

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

DEPARTMENT ORDER

Gerald L. Wood & Son, LLC Washington County Machiasport, Maine A-1130-71-A-N Departmental
Findings of Fact and Order
Air Emission License
New Source

FINDINGS OF FACT

After review of the air emission license 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

Gerald L. Wood & Son, LLC (Gerald Wood) has applied for an Air Emission License for the operation of their crushed stone and gravel facility located on Port Road in Machiasport, Maine.

The main office is located at 972 Port Road, Machiasport, Maine.

B. Emission Equipment

The following equipment is addressed in this Air Emission License:

Rock Crushers

Designation	Designation Powered		Date of Manufacture	
Jaw Crusher	Diesel #2	35	2003	
Track Crusher	Diesel #3	200	2004	

Engines

<u>Unit ID</u>	Max. Capacity (MMBtu/hr)	Output (HP)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf.
Diesel #1	0.82	113	6.0		1966
Diesel #2	0.72	99	5.3	Distillate fuel, 0.0015%	2003
Diesel #3	2.54	350	18.5		2004

Departmental
Findings of Fact and Order
Air Emission License
New Source

Additionally, Gerald Wood has a <u>portable</u> engine smaller than 0.5 MMBtu/hr. This engine is considered an insignificant activity and is not required to be included in this license. However, it may still be subject to applicable State and Federal regulations.

2

C. Definitions

Distillate Fuel. For the purposes of this license, 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.

<u>Portable Engine.</u> For the purposes of this license, <u>portable engine</u> 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.

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.

Gerald Wood is classified as an existing source previously licensed under the general permit program that is applying for its first air emission license under *Major* and *Minor Source Air Emission License Regulation*, 06-096 C.M.R. ch. 115. A source is considered a major or minor source based on whether or not total licensed annual emission exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100.

Pollutant	Total Licensed Annual Emissions (TPY)	Significant Emissions Levels
PM	0.5	100
PM ₁₀	0.5	100
SO_2	0.1	100
NO _x	19.6	100
CO	4.2	100
VOC	1.6	50
CO ₂ e	< 100,000	100,000

3

The Department has determined the facility is a minor source, and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

With the annual fuel limit on the distillate fuel-fired engines, the facility is licensed 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 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. Nonmetallic Mineral Processing Plants

The Jaw Crusher and Track Crusher are both portable rock crushers which were manufactured in 2003 and 2004 with rated capacities of 35 ton/hr and 200 ton/hr, respectively. The nonmetallic mineral processing plant also consists of other equipment associated with the Jaw Crusher and Track Crusher, such as screens and belt conveyors.

Departmental Findings of Fact and Order Air Emission License New Source

1. BACT Findings

The regulated pollutant from nonmetallic mineral processing plants is particulate matter. To meet the requirements of BACT for control of particulate matter emissions, Gerald Wood shall maintain water sprays or other equally effective control equipment or implement work practices on the rock crushers and operate them as needed to control visible emissions.

Visible emissions from the Jaw Crusher shall be limited to no greater than 10% opacity on a six-minute block average basis.

Visible emissions from nonmetallic mineral processing plant equipment other than crushers (transfer points on belt conveyors, screening operations, etc.) not associated with an NSPS rock crusher shall not exceed 20% opacity on a six-minute block average basis.

Gerald Wood shall maintain records detailing and quantifying the hours of operation on a daily basis for both the Jaw Crusher and the Track Crusher. The operation records shall be kept on-site at the rock crushing location.

Additionally, Gerald Wood shall maintain records detailing the maintenance on particulate matter control equipment (including spray nozzles). Gerald Wood shall perform monthly inspections of the control equipment during months when the equipment is in operation. If water sprays are used, the monthly inspection shall consist of ensuring water is flowing to the correct locations and, if it is not, Gerald Wood shall initiate corrective action within 24 hours. 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.

2. 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.

Departmental Findings of Fact and Order Air Emission License New Source

The Jaw Crusher is part of a nonmetallic mineral processing plant which is physically limited to a maximum capacity of less than 150 ton/hr. Therefore, the Jaw Crusher and its associated equipment are not subject 40 C.F.R. Part 60, Subpart OOO. [40 C.F.R. § 60.670(c)]

5

To ensure classification as a portable plant, the Jaw Crusher shall not be attached or clamped via cable, chain, turnbuckle, bolt, or other means (except electrical connections) to any anchor, slab, or structure (including bedrock) that must be removed prior to transportation.

