limitation is being met. [40 C.F.R. § 63.6640(b)]

e. Ultra-Low Sulfur Fuel Requirement

The fuel fired in CAT 3412 shall not exceed 15 ppm sulfur (0.0015% sulfur) by weight. [40 C.F.R. § 63.6604(a)]

f. General Requirement to Minimize Emissions

At all times the facility shall operate and maintain CAT 3412, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 C.F.R. § 63.6605(b)]

g. Reporting

Eurovia shall submit to EPA all reports required by Subpart ZZZZ including, but not limited to, the following:

- (1) Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.6645(g)]
- (2) Notification of Compliance Status within 60 days of completion of the initial compliance test. [40 C.F.R. § 63.6645(h)]
- (3) Semiannual Compliance Reports. [40 C.F.R. § 63.6650 and Table 7]

h. Record Keeping

Eurovia shall keep all records required by Subpart ZZZZ including, but not limited to, the following:

- (1) A copy of each notification and report that was submitted to comply with Subpart ZZZZ, including all supporting documentation;
 - (2) Records of the occurrence and duration of each malfunction of the engine, pollution control equipment, or monitoring equipment;
 - (3) Records of performance tests and performance evaluations;
 - (4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions taken to restore normal operation;
 - (5) Monitoring data from the CPMS; and
 - (6) Records of maintenance conducted on CAT 3412 and control equipment to demonstrate the equipment was operated and maintained according to the maintenance plan.
- [40 C.F.R. § 63.6655]

F. General Process Emissions

Visible emissions from any general process that is not part of a nonmetallic mineral processing plant shall not exceed 20% opacity on a six-minute block average basis.

G. Fugitive Emissions Including Stock Piles and Roadways

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

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

H. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- Processing 300,000 ton/year of asphalt;
- Limiting heat input of HYCO 200 to 6,000 MMBtu/yr; and
- Firing 50,000 gal/year of distillate fuel in CAT 3412.

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

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

	PM	PM₁₀	PM_{2.5}	SO₂	NO_x	CO	VOC
Drum Plant #70	6.0	6.0	6.0	8.7	8.3	19.5	4.8
HYCO 200	0.2	0.2	0.2	--	0.4	0.2	--
CAT 3412	0.4	0.4	0.4	--	15.1	3.3	1.2
Totals	6.6	6.6	6.6	8.7	23.8	23.0	6.0

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source to demonstrate that Ambient Air Quality Standards (AAQS) will not be exceeded is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
PM _{2.5}	15
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 renewal and amendment.

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

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-173-71-N-R/M, subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in 06-096 C.M.R. ch. 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]
- (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
 - 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) **Asphalt Plant (Drum Plant #70)**

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

1. The asphalt plant is licensed to fire distillate fuel, specification waste oil, natural gas, and propane.
2. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm).
3. The sulfur content of the specification waste oil fired in the asphalt plant shall not exceed 0.7% sulfur by weight.
4. At least once per calendar year, Eurovia shall have the specification waste oil analyzed to demonstrate compliance with the 0.7% sulfur content limit or maintain supplier certifications including sulfur content of the specification waste oil fired in the asphalt plant.
5. Eurovia shall keep records of fuel use and tons of asphalt produced for Drum Plant #70, as well as the quantity and analyzed test results of all specification waste oil fired in the unit. Records shall be maintained for at least six years and made available to the Department upon request.

B. The annual throughput of the asphalt plant shall not exceed 300,000 tons of asphalt per year on a 12-month rolling total basis. Records of asphalt productions shall be kept on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

C. Emissions from the asphalt plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks. [06-096 C.M.R. ch. 115, BPT]

D. The performance of the baghouse shall be monitored by either one of the following at all times the hot mix asphalt plant is operating:
[06-096 C.M.R. ch. 115, BPT]

1. Continuous PM detector: When the detector signals excessive PM concentrations in the exhaust stream, Eurovia shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
2. Personnel available on-site with a current EPA Method 9 visible emissions certification: When any individual visible emissions reading exceeds 20% opacity, the asphalt plant is operating with insufficient control, and corrective action shall be taken immediately.

