



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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**B&G Foods North America, Inc.
d/b/a Burnham and Morrill Company
Cumberland County
Portland, Maine
A-77-71-M-R (SM)**

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

After review of the air emissions 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

B&G Foods North America, Inc., d/b/a Burnham and Morrill Company (B&M) located in Portland, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their food products facility.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Date of Manufacture/ Installation	Fuel Type, % sulfur	Stack #
Boiler #1	39.0	1956 / 1956	#6 fuel oil, 0.5% natural gas, negligible	1
Boiler #3	29.4 31.4 (NG)	1997 / 2002	#6 fuel oil, 0.5% natural gas, negligible	2
Boiler #4	29.4 (oil) 31.4 (NG)	1997 / 2002	#6 fuel oil, 0.5% natural gas, negligible	2
Water Heater #1	1.9	unknown	natural gas	5

Electrical Generation Equipment

Equipment	Power Output (kW)	Maximum Heat Input (MMBtu/hr)	Firing Rate (gal/hr)	Fuel Type, % sulfur
Generator #1	75	0.73	5.3	distillate fuel, 0.0015%
Generator #2	230	2.24	16.4	distillate fuel, 0.0015%

C. Application Classification

The application for B&M does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the annual fuel limit on the licensed boilers and 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. Also, with the annual fuel limit on the boilers and the operating hours restriction on the emergency generators, 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 (BPT)

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. Boilers #1, #3 and #4

Boiler #1 was manufactured and installed in 1956 and is therefore not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989. Boiler #1 is not routinely run and is maintained for back-up purposes. B&M operates a smoke density monitor on the breaching of Boiler #1 as a boiler operator tool. This boiler exhausts to a 150-foot stack.

Boilers #3 and #4 are used for primary process steam and facility heating needs and exhaust to a common 100-foot stack. Boilers #3 and #4 each originally had a maximum heat input rating of 31.4 MMBtu/hr firing either #6 fuel oil or natural gas. B&M proposed physically reducing the heat input capacities (derating) Boilers #3 and #4 by changing the oil nozzles, blower wheel, and air inlet cone on each boiler. These proposed changes were approved as a derating strategy by USEPA in a letter dated September 17, 2002. The derated maximum heat input for Boilers #3 and #4 firing #6 fuel oil is 29.4 MMBtu/hr. Boilers #3 and #4 each maintain the ability to fire natural gas up to a maximum heat input of 31.4 MMBtu/hr. In 2010, B&M replaced the burner of Boiler #3 with an identically sized burner through Air License Amendment A-77-71-L-A issued July 12, 2010.

Boilers #3 and #4 are subject to NSPS 40 CFR Part 60 Subpart Dc. However, they are exempt from Sections 60.43(c) and 60.47(c), PM standards and monitoring for boilers greater than 30 MMBtu/hr that fire fuel oil. The boilers were de-rated in 2002 (Amendment A-77-71-I-M issued 8/2/02) to below 30 MMBtu/hr, therefore B&M is not subject to the opacity testing and monitoring requirements of the standard.

Based on the size of these fuel burning units, add-on air pollution control is cost prohibitive. The potential emissions from these units are sufficiently low to warrant operation with #6 fuel oil and/or natural gas and an annual limit on #6 fuel oil of 1,000,000 gallons and 600 MMscf of natural gas, without further consideration of other pollution controls. Thus, the Department concludes that burning #6 fuel oil with a sulfur content of 0.5% or less and natural gas in these three boilers and using good combustion practices meets BPT for all emitted pollutants. In addition, Boiler #3 is equipped with flue gas recirculation (FGR) which is operated during natural gas combustion. FGR was determined as BACT when the application was submitted for replacement of the burner.

1. A summary of the BPT analysis for Boilers #1, #3, and #4 is the following:

- The total fuel oil use for the facility shall not exceed 1,000,000 gal/year of #6 fuel oil, based on a 12 month rolling total, with a maximum sulfur content not to exceed 0.5% by weight.
- Total natural gas use for the facility shall not exceed 600 MMscf/year based on a 12 month rolling total.
- *Low Sulfur Fuel*, 06-096 CMR 106 (last amended June 9, 1999) regulates fuel sulfur content, however in this case it was determined a more stringent limit of 0.5% was appropriate and shall be used.
- *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended September 26, 1990) regulates PM emission limits (0.12 lb/MMBtu for residual oil fired units less than 50 MMBtu/hr). For natural gas firing, a more stringent BPT limit of 0.05 lb/MMBtu was determined to be more appropriate and shall be used. The PM₁₀ limits are derived from the PM limits.
- NO_x emission limits are based on AP-42 factors for #6 fuel oil and natural gas fired boilers of this size and age. The NO_x emission rate for Boiler #3 is derived from AP-42 emission factor formula and a maximum nitrogen content of 5%.
- CO and VOC emission limits are based upon AP-42 data dated 9/98 and 7/98.