The Track Crusher is part of a nonmetallic mineral processing plant with a maximum capacity greater than 150 MMBtu/hr and was manufactured after August 31, 1983. Therefore, the Track Crusher and its associated equipment are subject to 40 C.F.R. Part 60, Subpart OOO. [40 C.F.R. § 60.670(c)]

40 C.F.R. Part 60, Subpart OOO Requirements:

a. Standards

Subpart OOO, Table 3 contains applicable visible emission requirements for the Track Crusher. This equipment is also subject to standards contained in the State rule *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101. The State requirements are determined to be more stringent. Therefore, the visible emission limit for this equipment has been streamlined to the State regulation. Visible emissions from the Track Crusher shall be limited to no greater than 10% opacity on a six-minute block average basis.

Visible emissions from any nonmetallic mineral processing plant equipment, 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 nonmetallic mineral processing plant equipment, 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]

Departmental
Findings of Fact and Order
Air Emission License
New Source

b. Monitoring Requirements

Gerald Wood shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Gerald Wood shall perform monthly inspections of the control equipment during the months when the equipment is in operation. If using water sprays, Gerald Wood shall perform 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)]

6

c. Testing Requirements

Subpart OOO, § 60.675 requires that Gerald Wood conduct an initial performance test for visible emissions from the Track Crusher and from each piece of associated equipment 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 must 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)]
- (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) Gerald Wood 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)]
- (4) Gerald Wood shall conduct a performance test at least once every five years on the Track Crusher and ancillary equipment, as applicable, with a test to be conducted in 2018 and subsequent tests to be conducted every five calendar years thereafter. The test shall be conducted using the methods set forth in 40 C.F.R. § 60.675. [06-096 C.M.R. ch. 115, BACT and 40 C.F.R. § 60.672(b) and 40 C.F.R. Part 60, Subpart OOO, Table 3]

Departmental
Findings of Fact and Order
Air Emission License
New Source

d. Reporting and Recordkeeping Requirements

7

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

C. Diesels #1-3

Diesels #1 and #2 are stationary engines and Diesel #3 is a portable engine, all firing distillate fuel. Diesel #2 is used to power the Jaw Crusher, and Diesel #3 is used to power the Track Crusher. Diesels #1-3 were manufactured in 1966, 2003, and 2004, with maximum capacities of 0.82 MMBtu/hr (113 HP), 0.72 MMBtu/hr (99 HP), and 2.54 MMBtu/hr (350 HP), respectively.

1. BACT Findings

The BACT emission limits for Diesels #1-3 were based on the following:

PM, PM_{10}	- 0.31 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
SO_2	- 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	- 0.35 lb/MMBtu from AP-42, Table 3.3-1, dated 10/96
Visible	- 06-096 C.M.R. ch. 115, BACT
Emissions	

The BACT emission limits for Diesels #1-3 are the following:

<u>Unit</u>	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #1	0.25	0.25	0.01	3.62	0.78	0.29
Diesel #2	0.22	0.22	0.01	3.18	0.68	0.25
Diesel #3	0.79	0.79	0.01	11.20	2.41	0.89

Visible emissions from Diesels #1-3 shall each not exceed 20% opacity on a six-minute block average basis.

Total fuel use for Diesels #1-3 combined shall not exceed 65,000 gal/yr of distillate fuel based on a calendar year total. The sulfur content of the distillate fuel fired in Diesels #1-3 shall not exceed 0.0015% by weight (15 ppm). Compliance shall be demonstrated by fuel records showing the quantity, type,

Departmental
Findings of Fact and Order
Air Emission License
New Source

and percent sulfur of the fuel. Records of fuel use shall be kept on a monthly and calendar year total basis.

8

2. New Source Performance Standards

Diesels #1 and #2 were manufactured prior to April 1, 2006. Therefore, Diesels #1 and #2 are not subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII. [40 C.F.R. § 60.4200]

Diesel #3 is considered a non-road engine, as opposed to a stationary engine, since Diesel #3 is portable and will be moved to various sites with the Track Crusher. Additionally, Diesel #3 was manufactured prior to April 1, 2006. Therefore, Diesel #3 is not subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII. [40 C.F.R. § 60.4200]

3. National Emission Standards for Hazardous Air Pollutants

Diesel #3 is considered a non-road engine, as opposed to a stationary engine, since Diesel #3 is portable and will be moved to various sites with the Track Crusher. Therefore, Diesel #3 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 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." 40 C.F.R. § 1068.30 further states 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 a shorter period of time for an engine located at a seasonal source. An engine located at a seasonal source (a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year) is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. [40 C.F.R. § 63.6585]

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to Diesels #1 and #2. The units are considered existing, non-emergency, non-black start stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. [40 C.F.R. § 63.6585]

Departmental Findings of Fact and Order Air Emission License New Source

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart ZZZZ requirements Gerald Wood is subject to is listed below.

9

40 C.F.R. Part 63, Subpart ZZZZ Requirements:

a. Operation and Maintenance Requirements

	Operating Limitations			
Compression ignition	- Change oil and filter every 500 hours of operation or			
(distillate fuel) units	annually, whichever comes first;			
	- Inspect the air cleaner every 1000 hours of operation			
	or annually, whichever comes first, and replace as			
	necessary; and			
	- Inspect all hoses and belts every 500 hours of			
	operation or annually, whichever comes first, and			
	replace as necessary.			

