



DEPARTMENT ORDER

**Eurovia Atlantic Coast LLC
d/b/a Dirigo Materials
Penobscot County
Bangor, Maine
A-449-71-M-R**

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

FINDINGS OF FACT

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (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 d/b/a Dirigo Materials (Eurovia) has applied to renew their Air Emission License for the operation of their crushed stone and gravel facility located at 765 Odlin Road, Bangor, Maine.

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

B. Emission Equipment

The following equipment is addressed in this Air Emission License:

Rock Crushers

Designation	Powered	Process Rate (tons/hour)	Date of Manufacture	Control Device
4265ACPRI	Electric	800	Pre 1973	Spray Nozzles
1260ACPRI	Electric	400	Pre 1973	Spray Nozzles
H6000SVESEC	Electric	540	2005	Spray Nozzles
SANCH660	Electric	500	2016	Spray Nozzles
54FHELJ	Electric	200	1988	Spray Nozzles

Engines

Unit ID	Max. Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf.
Cat Gen	2.1	14.9	distillate fuel, 0.0015%	1997
Cat 3412	3.9	28.0		1988
JD 6466 *	0.45	3.2		1980

* Engine is below licensing threshold, but included for completeness purposes only

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.

Records or Logs 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 issued date of this license.

The application for Eurovia does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

E. Facility Classification

With the annual fuel limit on the engines, the facility is licensed as follows:

- As a synthetic minor source of air emissions for NO_x, 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.

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. Nonmetallic Mineral Processing Plants

Rock Crushers 4625ACPRI, 1260ACPRI, H6000SVESEC, SANCH660, and 54FHELJ are stationary units. Rock Crushers 4625ACPRI and 1260ACPRI were manufactured before 1973, Rock Crusher H6000SVESEC was manufactured in 1998, Rock Crusher SANCH660 was manufactured in 2016, and Rock Crusher 54FHELJ was manufactured in 1988. The units have rated capacities of 800 tons/hr, 400 tons/hr, 540 tons/hr, 500 tons/hr, and 200 tons/hr respectively. The nonmetallic mineral processing plant also consists of other equipment associated with 4625ACPRI, 1260ACPRI, H6000SVESEC, SANCH660, and 54FHELJ, 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 maintain water sprays on the nonmetallic mineral processing plant and operate as needed to control visible emissions.

Rock crushers 4625ACPRI, 1260ACPRI, H6000SVESEC, SANCH660, and 54FHELJ are exempt from the requirements of *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 because they are subject to a visible emission standard under 40 C.F.R. Part 60, Subpart 000. [include citation from Ch. 101]

2. New Source Performance Standards

The federal regulation *Standards of Performance for Nonmetallic Mineral Processing Plants*, 40 C.F.R. Part 60, Subpart 000, 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 000 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 Crushers 4265ACPRI and 1260ACPRI are fixed plants with maximum throughput ratings greater than 25 tons/hr but were each manufactured prior to 1983. However, it was determined in the air emission license at the facility that previously operated the crushers (A-257-71-R-R/A, issued 12/19/16), that due to the age of the crushers and the considerable impacts under which crusher equipment operates, it is likely that the crushers went through a reconstruction or modification after August 31, 1983, and are therefore subject to NSPS 40 C.F.R. Part 60, Subpart 000.

Rock crushers H6000SVESEC, SANCH660, and 54FHELJ are part of nonmetallic mineral processing plants with a maximum capacity greater than 25 ton/hr and were manufactured after August 31, 1983. These crushers are therefore subject to 40 C.F.R. Part 60, Subpart OOO. **Any grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, or enclosed truck or railcar loading station associated with these crushers are also affected facilities subject to 40 C.F.R. Part 60, Subpart OOO.** [40 C.F.R. §§ 60.670(c) and (e)]

a. Notification

For the rock crushers and ancillary equipment subject to 40 C.F.R. Part 60, Subparts A and OOO, Eurovia shall comply with the notification and recordkeeping requirements of 40 C.F.R. §§ 60.676 and 60.7, except for § 60.7(a)(2) pursuant to § 60.676(h). [40 C.F.R. §§ 60.676(b), (f), and (i)]

b. Standards

Visible emissions from Rock Crushers 4265ACPRI, 1260ACPRI, H6000SVESEC, and 54FHELJ shall not exceed 15% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

