General Contractor
Vaughn D. Thibodeau, II, Inc.
Waldo County
Prospect, Maine
A-1045-71-C-R/M (SM)

Departmental
Findings of Fact and Order
Air Emission License
Renewal/Minor Revision

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

General Contractor Vaughn D. Thibodeau, II, Inc. (Thibodeau) located at 995 Bangor Rd in Prospect, Maine has applied for a renewal to its air emissions license. Thibodeau has also requested a minor revision to include propane as a fuel for its Asphalt Batch Plant and hot oil heater (Boiler #1).

B. The following equipment is addressed in this Air Emission License:

Asphalt Batch Plant Equipment:

Equipment	Process Rate (ton/hr)	Design Capacity	Fuel Type & Firing Rate	Manufacturer	Date of Manufacture	Control Device
Asphalt Batch Plant	150 tph	35 MMBtu/hr	Propane, * distillate fuel, Spec waste oil	Stansteel	1954	baghouse
Boiler #1 (Hot Oil Heater)	--	1.4 MMBtu/hr	Propane, * distillate fuel, Spec waste oil	Heat-Tec	2000	none
Gen #1	--	3.2 MMBtu/hr	Distillate fuel, 0.0015%	Cat 375 kwh	1999	none

Rock Crushers

Designation	Power Source	Process Rate (tons/hour)	Date of Manufacturer	Control Device
Jaw Crusher Serial # (CT24X36-214)	Diesel unit	30	2004	spray nozzles
Cone Crusher Serial # (CC21-1028)	Diesel unit	30	1988	spray nozzles

Diesel Unit used for Rock Crushing equipment

Source ID	Max. Capacity	Max. Firing Rate	Manufacturer	Fuel Type, %S
Generator #2	0.6 MMBtu/hr	4.5 gal/hour	Cat Gen Serial # 5FA04336	distillate fuel, 0.0015%

* new fuel not listed in the previous air emissions license

C. Definitions

Distillate Fuel means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials 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.

D. Application Classification

The application for Thibodeau does not include the licensing of increased emissions or the installation of new or modified equipment. The amendment to include propane as a fuel for the Asphalt Batch Plant will not increase any licensed allowed emissions. Therefore, the license is considered to be a renewal of currently licensed emission units with a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the annual fuel limit on the Asphalt Batch Plant and the operating hours restriction on the emergency generators, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With these same license limits, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of 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 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Revision Description

Thibodeau's asphalt batch plant at the Prospect site is currently licensed to fire distillate fuel and specification waste oil. Due to the economics and prices of fuel and for greater fuel flexibility, Thibodeau has requested to include propane as a fuel along with the existing licensed fuel oils.

Per this license renewal and amendment, Thibodeau will also be licensed to fire propane. Currently the facility is licensed to fire a maximum of 290,000 gallons per year of distillate fuel. This equates to approximately 41,000 MMBtu/year based on the estimated heating value of distillate fuel at 140,000 Btu/gallon, this in-turn can be calculated to roughly 440,000 gallons of propane per year based on a heating value of propane at 94,000 Btu/gallon. Therefore, Thibodeau will keep the facility's total MMBtu/yr to less than 41,000 MMBtu/year either when firing distillate fuel, specification waste oil, propane, or any combination of the fuels.

C. Asphalt Batch Plant

The asphalt batch plant is rated at 150 tons/hr with a 35 MMBtu/hr burner firing distillate fuel, specification waste oil, and/or propane.