Residual Fuel

- PM/PM₁₀ – 0.20 lb/MMBtu based on 06-096 CMR 103 (for Boiler #1)
- PM/PM₁₀ – 0.12 lb/MMBtu based on 06-096 CMR 103 (for Boilers #2 and #3)
- SO₂ – based on firing 0.5% sulfur by weight required as BPT
- NO_x – 55 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 – 1.13 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 CMR 101 or previous BPT

Natural Gas

- PM/PM₁₀ – 0.05 lb/MMBtu based on 06-096 CMR 115, BPT
- SO₂ – 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- NO_x – 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- CO – 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98
- VOC – 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98
- Opacity – 06-096 CMR 101 or previous BPT

The BPT emission limits for the boilers are the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1 (firing oil)	PM	0.20	06-096 CMR 103(2)(A)(1)
Boiler #3 and #4 (firing oil) each	PM	0.12	06-096 CMR 103 (2)(B)(1)
Boiler #1, #3, #4 (firing natural gas) each	PM	0.05	06-096 CMR 115, BPT

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 (oil)	7.80	7.80	20.49	19.50	1.30	0.07
Boiler #1 (NG)	1.95	1.95	0.02	3.79	3.18	0.21
Boiler #3 (oil)	3.5	3.5	15.4	14.3	1.2	0.1
Boiler #3 (NG)	1.5	1.5	0.1	1.1	1.1	0.2
Boiler #4 (oil)	3.5	3.5	15.4	8.8	1.0	0.1
Boiler #4 (NG)	1.5	1.5	0.1	2.9	2.4	0.2

2. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and 12 month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

3. Visible emissions from Boiler #1 shall not exceed 30% 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.

Visible emissions from the common stack for Boilers #3 and #4 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average of no more than 27% opacity in a continuous 1-hour period.

4. 40 CFR Part 63 Subpart JJJJJ

B&M submitted a letter dated February 18, 2014 to EPA Region I for withdrawal of applicability of the Area Source Boiler NESHAP rule (40 CFR Part 63 Subpart JJJJJ). The boilers at B&M are not subject to this rule because the units meet the definition of "gas-fired boilers" as defined in §63.11236: "Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year." If B&M changes from the current fuel burning boiler operations, then the facility will reevaluate the applicability of this subpart.

C. Water Heater #1

B&M operates a small natural gas fired water heater.

Water Heater #1 has a maximum heat input of 1.89 MMBtu/hr, and is therefore not subject to the New Source Performance Standards (NSPS) Subpart Dc for steam generating units greater than 10 MMBtu/hr manufactured after June 9, 1989. Water Heater #1 is not subject to 40 CFR Part 63 Subpart JJJJJ because the rule is not applicable to units firing only natural gas.

A summary of the BACT analysis for Water Heater #1 (1.89 MMBtu/hr) is the following:

1. Total natural gas use for the facility shall not exceed 600 MMscf/year based on a 12 month rolling total.
2. PM and PM₁₀ emission limits are based on data from similar natural gas fired boilers of this size and age.
3. NO_x, CO, and VOC emission limits are based upon AP-42 data dated 7/98.
4. Visible emissions from Water Heater #1 shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period.

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

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Water Heater #1	0.09	0.09	0.18	0.15	0.01

D. Emergency Generators #1 and #2

B&M operates a 75 kW (0.73 MMBtu/hr) and a 230 kW (2.24 MMBtu/hr) emergency diesel generator at the facility. Each generator is test fired for approximately ½ hour each week. BPT for each generator is firing distillate fuel with a sulfur content not to exceed 0.0015% by weight and meeting the state and federal requirements for stationary internal combustion engines. The engines are subject to the provisions of 40 CFR Part 63 Subpart ZZZZ applicable to existing emergency engines located at area sources. The compliance date was May 3, 2013 and applicable requirements include installing a non-resettable hour meter, changing the oil and filter every 500 hours of operation or annually, whichever comes first, inspecting the air cleaner every 1,000 hours of operation or annually, whichever comes first, and inspecting all hoses and belts every 500 hours of operation or annually, whichever comes first, and replacing as necessary. The engines may be operated up to 100 hours per year for maintenance and testing. The emergency engines may also be operated up to 50 hours per year for non-emergency situations that is counted towards the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program.

1. BPT Findings

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

- PM/PM₁₀ - 0.12 lb/MMBtu from 06-096 CMR 115, BACT
- SO₂ - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO_x - 3.2 lb/MMBtu from AP-42 dated 10/96
- CO - 0.85 lb/MMBtu from AP-42 dated 10/96
- VOC - 0.09 lb/MMBtu from AP-42 dated 10/96

Opacity - 06-096 CMR 101

The BPT emission limits for the generators are the following:

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (0.73 MMBtu/hr) Distillate fuel	0.09	0.09	0.04	3.22	0.69	0.26
Generator #2 (2.24 MMBtu/hr) Distillate fuel	0.27	0.27	0.12	9.88	2.13	0.78

Visible emissions from each of the distillate fuel-fired emergency 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. 40 CFR Part 63, Subpart ZZZZ

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to the emergency generators listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements.

a. Emergency Definition:

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the following criteria:

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. There is no

time limit on the use of emergency stationary RICE in emergency situations.