Visible emissions from Rock Crusher SANCH660 shall not exceed 12% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction before April 22, 2008, shall not exceed 10% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction on or after April 22, 2008, shall not exceed 7% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

c. Monitoring Requirements

Eurovia shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Eurovia shall perform monthly inspections of any water sprays to ensure water is flowing to the correct locations and initiate corrective action within 24 hours if water is found to not be flowing properly. Records of the date of each inspection and any corrective action required

shall be included in the maintenance records. The maintenance records shall be kept on-site at the rock crushing location. [40 C.F.R. §§ 60.674(b) and 60.676(b)(1)]

d. Testing Requirements

Subpart 000, § 60.675 requires that Eurovia conduct an initial performance test for visible emissions from H6000SVESEC, SANCH660, and 54FHELJ and from all associated affected facilities subject to Subpart 000, potentially including **any associated grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station.**

Initial performance testing was successfully completed and documented for Rock Crushers 4265ACPRI, H6000SVESEC, and SANCH660 on November 7, 2017; Rock Crusher 1260ACPRI on June 2, 2004; and Rock Crusher 54FHELJ on May 30, 2002.

Note: Any affected facility, as defined in Subpart 000, that is subsequently brought on-site to replace or operate in conjunction with an affected facility identified in this license must also comply with all applicable requirements of 40 C.F.R. Part 60, Subpart 000 including notification and testing requirements.

C. Cat Gen and Cat 3412

The Cat Gen is a portable engine used to power various material handling processes throughout the facility such as the blend and wash plants, but it is not used to power rock crushers. The Cat Gen has a maximum capacity of 2.1 MMBtu/hr firing distillate fuel. The Cat Gen was manufactured in 1997.

The Cat 3412 is a stationary engine used to power various material handling processes throughout the facility such as the blend and wash plants, but it is not used to power rock crushers. The Cat 3412 has a maximum capacity of 3.8 MMBtu/hr, firing distillate fuel. The generator was manufactured in 1988 and is a Caterpillar Engine Model 3412.

The fuel fired in the Cat Gen and the Cat 3412 combined shall be limited to 80,000 gallons/year on a calendar year basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). This fuel limit shall apply regardless of where the units are operated.

1. BPT Findings

The BPT emission limits for Cat Gen and Cat 3412 were based on the following:

- PM, PM₁₀ - 0.12 lb/MMBtu based on the following authorities:
06-096 C.M.R. ch. 103 for Cat 3412 (engine > 3.0 MMBtu/hr);
06-096 C.M.R. ch. 115, BPT for Cat Gen (engine < 3.0 MMBtu/hr)
- SO₂ - combustion of distillate fuel with a maximum sulfur content of 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 - 0.35 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 101 (3)(A)(4)

The BPT emission limits for Cat Gen and Cat 3412 are the following:

Unit	Pollutant	lb/MMBtu
Cat 3412	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Cat Gen	0.25	0.25	0.01	9.26	2.00	0.74
Cat 3412	0.46	0.46	0.01	16.76	3.61	1.33

Visible emissions from each of the generators shall not exceed 20% opacity on a six-minute block average basis except for periods of startup, during which time Eurovia may comply with the following work practice standards in lieu of the numerical visible emissions standard.

- a. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
- b. Operate the generators in accordance with the manufacturer's emission-related operating instructions.
- c. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.

- d. Operate the generators, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the units.

2. New Source Performance Standards

The Cat Gen and Cat 3412 were manufactured prior to April 1, 2006. Therefore, the Cat Gen and Cat 3412 are 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]

3. National Emission Standards for Hazardous Air Pollutants

Cat Gen

The Cat Gen is not subject to *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. The Cat Gen is considered a non-road engine, as opposed to stationary engine, since the Cat Gen is portable and will be moved to various sites within the facility.

The definition in 40 C.F.R. § 1068.30 states that a non-road engine is an internal combustion engine that meets certain criteria, including: “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.” The regulation further states at 40 C.F.R. § 1068.30 that an engine is not a non-road 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 engine and is subject to applicable stationary engine requirements. [40 C.F.R. § 63.6585]

Cat 3412

The Cat 3412 is also a portable unit that may move to various sites. However, it is likely that this unit may stay in one location for multiple seasons. In that case, it would be considered a stationary unit per 40 C.F.R. § 1068.30. Therefore, Eurovia has chosen to consider this engine stationary and comply with the requirements of *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating*

Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ. The Cat 3412 is classified as an existing, non-emergency, stationary compression ignition (CI) reciprocating internal combustion engine (RICE) located at an area source of HAP.

