

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

DEPARTMENT ORDER

Owen J. Folsom, Inc. Penobscot County Old Town, Maine A-617-71-P-R/A Departmental Findings of Fact and Order Air Emission License Renewal with Amendment

FINDINGS OF FACT

After review of the air emission license renewal with 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

Owen J. Folsom, Inc. (Folsom) has applied to renew and amend the Air Emission License for the operation of their concrete batch plant and crushed stone and gravel facility located at 299 Gillman Falls Road, Old Town, Maine.

Folsom has requested an amendment to their license in order to add an additional propane fired boiler designated as Boiler #4, reduce the annual distillate fuel limit to 70,000 gallons per year, and increase the annual propane fuel limit to 50,000 gallons per year.

B. Emission Equipment

The following equipment is addressed in this Air Emission License:

Heating Equipment

	Max. Capacity		Maximum	
Equipment	(MMBtu/hr)	Fuel Type, % sulfur	Firing Rate	Date of Manuf.
Boiler #1 *	0.5	propane, neg.	3 gal/hr	N/A
Boiler #2	3.1	propane, neg.	33.3 gal/hr	2010
Boiler #3	1.5	propane, neg.	15.6 gal/hr	2010
Boiler #4 (new)	8.5	propane, neg.	92.9 gal/hr	2022

* The maximum input capacity of Boiler #1 is below the licensing threshold; thus, Boiler #1 is included in this table for completeness purposes only.

Concrete Plant

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Equipment	Production Rate (cubic yards/hour)	Control Device
CBP #1	120	baghouse
CBP #2	150	baghouse

Rock Crushers

		Process Rate	Date of	Control
Designation	Powered	(tons/hour)	Manufacture	Device
RC #1	electrical	135	1993	Spray Nozzles
RC #2	Direct Drive #1	350	2001	Spray Nozzles
RC #3	electrical	135	1982	Spray Nozzles

Engines

Unit ID	Max. Capacity (MMBtu/hr)	Max. Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf.
Gen #1	3.2	25.3	distillate fuel, 0.0015%	1993
Gen #2	2.2	15.6	distillate fuel, 0.0015%	1993
Gen #3	3.3	24.1	distillate fuel, 0.0015%	1988
Direct Drive #1	2.6	19.0	distillate fuel, 0.0015%	2001

Folsom 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.

Folsom 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

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Additionally, Folsom may operate <u>portable</u> engines used for maintenance or emergencyonly 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.

<u>Nonmetallic mineral processing plant</u> 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.

<u>Portable or Non-Road 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. <u>A location is any single site</u> 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 <u>not</u> 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.

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

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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 Folsom does include the licensing of increased emissions and the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units with a modification to a minor source and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

The modification of a minor source is considered a major or minor modification based on whether or not expected emissions 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. The emissions increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emissions Levels
PM	0.7	0.8	0.1	100
PM ₁₀	0.7	0.8	0.1	100
SO_2	0.1	0.2	0.1	100
NO _x	24.3	21.6	-2.7	100
СО	5.3	4.8	-0.5	100
VOC	2.0	1.8	-0.2	100

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

E. Facility Classification

With the annual fuel limit on the boilers and distillate fired engines, the facility is licensed as follows:

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

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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.

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. Concrete Batch Plants

Concrete Batch Plants CBP #1 and CBP #2 are rated at 120 and 150 cubic yards/hour respectively and includes two silos each.

All components of each Concrete Batch Plant shall be maintained so as to prevent PM leaks. To meet the requirements of BPT for particulate matter, emissions from the cement silo and truck filling shall each be vented through a baghouse maintained for 99% removal efficiency. Visible emissions from each baghouse are limited to no greater than 10% opacity on a six-minute block average basis. The facility shall take corrective action if visible emissions from any baghouse exceed 5% opacity on a six-minute block average basis.

C. Nonmetallic Mineral Processing Plants

Rock Crushers RC #1, RC #2, and RC #3 are portable units which were manufactured in 1993, 2001, and 1982 with rated capacities of 135 tons/hr, 350 tons/hr, and 135 tons/hr, respectively. The nonmetallic mineral processing plants also consists of other equipment associated with Rock Crushers RC #1, RC #2, and RC #3, 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, Folsom shall maintain water sprays on each nonmetallic mineral processing plant and operate as needed to control visible emissions.

