



DEPARTMENT ORDER

**Carroll Materials, LLC
York County
Limerick, Maine
A-478-71-R-A**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

F.R. Carroll, Inc. was issued Air Emission License A-478-71-P-R on November 20, 2015, for the operation of emission sources associated with their hot mix asphalt plant, concrete batch plant, and crushed stone gravel facility. The license was subsequently transferred on June 17, 2019 (A-478-71-Q-T) from F.R. Carroll, Inc. to Carroll Materials, LLC (Carroll Materials).

The equipment addressed in this license amendment is located at 25 Doles Ridge Road, Limerick, Maine.

Carroll Materials has requested an amendment to remove Jaw Crushers RC #1 and #3 and install a portable cone crusher RC #5. As part of this amendment, the Department is updating the visible emission limits to the recently updated Visible Emissions Regulation, 06-096 Code of Maine Rules (C.M.R.) ch. 101 requirements.

B. Emission Equipment

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

Rock Crushers

Designation	Description	Process Rate (tons/hour)	Date of Manufacture	Control Device
RC #1*	Primary Jaw	250	1984	Spray Nozzles
RC #2	Gyro #1	250	2004	Spray Nozzles
RC #3*	Secondary Jaw	125	2001	Spray Nozzles
RC #4	Gyro #2	125	2001	Spray Nozzles
RC #5**	Sandvick Cone	300	2000	Spray Nozzles

* Remove from license

** Add to license

C. Definitions

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.

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.

Carroll Materials has applied to modify their license as addressed in Section I(A) above.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the “Significant Emissions” levels as defined in the Department’s *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. This modification is not changing the licensed annual emissions.

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

E. Facility Classification

With the annual fuel limit on Boiler #3, Generator #1, and Generator #5 and the annual throughput limit on the Batch Mix Asphalt Plant, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because Carroll Materials 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.

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

II. BEST PRACTICAL TREATMENT

A. Introduction

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

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

B. Rock Crushers #2 and #4 – Visible Emissions Limits

Visible emissions from Rock Crushers RC #2 and #4 are limited to no greater than 10% opacity on a six-minute block average basis by 06-096 C.M.R. ch. 101. [06-096 C.M.R. ch. 101, § 4(B)(2)]

Visible emissions from Rock Crushers RC #2 and #4 are also subject to the following opacity standard of *Standards of Performance for Nonmetallic Mineral Processing Plants*, 40 C.F.R. Part 60, Subpart OOO, Table 3: Visible emissions from Rock Crushers RC #2 and #4 are limited to 12% opacity on a six-minute block average basis.

The Department has determined that the applicable visible emission limit of 06-096 C.M.R. ch. 101 is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart OOO. Therefore, the visible emission limit for Rock Crushers RC #2 and #4 has been streamlined

to the more stringent limit, and only this more stringent limit shall be included in the Order of this air emission license.

C. Rock Crusher #5 (RC #5)

Rock Crusher RC #5 is a portable unit manufactured in 2000 with a rated capacity of 300 tons/hr. The nonmetallic mineral processing plant also consists of other equipment associated with RC #5, such as screens and belt conveyors.

1. BACT Findings

The regulated pollutant from the nonmetallic mineral processing plant is particulate matter. To meet the requirements of BPT for control of particulate matter emissions, Carroll Materials 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 RC #5 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)]

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.

RC #5 is part of a nonmetallic mineral processing plant with a maximum capacity of greater than 150 ton/hr and was manufactured after August 31, 1983. This portable crusher is therefore an affected facility 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

Carroll Materials shall submit notification to the Department and EPA of the date of initial startup of every affected facility (as listed above) postmarked within 15 days of the startup. This notification shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted. For portable units, this notification shall also include both the home office and the current address or location of the portable plant. [40 C.F.R. § 60.676(i)]

As specified in the Order section of this license, the rock crushers and ancillary equipment are subject to 40 C.F.R. Part 60, Subparts A and OOO. Carroll Materials 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

Subpart OOO, Table 3 contains applicable visible emission requirements for affected facilities.

Visible emissions from RC #5 shall not exceed 15% opacity on a six-minute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]

The Department has determined that the visible emission limit in 06-096 C.M.R. ch. 101 applicable to the rock crushers is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart OOO. Therefore, the visible emission limit for RC #5 has been streamlined to the more stringent limit, and only this more stringent limit shall be included in the air emission license.