1. BPT Findings

PM/PM_{10}	–	0.03 gr/dscf and the use of a baghouse
SO_2	–	0.088 lb/ton based on AP-42, Table 11.1-5 dated 3/04
NO_x	–	0.12 lb/ton based on AP-42, Table 11.1-5, dated 3/04

CO – 0.40 lb/ton based on AP-42, Table 11.1-5, dated 3/04
VOC – 0.036 lb/ton based on AP-42, Table 11.1-6, dated 3/04
Opacity – 06-096 CMR 101 and previous BACT

Emissions from the asphalt plant baghouse shall not exceed the following:

Pollutant	grs/dscf	lb/hr
PM	0.03	11.91
PM_{10}	-	11.91
SO_2	-	13.20
NO_X	-	18.01
CO	-	60.10
VOC	-	1.23

Opacity - 06-096 CMR 101, *Visible Emission Regulation*: visible emissions from the asphalt plant baghouse shall not exceed 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. This is consistent with the 40 CFR Part 60, Subpart I PM limit of 20% opacity.

General process emissions from the asphalt batch plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period.

Prior to July 1, 2016, or by the date otherwise stated in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.5% by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, distillate fuel fired at the facility shall have a maximum sulfur content of 0.005% by weight (50 ppm), and beginning January 1, 2018, or on the date specified in the statute, distillate fuel fired at the facility shall have a maximum sulfur content of 0.0015% by weight (15 ppm). The specific dates and requirements contained in this paragraph reflect the current dates and requirements in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates and requirements upon promulgation of the statute revision.

2. New Source Performance Standards

The portable asphalt plant was manufactured in 1954 and is therefore not subject to the federal Environmental Protection Agency's (EPA) New Source Performance Standards (NSPS) 40 Code of Federal Regulation (CFR) Part 60, Subpart I *Standards of Performance for Hot Mix Asphalt Facilities* constructed or modified after June 11, 1973. The previous owner performed a performance test on May 20, 2005 to demonstrate compliance with the PM emission limits.

3. Control Equipment

The asphalt plant shall be controlled by a baghouse.

4. Periodic Monitoring

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

a. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Thibodeau shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
b. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

Thibodeau shall keep records of baghouse failures and baghouse maintenance.

Thibodeau shall keep records of fuel use and receipts for the asphalt batch plant which shall be maintained for at least six years and made available to the Department upon request. Records shall also be maintained recording the quantity and analyzed test results of all specification waste oil fired in the dryer.

5. Contaminated Soils

Thibodeau may process up to 10,000 cubic yards per year of soil contaminated by gasoline or distillate fuel without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Department (regional inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil.

D. Rock Crushers

The Jaw and Cone Rock Crushers are portable units with each having a rated capacity of 30 tons per hour.

1. BACT/BPT Findings

The regulated pollutant from the rock crushers is particulate matter emissions. To meet the requirements of BPT for control of particulate matter emissions from the rock crushers, Thibodeau shall maintain water sprays on the rock crushers and operate as needed to control visible emissions. Visible emissions from the rock crushers shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

2. New Source Performance Standards

The Jaw and Cone Rock Crushers are not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants based on the size of the crushers.

E. Boiler #1 (Hot Oil Heater)

Boiler #1 is referred to as a Hot Oil Heater (1.4 MMBtu/hr) by the facility and is used for the asphalt batch plant operations. Boiler #1 fires distillate fuel with a maximum sulfur content of 0.5% by weight and/or propane. The boiler was originally manufactured in 2000 and has recently been retrofitted to burn propane. The fuel fired in Boiler # 1 shall be included in the asphalt plant combined heat input of 41,000 MMBtu/year.

1. BPT Findings

The BPT emission limits for Boiler #1 (Hot Oil Heater) firing distillate fuel were based on the following:

PM/PM_{10}	–	0.08 lb/MMBtu based on 06-096 CMR 115, BPT
SO_2	–	based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
NO_x	–	20 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
CO	–	5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
VOC	–	0.34 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
Opacity	–	06-096 CMR 101

The BPT emission limits for Boiler #1 (Hot Oil Heater) firing propane were based on the following:

PM/PM_{10}	–	0.05 lb/MMBtu based on 06-096 CMR 115, BPT
SO_2	–	0.18 lb/1000 gal based on AP-42, Table 1.5-1, dated 07/08
NO_x	–	13 lb/1000 gal based on AP-42, Table 1.5-1, dated 07/08
CO	–	7.5 lb/1000 gal based on AP-42, Table 1.5-1, dated 07/08
VOC	–	1.0 lb/1000 gal based on AP-42, Table 1.5-1, dated 07/08
Opacity	–	06-096 CMR 101

The BPT emission limits for the boiler are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler # 1 (distillate fuel)	0.17	0.17	0.71	0.42	0.05	0.01
Boiler # 1 (propane)	0.07	0.07	0.01	0.20	0.12	0.02

Visible emissions from Boiler #1 (when firing distillate fuel) shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.
Visible emissions from Boiler #1 (when firing propane) shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Prior to July 1, 2016, or by the date otherwise stated in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.5% by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, distillate fuel fired at the facility shall have a maximum sulfur content of 0.005% by weight (50 ppm), and beginning January 1, 2018, or on the date specified in the statute, distillate fuel fired at the facility shall have a maximum sulfur content of 0.0015% by weight (15 ppm). The specific dates and requirements contained in this paragraph reflect the current dates and requirements in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates and requirements upon promulgation of the statute revision.

2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and calendar year total basis. Documentation shall include the type of fuel used and sulfur content of the fuel as applicable.

3. New Source Performance Standards

The Hot Oil Heater (Boiler #1) does not heat water. It does not meet the definition of a "steam generating unit" and therefore is not subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

4. National Emission Standards for Hazardous Air Pollutants

The Hot Oil Heater (Boiler #1) does not heat water. It does not meet the definition of a "boiler" and therefore is not subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJJ).

F. Generators #1 and #2

Generator #1 has a maximum design heat input of 3.2 MMBtu/hr and fires distillate fuel. Generator #1 was manufactured in 1999 and is used as back-up power for the asphalt batch plant equipment. Generator #2 is a CAT Engine Model with serial number #5FA04336 manufactured in 1988 and has a maximum capacity of 0.6 MMBtu/hr firing distillate fuel used as back-up power for the rock crushing equipment.

The fuel fired in Generator #1 and #2 shall be limited to 40,000 gallons/year on a calendar year total basis of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight).

1. BPT Findings

The BPT emission limits for the generators were based on the following:

PM/PM_{10}	- 0.12 lb/MMBtu from 06-096 CMR 103
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 dated 10/96
CO	- 0.95 lb/MMBtu from AP-42 dated 10/96
VOC	- 0.35 lb/MMBtu from AP-42 dated 10/96
Opacity	- 06-096 CMR 101

The BPT emission limits for the generators are the following:

Unit	Pollutant	lb/MMBtu
Generator #1	PM	0.12

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (3.2 MMBtu/hr) Distillate fuel	0.38	0.38	0.01	14.11	3.04	1.12
Generator #2 (0.6 MMBtu/hr) Distillate fuel	0.07	0.07	0.01	2.65	0.57	0.21

Visible emissions from each of the distillate fuel-fired generators shall not exceed 20% opacity on a 6-minute block average, except for no more than two (2) six (6) minute block averages in a 3-hour period.

2. New Source Performance Standards

Generators #1 and #2 are considered non-road engines, as opposed to stationary engines, since Generators #1 and #2 are portable and will be moved to various sites with the asphalt plant. Also, both generators were manufactured prior to the applicability date. Therefore, Generators #1 and #2 are not subject to New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

3. National Emission Standards for Hazardous Air Pollutants

Generators #1 and #2 are considered non-road engines, as opposed to a stationary engine, since Generators #1 and #2 are portable and will be moved to various sites with the asphalt plant. Therefore, Generators #1 and #2 are <u>not</u> subject to 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. The definition in 40 CFR Part 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 CFR Part 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.

G. Stock Piles and Roadways

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

H. General Process Emissions

Visible emissions from any other general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed an opacity of 20% on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period.