- E. To document maintenance of the baghouse, Eurovia shall keep records of the date and location of all bag failures, the date and a description of all routine maintenance, and the date and results of all inspections. These records shall be kept on-site at the asphalt plant location. [06-096 C.M.R. ch. 115, BPT]
- F. Emissions from the asphalt plant baghouse shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Pollutant	grs/dscf	Distillate Fuel	Specification Waste Oil	Natural Gas and Propane
		lb/hr		
PM	0.03	11.94	11.91	11.91
PM ₁₀	0.03	11.91	11.91	11.91
PM _{2.5}	0.03	11.91	11.91	11.91
SO ₂	–	3.30	17.40	1.02
NO _x	–	16.50	16.50	7.80
CO	–	39.00	39.00	39.00
VOC	–	9.60	9.60	9.60

- G. General process emissions from the hot mix asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]
- H. Eurovia shall comply with all requirements of 40 C.F.R. Part 60, Subpart I applicable to the asphalt plant including, but not limited to, the following:

Visible emissions from the asphalt plant shall not exceed 20% opacity on a 6-minute block average basis. [40 C.F.R. §§ 60.92(a)(2) and 60.93(b)(2)] This standard applies at all times. [06-096 C.M.R. ch. 101, § 4(B)(1)]

I. Contaminated Soils

1. Soils Contaminated with Gasoline and Distillate Fuel

Eurovia may process up to 10,000 cubic yards per calendar year of soil contaminated by gasoline or distillate fuel without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

2. Soils Contaminated with Virgin Oil

Eurovia may process up to 5,000 cubic yards per calendar year of soil contaminated with virgin oil as defined in this license/amendment without prior approval from the Department's Bureau of Air Quality.

This limit may be exceeded with prior written authorization from the Department's Bureau of Air Quality. Requests will be evaluated on a case-by-case basis taking into account the nature and amount of the contaminated soil to be processed, the location where the processing will occur, and the potential for fugitive emissions.

3. General Requirements for Contaminated Soils

- a. Eurovia shall not process soils which are classified as hazardous waste or which have unknown contaminants.
- b. Eurovia shall notify the Department (regional air compliance inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating material and quantity, origin of the soil and contaminating material, and the disposition of the contaminated soil. This authorization to process contaminated soil does not absolve the facility of responsibility to comply with all other air emission license conditions and any other applicable state rules or statutes.
- c. When processing contaminated soils, Eurovia shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Eurovia shall maintain records on an hourly basis of processing temperature, asphalt feed rates, and dryer throughput.
- d. Processing of contaminated soils may also require a solid waste processing facility license under *Maine Solid Waste Management Rules*, 06-096 C.M.R. ch. 409, before processing of contaminated soils may occur. The material shall be handled in accordance with the requirements of the Department's Bureau of Remediation and Waste Management.

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

(18) **Hot Oil Heater (HYCO 200)**

A. Fuel

1. Total fuel use for HYCO 200 shall be limited to a combined heat input of 6,000 MMBtu/yr of distillate fuel, natural gas, and propane, based on a calendar year total basis. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use and

heat input shall be kept on a monthly and calendar year basis. [06-096 C.M.R. ch. 115, BPT]

2. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]
3. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	PM _{2.5} (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
HYCO 200 <i>Distillate fuel</i>	0.16	0.16	0.16	0.003	0.29	0.07	0.01
HYCO 200 <i>Natural gas</i>	0.10	0.10	0.10	0.001	0.19	0.16	0.01
HYCO 200 <i>Propane</i>	0.10	0.10	0.10	0.001	0.28	0.16	0.02