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Gerald Wood shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practices for minimizing emissions. [40 C.F.R. § 63.6625(e) and 40 C.F.R. Part 63, Subpart ZZZZ, Table 6]

b. Optional Oil Analysis Program

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

c. Startup Idle and Startup Time Minimization Requirements
During periods of startup, Gerald Wood must minimize the engine's time
spent at idle and minimize the engine's startup time to a period needed for
appropriate and safe loading of the engine, not to exceed 30 minutes.
[40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

Departmental
Findings of Fact and Order
Air Emission License
New Source

d. Recordkeeping

Gerald Wood shall keep records that include maintenance conducted on the engines in order to demonstrate compliance with all applicable operation and maintenance requirements. Records shall be in a form suitable and readily available for expeditious review. Records shall be kept for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 C.F.R. §§ 63.6655(d) and 63.6660(a) through (c)]

D. Stock Piles and Roadways

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

E. General Process Emissions

Visible emissions from any general process (including conveyor belts, transfer points, portable screens, etc.) associated with an NSPS rock crusher shall not exceed 10% opacity on a six-minute block average basis. Compliance with this limit shall be demonstrated by conducting the initial performance test according to 40 C.F.R. §§ 60.11 and 60.675 and periodic inspections of the water sprays (if used) according to §§ 60.674(b) and 60.676(b). [40 C.F.R. Part 60, Subpart OOO, Table 3]

Visible emissions from any other general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, portable screens, etc.) shall not exceed 20% opacity on a six-minute block average basis.

F. Annual Emissions

1. Total Annual Emissions

Gerald Wood shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on a fuel limit of 65,000 gallons of distillate fuel per year for Diesels #1-3:

Total Licensed Annual Emissions for the Facility Tons/year

11

(used to calculate the annual license fee)

	<u>PM</u>	PM ₁₀	SO ₂	NOx	CO	VOC
Diesels #1-3	0.5	0.5	0.1	19.6	4.2	1.6
Total TPY	0.5	0.5	0.1	19.6	4.2	1.6

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's Approval and Promulgation of Implementation Plans, 40 C.F.R. Part 52, Subpart A, § 52.21, Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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:

Departmental Findings of Fact and Order Air Emission License New Source

Pollutant	Tons/Year	
PM ₁₀	25	
SO_2	50	
NOx	50	
СО	250	

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

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-1130-71-A-N, subject to the following conditions.

<u>Severability</u>. 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]

Departmental Findings of Fact and Order Air Emission License New Source

(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]

Departmental Findings of Fact and Order Air Emission License New Source

- (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 such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and
 - B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

Departmental Findings of Fact and Order Air Emission License New Source

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 Part 70 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]

SPECIFIC CONDITIONS

(16) Nonmetallic Mineral Processing Plants

- A. Gerald Wood shall install and maintain spray nozzles or other equally effective control equipment or implement work practices to minimize particulate matter emissions from the nonmetallic mineral processing plants. [06-096 C.M.R. ch. 115, BACT]
- B. Gerald Wood shall maintain records detailing and quantifying the hours of operation on a daily basis for both the Jaw Crusher and Track Crusher. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BACT]

Departmental Findings of Fact and Order Air Emission License New Source

- C. Visible emissions from the Jaw Crusher and Track Crusher shall each be limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101]
- D. Visible emissions from nonmetallic mineral processing plant equipment other than crushers (transfer points on belt conveyors, screening operations, etc.) that are not part of a nonmetallic mineral processing plant subject to Subpart OOO shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]
- E. The Jaw Crusher shall not be attached or clamped via cable, chain, turnbuckle, bolt, or other means (except electrical connections) to any anchor, slab, or structure (including bedrock) that must be removed prior to transportation. [06-096 C.M.R. ch. 115, BACT and 40 C.F.R. § 60.670(c)(2)]
- F. Gerald Wood shall maintain records detailing the maintenance on particulate matter control equipment (including spray nozzles) on the Jaw Crusher. Gerald Wood shall perform monthly inspections of the control equipment during months when the equipment is in operation. If using water sprays, Gerald Wood shall perform 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. [06-096 C.M.R. ch. 115, BACT]

G. NSPS Subpart OOO Requirements

Gerald Wood shall comply with all requirements of 40 C.F.R. Part 60, Subpart OOO applicable to the Track Crusher and each associated grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station.