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Rock Crusher RC #2 is exempt from the requirements of *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 because it is subject to a visible emission standard under 40 C.F.R. Part 60, Subpart OOO.

Visible emissions from Rock Crushers RC #1 and RC #3 shall each 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 associated with RC #1 and RC #3 (transfer points on belt conveyors, screening operations, etc.) shall each not exceed 20% opacity on a six-minute block average basis.

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.

Rock Crushers RC #1 and RC #3 are part of portable nonmetallic mineral processing plants which is physically limited to a maximum capacity of less than 150 ton/hr each. Therefore, this equipment is not subject to 40 C.F.R. Part 60, Subpart OOO. [40 C.F.R. § 60.670(c)]

Rock Crusher RC #2 is part of a portable nonmetallic mineral processing plant with a maximum capacity of greater than 150 ton/hr and was manufactured after August 31, 1983. This crusher is 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 this crusher are also subject to 40 C.F.R. Part 60, Subpart OOO. [40 C.F.R. \S 60.670(c) and (e)]

a. Standards

Subpart OOO, Table 3 contains applicable visible emission requirements for facilities subject to 40 C.F.R. Part 60, Subpart OOO.

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Visible emissions from Rock Crusher RC #2 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 any affected facility other than rock crushers associated with RC #2, 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 associated with RC #2, 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]

b. Monitoring Requirements

Folsom shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Folsom 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)]

c. Testing Requirements

Subpart OOO, § 60.675 requires that Folsom conduct an initial performance test for visible emissions from RC #2 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.** The performance tests were completed for RC #2 on June 9, 2004, and all necessary documentation has been provided to the Department.

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D. Boilers

Boilers #2, #3, and #4 have maximum capacities of 3.1, 1.5, and 8.5 MMBtu/hr, respectively, and each fires propane. The boilers were manufactured in 2010 for Boilers #2 and #3, and 2020 for Boiler #4.

1. BPT and BACT Findings

The BPT emission limits for Boilers #2 and #3, and the BACT emission limits for Boiler #4 were based on the following:

PM, PM_{10}	_	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT and BACT
SO_2	_	0.054 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
NO _x	_	13 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
CO	_	7.5 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
VOC	_	1 lb/1000 gal based on AP-42 Table 1.5-1 dated 7/08
Visible	_	06-096 C.M.R. ch. 101
Emissions		

The BPT emission limits for Boilers #2 and #3, and the BACT emission limits for Boiler #4 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #2	PM	0.05
Boiler #4	PM	0.05

	PM	PM ₁₀	SO ₂	NOx	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Boiler #2	0.16	0.16	0.01	0.44	0.25	0.04
Boiler #3	0.08	0.08	0.01	0.21	0.12	0.02
Boiler #4	0.43	0.43	0.01	1.21	0.7	0.1

Total fuel use for Boilers #2, #3, and #4 shall not exceed 50,000 gal/yr of propane, on a calendar year total basis. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year basis. [06-096 C.M.R. ch. 115, BPT]

Visible emissions from Boilers #2, #3, and #4 shall each not exceed 10% opacity on a six-minute block average basis.

2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and calendar year total basis.

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3. New Source Performance Standards

Due to their size, Boilers #2, #3, and #4 are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants

Boilers #2, #3, and #4 are not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources,* 40 C.F.R. Part 63, Subpart JJJJJJ. The units exclusively fire propane which classifies them as gas-fired boilers which are not subject to this subpart. [40 C.F.R. §§ 63.11193 and 63.11195]

E. Engines

Engines Gen #1, #2, and #3, and Direct Drive #1 are portable engines used to power the rock crushers. Engines Gen #1, #2, and #3, and Direct Drive #1 have maximum input capacities of 3.2, 2.2, 3.3, and 2.6 MMBtu/hr respectively, firing distillate fuel. The engines were manufactured in 1993 for Gen #1 and #2, 1988 for Gen #3, and 2001 for Direct Drive #1. The distillate fuel fired in the four engines combined shall be limited to 70,000 gallons/year on a calendar year total basis 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 Gen #1, #2, and #3, and Direct Drive #1 were based on the following:

PM, PM ₁₀	- 0.12 lb/MMBtu from 06-096 C.M.R. ch. 103 for the units rated at
	3.0 MMBtu/hr or greater; 06-096 C.M.R. ch. 115, BPT for the units
	rated below 3.0 MMBtu/hr
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. 101
Emissions	

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The BPT emission limits for Gen #1, #2, and #3, and Direct Drive #1 are the following:

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Unit	Pollutant	lb/MMBtu
Gen #1	PM	0.12
Gen #3	PM	0.12

	PM	PM ₁₀	SO ₂	NOx	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Gen #1	0.39	0.39	0.01	14.12	3.04	1.12
Gen #2	0.27	0.27	0.01	9.71	2.09	0.77
Gen #3	0.4	0.4	0.01	14.56	3.14	1.16
Direct Drive #1	0.32	0.32	0.01	11.47	2.47	0.91

Visible emissions from each of the engines shall not exceed 20% opacity on a sixminute block average basis except for periods of startup during which time Folsom 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 engine startups.
- b. Operate the engines 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 engines, 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 procedures, review of operation of the unit.
- 2. Chapter 169

Engines Gen #1, #2, and #3, and Direct Drive #1 are portable units and were licensed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and are therefore exempt from this rule pursuant to section 3(A) and (B).

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3. New Source Performance Standards

Engines Gen #1, #2, and #3, and Direct Drive #1 were manufactured prior to April 1, 2006. Therefore, they are <u>not</u> 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]

4. National Emission Standards for Hazardous Air Pollutants

Engines Gen #1, #2, and #3, and Direct Drive #1 are <u>not</u> 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." The regulation further states at 40 C.F.R. § 1068.30 that an engine is <u>not</u> 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]

Engines Gen #1, #2, and #3, and Direct Drive #1 are considered non-road engines, as opposed to a stationary engines, since Engines Gen #1, #2, and #3, and Direct Drive #1 are portable and will be moved to and operated at various locations.

F. 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.

G. 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.

H. <u>Annual Emissions</u>

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

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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 50,000 gal/year of propane in the boilers;
- Firing 70,000 gal/year of distillate fuel in the generator engines.

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 needse ree)						
	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers #2, #3, and #4	0.2	0.2	0.1	0.4	0.2	0.1
Engines: Gen #1, #2, and #3, and Direct Drive #1	0.6	0.6	0.1	21.2	4.6	1.7
Total TPY	0.8	0.8	0.2	21.6	4.8	1.8

(used to calculate the annual license fee)

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

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

Pollutant	Tons/Year
PM ₁₀	25
SO_2	50
NO _x	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.

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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 Folsom 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-617-71-P-R/A, 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]
- (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]

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- (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.

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- 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]

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- (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) **Concrete Batch Plants**

- A. Particulate emissions from the cement silos and truck filling shall each be vented through a baghouse and all components of the concrete batch plant shall be maintained so as to prevent PM leaks. [06-096 C.M.R. ch. 115, BPT]
- B. To document maintenance of the cement silo baghouses, Folsom shall keep a maintenance record of the date and location of all bag failures as well as all routine maintenance and inspections. The maintenance and inspection record shall be kept on-site at the concrete batch plant location. [06-096 C.M.R. ch. 115, BPT]
- C. Visible emissions from the cement silo and truck filling baghouses is limited to no greater than 10% opacity on a six-minute block average basis. Folsom shall take corrective action if visible emissions from the baghouse(s) exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, 3(B)(3)]
- D. PM emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, 3(B)(4)]

(18) Nonmetallic Mineral Processing Plants

- A. Folsom shall install and maintain spray nozzles for control of particulate matter on each nonmetallic mineral processing plant. [06-096 C.M.R. ch. 115, BPT]
- B. Folsom shall maintain records detailing and quantifying the hours of operation on a daily basis for each of the crushers. The operation records shall be kept on-site at the rock crushing location. [06-096 C.M.R. ch. 115, BPT]