C. Visible Emissions

1. Visible emissions from HYCO 200 when firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]
2. Visible emissions from HYCO 200 when firing natural gas or propane shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(3)]

(19) **Nonmetallic Mineral Processing Plant (Rock Crusher TER1260AC)**

- A. Eurovia shall install and maintain spray nozzles for control of particulate matter on the nonmetallic mineral processing plant and operate as needed to control visible emissions when the unit is in operation. [06-096 C.M.R. ch. 115, BPT]
- B. Eurovia shall maintain records detailing and quantifying the hours of operation on a daily basis for Rock Crusher TER1260AC. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT]
- C. Visible emissions from Rock Crusher TER1260AC shall be limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(2)]

D. Visible emissions from nonmetallic mineral processing plant equipment other than crushers (transfer points on belt conveyors, screening operations, etc.) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

(20) Generator Unit (CAT 3412)

A. Fuel Use

1. CAT 3412 is licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (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 fuel in the tank on-site. [06-096 C.M.R. ch. 115, BPT]
2. Total fuel use for CAT 3412 shall not exceed 50,000 gal/yr of distillate fuel, Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year basis. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
CAT 3412	PM	0.12	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]:

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	PM_{2.5} (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
CAT 3412	0.46	0.46	0.46	0.01	16.93	3.65	1.38

D. Visible Emissions

Visible emissions from CAT 3412 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup, during which time Eurovia shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

1. The duration of the startup shall not exceed 30 minutes per event;
2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
3. Eurovia shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

- E. CAT 3412 shall 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]

Per 40 C.F.R. Part 63, Subpart ZZZZ, CAT 3412 is subject to emission limits for CO. Eurovia will comply with the option to meet the 23 ppmvd CO at 15% O₂ emission limit or to reduce CO emissions by 70% or more through the use of an oxidation catalyst. Eurovia has elected to demonstrate compliance through a continuous parameter monitoring system (CPMS) instead of the use of a continuous emission monitoring system (CEMS).

The requirements of 40 C.F.R. Part 63, Subpart ZZZZ for CAT 3412 include, but are not necessarily limited to, the following:

1. Operation Requirements

- a. Limit concentration of CO in the exhaust to 23 ppmvd at 15% O₂ or reduce CO emissions by 70% or more (Table 2d);
- b. Minimize the engine's time spent at idle and minimize the engine's startup time at startup 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 apply (Table 2d);
- c. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test (Table 2b); and
- d. Maintain the temperature of the exhaust so that the catalyst inlet temperature is 450 °F – 1,350 °F. (Table 2b)

[40 C.F.R. § 63.6603, Tables 2b and 2d]

2. Crankcase Filtration

Eurovia shall operate on CAT 3412 an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. [40 C.F.R. § 63.6625(g)(2)]

3. Continuous Parameter Monitoring System (CPMS)

- a. Eurovia shall install, operate, and maintain a CPMS on CAT 3412.
- b. Eurovia shall monitor the catalyst inlet temperature and reduce this data to 4-hour rolling averages to demonstrate compliance with the limitations on the catalyst inlet temperature range.

- c. Eurovia shall monitor the pressure drop across the catalyst once per month to demonstrate compliance with the operating limit established during the last performance test.
- d. Eurovia shall prepare a site-specific monitoring plan that addresses the requirements outlined in 40 C.F.R. § 63.6625(b)(1).
- e. The CPMS shall be continuously operated in accordance with the site-specific monitoring plan at all times that CAT 3412 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities.
- f. The CPMS shall collect data at least once every 15 minutes.
- g. The minimum tolerance for a CPMS measuring temperature is 5°F or 1% of the measurement range, whichever is larger.
- h. CPMS audit procedures shall be performed at least annually.
[40 C.F.R. §§ 63.6625(b), 63.6635, and Table 6]