Per 40 C.F.R. Part 63, Subpart ZZZZ, the 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 the Cat 3412 include, but are not necessarily limited to, the following:

a. Operation Requirements

	Compliance Dates	Operating Limitations
Non-Emergency, non-black start CI stationary RICE >500 HP	Beginning May 3, 2014	<ul style="list-style-type: none"> - Limit concentration of CO in the exhaust to 23 ppmvd at 15% O₂ <u>or</u> reduce CO emissions by 70% or more [40 C.F.R. Part 63, Subpart ZZZZ, Table 2d]; - 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 [40 C.F.R. § 63.6625(h)]; - 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 [40 C.F.R. Part 63, Subpart ZZZZ, Table 2b]; and - Maintain the temperature of the exhaust so that the catalyst inlet temperature is 450°F – 1350°F. [40 C.F.R. Part 63, Subpart ZZZZ, Table 2b]

b. Crankcase Filtration

Eurovia shall operate on the 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 the 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 the Cat 3412 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities.
- (6) Eurovia shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. Eurovia shall, however, use all the valid data collected during all other periods.
- (7) The CPMS shall collect data at least once every 15 minutes.
- (8) The minimum tolerance for a CPMS measuring temperature is 5 °F or 1% of the measurement range, whichever is larger.
- (9) 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 conduct an initial performance test in accordance with Table 4 of Subpart ZZZZ within 180 days of startup after installation of controls but no later than October 30, 2014. Eurovia completed the initial performance test on the Cat 3412 on May 1, 2019. [40 C.F.R. § 63.6612(a)]
- (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)]
 - (6) Eurovia shall perform additional performance tests every 8,760 hours of operation or 3 years, whichever comes first.
[40 C.F.R. § 63.6640(a), Table 3, and Table 6]
- e. Ultra-Low Sulfur Fuel Requirement
- The fuel fired in the 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 the 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 and the Department 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) Semiannual Compliance Reports as defined in 40 C.F.R. § 63.6650.
[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 the Cat 3412 and control equipment to demonstrate the equipment was operated and maintained according to the maintenance plan.
- (7) All records must be kept in a form suitable and readily available for expeditious review for a period of 5 years.
[40 C.F.R. § 63.6655 and § 63.6660]

D. Stockpiles and Roadways

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.

E. 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.

F. Performance Test Protocol

For any performance 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]

Note: Although some federal standards, such as 40 C.F.R. Part 60, Subpart OOO, allow for a shorter pretest notification period, the Department requires pretest notification a minimum of 30 days prior to the scheduled date of the performance test unless a variance of this requirement is preapproved by the Department.

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

G. 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:

- Firing 80,000 gal/year of distillate fuel in the generators

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	SO₂	NO_x	CO	VOC
Generators	0.7	0.7	0.1	24.2	5.3	2.0
Total TPY	0.7	0.7	0.1	24.2	5.3	2.0

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 is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
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.

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed 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-449-71-M-R, subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License 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 commencing 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) **Nonmetallic Mineral Processing Plants**

- A. Eurovia shall install and maintain spray for control of particulate matter on the nonmetallic mineral processing plants. [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 all of the crushers. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT]

C. NSPS Subpart OOO Requirements

Eurovia shall comply with all requirements of 40 C.F.R. Part 60, Subpart OOO applicable to Rock Crushers 4625ACPRI, 1260ACPRI, H6000SVESEC, SANCH660, and 54FHELJ, and each associated affected facility including any grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station.