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- C. Visible emissions from Rock Crushers RC #1 and RC #3 shall each be limited to no greater than 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § (3)(B)(2)]
- D. Visible emissions from nonmetallic mineral processing plant equipment associated with Rock Crushers RC #1 and RC #3 (transfer points on belt conveyors, screening operations, etc.) shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101 § (3)(B)(4)]
- E. Rock Crushers RC #1 and RC #3 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, BPT and 40 C.F.R. § 60.670(c)(2)]
- F. NSPS Subpart OOO Requirements

Folsom shall comply with all requirements of 40 C.F.R. Part 60, Subpart OOO applicable to Rock Crusher RC #2 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. Folsom 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 Rock Crusher RC #2 shall not exceed 15% opacity on a sixminute block average basis. [40 C.F.R. Part 60, Subpart OOO, Table 3]
- Visible emissions from any affected facility associated with Rock Crusher RC #2 other than the rock crusher, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction <u>before</u> 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 associated with Rock Crusher RC #2 other than the rock crusher, including transfer points on belt conveyors, portable screens, etc., which commenced construction, modification, or reconstruction <u>on or after</u> 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]

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- 5. Folsom shall maintain records detailing the maintenance on particulate matter control equipment including spray nozzles. Folsom 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, Folsom 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]

- (19) **Boilers #2, #3, and #4**
 - A. Fuel
 - 1. Boilers #2, #3, and #4 are licensed to fire propane. [06-096 C.M.R. ch. 115, BPT]
 - 2. Total fuel use for Boilers #2, #3, and #4 shall not exceed 50,000 gal/yr of propane, on a calendar year total basis. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use 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
Boiler #2	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #4	PM	0.05	06-096 C.M.R. ch. 115, BACT

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Unit	PM (lb/hr)	PM10 (lb/hr)	SO2 (lb/hr)	NOx (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2	0.16	0.16	0.01	0.44	0.25	0.04
Boiler #3	0.08	0.08	0.01	0.21	0.12	0.02
Boiler #4	0.43	0.43	0.01	1.21	0.7	0.1

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

D. Visible emissions from Boilers #2, #3, and #4 shall each not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, 3(A)(3)]

(20) Engines

A. Fuel Use

- 1. Gen #1, #2, and #3, and Direct Drive #1 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 Gen #1, #2, and #3, and Direct Drive #1 combined shall not exceed 70,000 gal/yr of distillate fuel on a calendar year basis, 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
Gen #1	PM	0.12	06-096 C.M.R. ch. 103 § (2)(B)(1)(a)
Gen #3	PM	0.12	$\begin{array}{c} 3 (2)(2)(1)(a) \\ \hline 06-096 \text{ C.M.R. ch. 103} \\ \$ (2)(B)(1)(a) \end{array}$

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

	PM	PM ₁₀	SO ₂	NOx	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Gen #1	0.39	0.39	0.01	14.12	3.04	1.12
Gen #2	0.27	0.27	0.01	9.71	2.09	0.77
Gen #3	0.4	0.4	0.01	14.56	3.14	1.16
Direct Drive #1	0.32	0.32	0.01	11.47	2.47	0.91

D. Visible Emissions

Visible emissions from each of the engines shall not exceed 20% opacity on a sixminute block average basis except for periods of startup during which time Folsom 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)]

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- 1. Maintain a log (written or electronic) of the date, time, and duration of all engine startups.
- 2. Operate the engines 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 engines, 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 procedures, review of operation of the unit.

(21) 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)]

(22) 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)]

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

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

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

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

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

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

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(25) 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, Folsom may be required to submit additional information. Upon written request from the Department, Folsom shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

Done and dated in Augusta, maine this 22^{nd} day of MARCH, 2023.

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: <u>9/21/23</u> Date of application acceptance: <u>9/26/23</u>

Date filed with the Board of Environmental Protection:

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

FILED

MAR 22, 2023

State of Maine Board of Environmental Protection