4. Performance Tests

- a. Eurovia shall perform performance tests on CAT 3412 every 8,760 hours of operation or 3 years, whichever comes first. [40 C.F.R. § 63.6640(a), Table 3 and Table 6]
- b. Eurovia shall conduct three separate test runs for each performance test. Each test run must be at least 1 hour, unless otherwise specified. [40 C.F.R. § 63.6620(d)]
- c. The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The report shall contain the information specified in 40 C.F.R. § 63.6620(i).
- d. During the performance test the facility must establish the pressure drop across the catalyst to be used to demonstrate compliance per the CPMS. [40 C.F.R. § 63.6630(b)]
- e. If the facility changes the catalyst, Eurovia shall reestablish the values of the operating parameters measured during the performance test. In order to reestablish the operating parameters, the facility shall conduct a performance test to demonstrate that the required emission limitation is being met. [40 C.F.R. § 63.6640(b)]

5. Ultra-Low Sulfur Fuel Requirement

The fuel fired in CAT 3412 shall not exceed 15 ppm sulfur (0.0015% sulfur) by weight. [40 C.F.R. § 63.6604(a)]

6. General Requirement to Minimize Emissions

At all times the facility shall operate and maintain CAT 3412, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 C.F.R. § 63.6605(b)]

7. Reporting

Eurovia shall submit to EPA all reports required by Subpart ZZZZ including, but not limited to, the following:

- a. Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. [40 C.F.R. § 63.6645(g)]
- b. Notification of Compliance Status within 60 days of completion of the initial compliance test. [40 C.F.R. § 63.6645(h)]
- c. Semiannual Compliance Reports. [40 C.F.R. § 63.6650 and Table 7]

8. Record Keeping

Eurovia shall keep all records required by Subpart ZZZZ including, but not limited to, the following:

- a. A copy of each notification and report that was submitted to comply with Subpart ZZZZ, including all supporting documentation;
- b. Records of the occurrence and duration of each malfunction of the engine, pollution control equipment, or monitoring equipment;
- c. Records of performance tests and performance evaluations;
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions taken to restore normal operation;
- e. Monitoring data from the CPMS; and
- f. Records of maintenance conducted on CAT 3412 and control equipment to demonstrate the equipment was operated and maintained according to the maintenance plan.

[40 C.F.R. § 63.6655]

(21) General Process Sources

Visible emissions from any general process that is not part of a nonmetallic mineral processing plant shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

(22) Fugitive Emissions Including Stockpiles and Roadways

Eurovia shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management

practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

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

[06-096 C.M.R. ch. 101, § 4(C)]

(23) **Equipment Relocation** [06-096 C.M.R. ch. 115, BPT]

A. Eurovia shall notify the Bureau of Air Quality, by a written notification, prior to relocation of any equipment carried on this license. It is preferred for notice of relocation to be submitted through the Department's on-line e-notice at: www.maine.gov/dep/air/compliance/forms/relocation

Written notice may also be sent by mail. Notification sent by mail shall be sent to the address below:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

The notification shall include the license number the equipment is covered under, identification of the equipment moved, the address of the equipment's new location, the date the equipment will be moved.

B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification shall be made to the respective county commissioners. The notification to the Department shall include the date the municipality was notified.

(24) Eurovia shall keep a copy of this Order on site, and ensure the operator(s) are familiar with the terms of this Order. [06-096 C.M.R. ch. 115, BPT]

**Eurovia Atlantic Coast LLC
Knox County
Washington, Maine
A-173-71-N-R/M**

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**Departmental
Findings of Fact and Order
Air Emission License
Renewal and Amendment**

- (25) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Eurovia may be required to submit additional information. Upon written request from the Department, Eurovia shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.
[06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 15th DAY OF AUGUST, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 9, 2024

Date of application acceptance: May 10, 2024

Date filed with the Board of Environmental Protection:

This Order prepared by Kendra Nash, Bureau of Air Quality.

FILED
AUG 15, 2024
State of Maine
Board of Environmental Protection