1. Visible emissions from Rock Crushers 4265ACPRI, 1260ACPRI, H6000SVESEC, and 54FHELJ shall not exceed 15% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]
2. Visible emissions from Rock Crusher SANCH660 shall not exceed 12% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]
3. Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction before April 22, 2008, shall not exceed 10% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]
4. Visible emissions from any affected facility other than rock crushers, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction on or after April 22, 2008, shall not exceed 7% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]
5. Eurovia shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Eurovia shall perform monthly inspections of any water sprays to ensure water is flowing to the correct locations and initiate corrective action within 24 hours if water is found to not be flowing properly. Records of the date of each inspection and any corrective action required shall be included in the maintenance records. The maintenance records shall be kept on-site at the rock crushing location. [40 C.F.R. §§ 60.674(b) and 60.676(b)(1)]

6. For the rock crushers and ancillary equipment subject to 40 C.F.R. Part 60, Subparts A and OOO, Eurovia shall comply with the notification and recordkeeping requirements of 40 C.F.R. §§ 60.676 and 60.7, except for § 60.7(a)(2) pursuant to § 60.676(h). [40 C.F.R. §§ 60.676(b), (f), and (i)]

Note: Although some federal standards, such as 40 C.F.R. Part 60, Subpart OOO, allow for a shorter pretest notification period, the Department requires pretest notification a minimum of 30 days prior to the scheduled date of the performance test unless a variance of this requirement is preapproved by the Department. [06-096 C.F.R. ch. 115, BPT]

(18) Generators

A. Fuel Use

1. The Cat Gen and Cat 3412 are 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 the tank containing the fuel to be fired. [06-096 C.M.R. ch. 115, BPT]
2. Total fuel use for The Cat Gen and Cat 3412 combined shall not exceed 80,000 gal/yr of distillate fuel, regardless of where the units are operated. 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)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Cat Gen	0.25	0.25	0.01	9.26	2.00	0.74
Cat 3412	0.46	0.46	0.01	16.76	3.61	1.33

D. Visible Emissions

Visible emissions from each of the generators shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Eurovia may comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)]

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

E. The 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]

1. Eurovia shall meet the following operational limitations for the Cat 3412:
 - a. Limit the concentration of CO in the exhaust to 23 ppmvd at 15% O₂ or reduce CO emissions by 70% or more;
 - 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;
 - 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; and

- d. Maintain the temperature of the exhaust so that the catalyst inlet temperature is 450 °F – 1,350 °F.

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

2. Crankcase Filtration

Eurovia shall operate an open crankcase filtration emission control system on the Cat 3412 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) and 06-096 C.M.R. 115, BPT]

3. Continuous Parameter Monitoring System (CPMS)

- a. Eurovia shall install, operate, and maintain a CPMS on the 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. Eurovia shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. Eurovia shall, however, use all the valid data collected during all other periods
- g. The CPMS shall collect data at least once every 15 minutes.
- h. The minimum tolerance for a CPMS measuring temperature is 5 °F or 1% of the measurement range, whichever is larger.

- i. CPMS audit procedures shall be performed at least annually.

[40 C.F.R. § 63.6625(b), § 63.6635, Table 6, and 06-096 C.M.R. 115, BPT]

4. Performance Tests

- a. Eurovia shall perform performance tests 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)]

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

5. General Requirement to Minimize Emissions

At all times the facility shall operate and maintain the 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) and 06-096 C.M.R. 115, BPT]

6. Reporting

Eurovia shall submit to the Department and 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. Semiannual Compliance Reports as defined in 40 C.F.R. § 63.6650. [40 C.F.R. § 63.6650 and Table 7]
[06-096 C.M.R. 115, BPT]

7. 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 the Cat 3412 and control equipment to demonstrate the equipment was operated and maintained according to the maintenance plan.
- g. All records must be kept in a form suitable and readily available for expeditious review for a period of 5 years.
[40 C.F.R. § 63.6655, § 63.6660, and 06-096 C.M.R. 115, BPT]

(19) Stockpiles and Roadways

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a five-minute block average basis.
[06-096 C.M.R. ch. 101, 3(C)]

(20) 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, § 3(B)(4)]

(21) 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.

(22) Performance Test Protocol

For any performance 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]

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

**Eurovia Atlantic Coast LLC
d/b/a Dirigo Materials
Penobscot County
Bangor, Maine
A-449-71-M-R**

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

- (24) If the Department determines that any parameter value pertaining to construction and operation of the proposed 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 Ambient Air Quality Standards (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 29th DAY OF AUGUST, 2022.

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: 7/15/22

Date of application acceptance: 7/15/22

Date filed with the Board of Environmental Protection:

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