1. Visible emissions from any nonmetallic mineral processing plant equipment, 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]

Departmental
Findings of Fact and Order
Air Emission License
New Source

2. Visible emissions from any nonmetallic mineral processing plant equipment, 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]

- 3. Gerald Wood shall maintain records detailing the maintenance on particulate matter control equipment (including spray nozzles) and shall perform monthly inspections of the control equipment during months when the equipment is in operation. If using water sprays, Gerald Wood 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. [06-096 C.M.R. ch. 115, BACT and 40 C.F.R. § 60.674(b)]
- 4. Gerald Wood shall either have an initial performance test performed on the Track Crusher and ancillary equipment, as applicable, per the applicable sections of 40 C.F.R. § 60.675 or provide documentation to the Department that the initial performance test was previously performed. [06-096 C.M.R. ch. 115, BACT and 40 C.F.R. § 60.675(c)]
- 5. An initial performance test must 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 06 096 C.M.R. ch. 115, BACT]
- 6. Gerald Wood shall conduct a performance test at least once every five years on the Track Crusher and ancillary equipment, as applicable, with a test to be conducted in 2018 and subsequent tests to be conducted every five calendar years thereafter. The test shall be conducted using the methods set forth in 40 C.F.R. § 60.675. [06-096 C.M.R. ch. 115, BACT and 40 C.F.R. § 60.672(b) and 40 C.F.R. Part 60, Subpart OOO, Table 3]
- 7. Gerald Wood shall submit a test notice to the Department and the EPA at least seven days prior to conducting a performance test. [06-096 C.M.R. ch. 115, BACT and 40 C.F.R. § 60.675(g)]

Departmental Findings of Fact and Order Air Emission License New Source

18

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

(17) **Diesels #1-3**

A. Fuel Use

- 1. Diesels #1-3 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 records from the supplier showing the sulfur content of the fuel delivered. [06-096 C.M.R. ch. 115, BACT]
- 2. Total fuel use for Diesels #1-3 combined shall not exceed 65,000 gal/yr of distillate fuel on a calendar year total. Compliance shall be demonstrated by fuel records showing the quantity and type of fuel delivered. Records of fuel use shall be kept on a monthly and calendar year total basis. [06-096 C.M.R. ch. 115, BACT]
- B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Diesel #1	0.25	0.25	0.01	3.62	0.78	0.29
Diesel #2	0.22	0.22	0.01	3.18	0.68	0.25
Diesel #3	0.79	0.79	0.01	11.20	2.41	0.89

- C. Visible emissions from Diesels #1-3 shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]
- D. Diesels #1 and #2 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. Gerald Wood shall meet the following operational limitations for Diesels #1 and #2:
 - a. Change the oil and filter every 500 hours of operation or annually, whichever comes first;
 - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect the hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Departmental
Findings of Fact and Order
Air Emission License
New Source

Records shall be maintained documenting compliance with these operational limitations.

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

2. Oil Analysis Program Option

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

3. Operation and Maintenance

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Gerald Wood shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e) and 40 C.F.R. Part 63, Subpart ZZZZ, Table 6]

4. Startup Idle and Startup Time Minimization

During periods of startup, Gerald Wood must minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

5. Reports and Recordkeeping

Gerald Wood shall keep records of the maintenance conducted on the engines in order to demonstrate compliance with all applicable operation and maintenance requirements. Records shall be in a form suitable and readily available for expeditious review. Records shall be kept for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 C.F.R. §§ 63.6655(d) and 63.6660(a) through (c)]

Departmental
Findings of Fact and Order
Air Emission License
New Source

(18) Stockpiles and Roadways

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BACT]

20

(19) General Process Sources

Visible emissions from any general process (including conveyor belts, transfer points, portable screens, etc.) associated with an NSPS rock crusher shall not exceed 10% opacity on a six-minute block average basis. Compliance with this limit shall be demonstrated by conducting the initial performance test according to 40 C.F.R. §§ 60.11 and 60.675 and periodic inspections of the water sprays (if used) according to §§ 60.674(b) and 60.676(b). [40 C.F.R. Part 60, Subpart OOO, Table 3]

Visible emissions from any other general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, portable screens, etc.) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

(20) Equipment Relocation [06-096 C.M.R. ch. 115, BACT]

A. Gerald Wood 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 fax (207-287-7641) or 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 address of the equipment's new location, an identification of the equipment, and the license number pertaining to the relocated equipment.

Departmental
Findings of Fact and Order
Air Emission License
New Source

21

- 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.
- (21) Gerald Wood 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, BACT]
- (22) Gerald Wood shall notify the Department within 48 hours and submit a report to the Department on a <u>quarterly basis</u> if a malfunction or breakdown in any component causes a violation of any emission standard [38 M.R.S. § 605].

DONE AND DATED IN AUGUSTA, MAINE THIS 20 DAY OF December, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Man Allen Robert Cone for

DEC 2 0 2017

State of Maine
Board of Environmental Protection

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: 9/21/2017

Date of application acceptance: 9/21/2017

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.