I. Annual Emissions

1. Total Annual Emissions

Thibodeau shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on 290,000 gal/yr distillate fuel fired in the asphalt plant and Boiler #1 and 40,000 gal/yr of distillate fuel fired in the generators:

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

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Asphalt Plant	6.9	6.9	7.7	10.4	34.8	0.8
Generators #1 and #2	0.4	0.4	0.1	12.1	2.6	1.0
Boiler #1	0.8	0.8	3.1	1.9	0.3	0.1
Total TPY	**8.1**	**8.1**	**10.9**	**24.4**	**37.7**	**1.9**

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 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), 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 (CO_2e).

The quantity of CO_2e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limits;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR 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 shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM_{10}	25
SO_2	50
NO_x	50
CO	250

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

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-1045-71-C-R/M, subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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.A. §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 Chapter 115. [06-096 CMR 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 CMR 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 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 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 CMR 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 CMR 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 CMR 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 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR 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 CFR 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 CMR 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 CFR 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 CMR 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 CMR 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 CMR 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 CMR 115]

SPECIFIC CONDITIONS

(16) **Asphalt Batch Plant (150 tons/hr)**

A. Fuel Use

1. Thibodeau is licensed to combust distillate fuel, specification waste oil, and propane for their Asphalt Batch Plant.
2. Thibodeau shall be limited to the use of a total of 290,000 gallons on a calendar year total of distillate fuel and specification waste oil (not to exceed 0.7% sulfur by weight) in the asphalt plant. If only using propane, total propane fuel usage is limited to 440,000 gallons/year. Thibodeau shall keep the facility's total MMBtu/yr to less than 41,000 MMBtu/year either when firing distillate fuel, specification waste oil, propane, or any combination of the fuels. [06-096 CMR 115, BPT]
3. Per the current dates and requirements of 38 M.R.S.A. §603-A(2)(A)(3), the facility shall comply with the following statements; however, if the statute is revised, the facility shall comply with the revised dates and requirements upon promulgation of the statute revision.
   i. Prior to July 1, 2016, or the date specified in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.5% by weight. [06-096 CMR 115, BPT]
   ii. Beginning July 1, 2016, or on the date specified in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.005% by weight (50 ppm). [38 M.R.S.A. §603-A(2)(A)(3)]
   iii. Beginning January 1, 2018, or on the date specified in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.0015% by weight (15 ppm). [38 M.R.S.A. §603-A(2)(A)(3)]
4. Fuel use records and receipts for the hot mix asphalt plant shall be maintained for at least six years and made available to the Department upon request. Fuel use records shall be kept on a monthly and calendar year basis. [06-096 CMR 115, BPT]

5. Records shall be maintained recording the quantity and analyzed test results of all specification waste oil fired in the asphalt plant. [06-096 CMR 115, BPT]

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

C. The performance of the baghouse shall be constantly monitored by either one of the following at all times the hot mix asphalt plant is operating. [06-096 CMR 115, BPT]:
   1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Thibodeau shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
   2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

D. To document maintenance of the baghouse, the licensee shall keep maintenance records recording the date and location of all bag failures as well as all routine maintenance. The maintenance records shall be kept on-site at the asphalt plant location. [06-096 CMR 115, BPT]

E. Emissions from the asphalt plant baghouse shall not exceed the following [06-096 CMR 115, BPT]:

Pollutant	grs/dscf	lb/hr
PM	0.03	11.91
PM_{10}	-	11.91
SO_2	-	13.20
NO_X	-	18.01
CO	-	60.10
VOC	-	1.23

F. Opacity from the baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

G. General process emissions from the hot mix asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute

block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 101]

H. Thibodeau may process up to 10,000 cubic yards per year of soil contaminated by gasoline or distillate fuel without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the Department (regional inspector) at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil. [06-096 CMR 115, BPT]

I. Thibodeau shall not process soils which are classified as hazardous waste or which have unknown contaminants. [06-096 CMR 115, BPT]