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]

The Department has determined that the visible emission limit in 40 C.F.R. Part 60, Subpart OOO applicable to affected equipment other than rock crushers is more stringent than the applicable limit in 06-096 C.M.R. ch. 101. Therefore, the visible emission limit for has been streamlined to the more stringent limit, and only this more stringent limit shall be included in the air emission license.

c. Monitoring Requirements

Carroll Materials shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Carroll Materials 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 OOO, § 60.675 requires that Carroll Materials conduct an initial performance test for visible emissions from RC #5 and from all associated affected facilities subject to Subpart OOO, potentially including **any associated grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station.**

Testing shall be completed in accordance with the following:

- (1) An initial performance test shall be completed within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. If the initial performance test for a facility falls within a seasonal shutdown, then with approval from the Department, the initial performance test may be postponed until no later than 60 calendar days after resuming operation of the affected equipment. [40 C.F.R. §§ 60.672(b) and 60.675(i)]
- (2) Each performance test shall be done using the methods set forth in 40 C.F.R. Part 60, Subpart OOO, § 60.675. [40 C.F.R. § 60.675(c)]
- (3) Carroll Materials shall submit a test notice to the Department at least seven days prior to conducting a performance test. [40 C.F.R. § 60.675(g)]

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.

Please note, although Carroll Materials may submit notifications and conduct performance testing for multiple affected facilities as a group, any new affected facility subsequently brought on-site to replace or operate in conjunction with an affected facility must also comply with all applicable requirements of 40 C.F.R. Part 60, Subpart OOO including notification and testing requirements.

D. Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

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 Amendment A-478-71-R-A, subject to the conditions found in Air Emission A-478-71-P-R and the following conditions.

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

SPECIFIC CONDITIONS

The following shall replace Condition (19) of Air Emission License A-478-71-P-R:

(19) Rock Crushers - RC #2, #4, and #5

- A. Carroll Materials shall install and maintain spray nozzles for control of particulate matter on the nonmetallic mineral processing plants and operate as needed, when the units are in operation, to control visible emissions. [06-096 C.M.R. ch. 115, BPT/BACT]
- B. Carroll Materials shall maintain records detailing and quantifying the hours of operation on a daily basis for RC #2, #4, and #5. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT/BACT]

C. Visible emissions from RC #2, #4, and #5 shall each 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. NSPS Subpart OOO Requirements

Carroll Materials shall comply with all requirements of 40 C.F.R. Part 60, Subpart OOO applicable to Rock Crushers RC #2, #4, and #5 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 including but not limited to, the following.

1. Carroll Materials shall submit notification to the Department of the date of initial startup of any affected facility postmarked within 15 days of the startup. This notification shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted. For portable units, this notification shall also include both the home office and the current address or location of the portable plant. [40 C.F.R. § 60.676(i)]
2. 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]
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]
4. Carroll Materials shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Carroll Materials 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)]
5. An initial performance test shall be completed on RC #5 in accordance with the applicable sections of 40 C.F.R. § 60.675. The performance test shall be conducted within 60 days after achieving the maximum production rate at which the unit will

be operated, but no later than 180 days after initial startup of the unit. If the initial performance test for a unit falls within a seasonal shutdown, then with approval from the Department, the initial performance test may be postponed until no later than 60 calendar days after resuming operation of the affected equipment. [40 C.F.R. §§ 60.672(b) and 60.675(i)]

6. An initial performance test shall be completed on any affected facilities operated with a rock crusher subject to 40 C.F.R. Part 60, Subpart OOO in accordance with the applicable sections of 40 C.F.R. § 60.675. This potentially includes each associated grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station. The performance test shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial startup of the unit. If the initial performance test for a unit falls within a seasonal shutdown, then with approval from the Department, the initial performance test may be postponed until no later than 60 calendar days after resuming operation of the affected equipment. [40 C.F.R. §§ 60.672(b) and 60.675(i)]
7. Carroll Materials shall submit a test notice to the Department at least seven days prior to conducting a performance test. [06-096 C.M.R. ch. 115, BPT and 40 C.F.R. § 60.675(g)]

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]

The following is a new condition:

- (29) 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, Carroll Materials may be required to submit additional information. Upon written request from the Department, Carroll Materials 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

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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 23rd DAY OF APRIL, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-478-71-P-R (issued 11/20/2015).

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 13, 2024

Date of application acceptance: March 18, 2024

Date filed with the Board of Environmental Protection:

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