J. When processing contaminated soils, Thibodeau shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Thibodeau shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [06-096 CMR 115, BPT]

(17) **Rock Crushers**

A. Thibodeau shall install and maintain spray nozzles for particulate control on the Jaw and Cone Rock Crushers and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [06-096 CMR 115, BPT and 06-096 CMR 101]

B. Thibodeau shall maintain records detailing and quantifying the hours of operation on a daily basis for the Jaw and Cone Rock Crushers. The operation records shall be kept on-site at the rock crushing location. [06-096 CMR 115, BPT]

C. Thibodeau shall maintain records detailing the maintenance on particulate matter control equipment (including spray nozzles). Thibodeau 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 CMR 115, BPT]

D. The crushers 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 CMR 115, BPT]

(18) **Boiler #1 (Hot Oil Heater)**

A. Fuel

1. Boiler #1 can fire distillate and/or propane fuel. Total fuel use for Boiler #1 shall be included in the facility-wide MMBtu/yr. Thibodeau will keep the facility's total MMBtu/yr to less than 41,000 MMBtu/year either when firing distillate fuel, specification waste oil, propane, or any combination of the fuels. [06-096 CMR 115, BPT]
2. Per the current dates and requirements of 38 M.R.S.A. §603-A(2)(A)(3), the facility shall comply with the following statements; however, if the statute is revised, the facility shall comply with the revised dates and requirements upon promulgation of the statute revision.
   i. Prior to July 1, 2016, or the date specified in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.5% by weight. [06-096 CMR 115, BPT]
   ii. Beginning July 1, 2016, or on the date specified in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.005% by weight (50 ppm). [38 M.R.S.A. §603-A(2)(A)(3)]
   iii. Beginning January 1, 2018, or on the date specified in 38 M.R.S.A. §603-A(2)(A)(3), the distillate fuel fired at the facility shall have a maximum sulfur content of 0.0015% by weight (15 ppm). [38 M.R.S.A. §603-A(2)(A)(3)]
3. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.08	06-096 CMR 115, BPT

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler # 1 (distillate oil)	0.17	0.17	0.71	0.42	0.05	0.01
Boiler # 1 (propane)	0.07	0.07	0.01	0.20	0.12	0.02

D. Visible emissions from Boiler #1 (when firing distillate fuel) shall not exceed 20% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

Visible emissions from Boiler #1 (when firing propane) shall not exceed 10% opacity on a 6-minute block average, except for no more than one (1) six (6) minute block average in a 3-hour period.

(19) **Portable Generators #1 and #2**

A. Fuel Use

1. Generators #1 and #2 are licensed to fire distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight). [06-096 CMR 115, BPT]
2. Total fuel use for Generators #1 and #2 shall not exceed 40,000 gal/yr of distillate fuel. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a monthly and calendar year basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (3.2 MMBtu/hr)	0.38	0.38	0.01	14.11	3.04	1.12
Generator #2 (0.6 MMBtu/hr)	0.07	0.07	0.01	2.65	0.57	0.21

D. Visible emissions from each generator shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [06-096 CMR 101]

(20) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

(21) **General Process Sources**

Visible emissions from any other general process (non-NSPS crusher conveyor belts, bucket elevators, bagging operations, truck loading operations, etc.) shall not exceed an opacity of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. [06-096 CMR 115, BPT]

(22) **Equipment Relocation** [06-096 CMR 115, BPT]

A. Thibodeau 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.

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.

(23) Thibodeau shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [06-096 CMR 115, BPT]

(24) Thibodeau 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.A. §605].

DONE AND DATED IN AUGUSTA, MAINE THIS 4 DAY OF September, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PATRICIA W. AHO, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 16, 2015
Date of application acceptance: March 19, 2015

Date filed with the Board of Environmental Protection:

Filed
SEP 04 2015
State of Maine
Board of Environmental Protection

This Order prepared by Edwin Cousins, Bureau of Air Quality