(2) Paragraph (1) above notwithstanding, the emergency stationary RICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:

(i) Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Paragraphs (1) and (2) above notwithstanding, emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, and periods of voltage deviation or low frequency, as provided in paragraph (2) above.

The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except provided in the following paragraphs:

- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (e) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Generators #1 and #2 shall be limited to the usage outlined in §63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 CFR Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in §63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all the requirements for non-emergency engines.

b. 40 CFR Part 63, Subpart ZZZZ Requirements:

(1) Operation and Maintenance Requirements

	Operating Limitations (40 CFR §63.6603(a) and Table 2(d))
Compression ignition (distillate fuel) units: Generator #1 and Generator #2	<ul style="list-style-type: none"> - Change oil and filter every 500 hours of operation or 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 generators shall be operated and maintained according to the manufacturer's emission-related written instructions or facility shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

(2) Optional Oil Analysis Program

B&M 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, B&M must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup the facility 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, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing

The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). [40 CFR §63.6640(f)]

(6) Recordkeeping

B&M shall keep records that include maintenance conducted on the generators and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), B&M shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

(7) Requirements for Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake hp)

If B&M operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), beginning January 1, 2015, the fuel fired in the generator(s) shall not exceed 15 ppm sulfur (0.0015%). Any existing fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR §63.6604(b)]

If B&M operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial

arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

E. Part Washers

B&M operates various size parts washers throughout the facility. The parts washers are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended) and records shall be kept documenting compliance as specified in the Order.

F. Annual Emissions

1. Total Annual Emissions

B&M shall be restricted to the following annual emissions, based on a 12 month rolling total.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
#6 fuel oil	15.0	15.0	39.4	37.5	2.5	0.1
Natural Gas	15.5	15.5	0.2	30.0	25.2	1.7
Generator #1	0.1	0.1	0.1	0.8	0.2	0.1
Generator #2	0.1	0.1	0.1	2.5	0.5	0.2
Total TPY	30.7	30.7	39.8	70.8	28.4	2.1

Based on:

- Firing 1,000,000 gallons of 0.5% sulfur #6 fuel oil in any combination of Boilers #1, #3, and #4.
- Firing 600 million scf of natural gas in any combination of Boilers #1, #3, #4 and Water Heater #1.
- Firing Generators #1 and #2 per requirements of 40 CFR Part 63 Subpart ZZZZ.

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 (CO₂e).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, B&M is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

B&M previously submitted an ambient air quality impact analysis for air emission license A-77-72-B-R (issued March 18, 1992) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate Ambient Air Quality Standards (AAQS). An additional air quality impact analysis is not required for this renewal.

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-77-71-M-R (SM) 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) Boiler #1

- A. Boiler #1 shall fire only natural gas or #6 fuel oil with a sulfur content not to exceed 0.5% sulfur by weight. [06-096 CMR 115, BPT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1 (firing oil)	PM	0.20	06-096 CMR 103(2)(A)(1)
Boiler #1 (firing NG)	PM	0.05	06-096 CMR 115, BPT

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 (oil)	7.80	7.80	20.49	19.50	1.30	0.07
Boiler #1 (NG)	1.95	1.95	0.02	3.79	3.18	0.21

- D. Visible emissions from Boiler #1 shall not exceed 30% 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]

(17) Boilers #3 and #4

- A. Boilers #3 and #4 shall fire only natural gas or #6 fuel oil with a sulfur content not to exceed 0.5% sulfur by weight. [06-096 CMR 115, BPT]
- B. Boilers #3 and #4 shall be operated with oil nozzles, blower wheel, and air inlet cone such that the heat input of the boilers firing #6 fuel oil shall not exceed 29.4 MMBtu/hr. FGR will be operated when Boiler #3 is combusting natural gas. [06-096 CMR 115, BPT]

C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #3 (firing oil)	PM	0.12	06-096 CMR 103(2)(B)(1)(a)
Boiler #3 (firing NG)	PM	0.05	06-096 CMR 115, BPT
Boiler #4 (firing oil)	PM	0.12	06-096 CMR 103(2)(B)(1)(a)
Boiler #4 (firing NG)	PM	0.05	06-096 CMR 115, BPT

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

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3 (oil)	3.5	3.5	15.4	14.3	1.2	0.1
Boiler #3 (NG)	1.5	1.5	0.1	1.1	1.1	0.2
Boiler #4 (oil)	3.5	3.5	15.4	8.8	1.0	0.1
Boiler #4 (NG)	1.5	1.5	0.1	2.9	2.4	0.2

E. Visible emissions from the common stack for Boilers #3 and #4 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average of not more than 27% opacity in a continuous 1-hour period. [40 CFR Part 60, Subpart Dc]

(18) B&M shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boiler #3 and #4 including, but not limited to, the following:

A. B&M shall record and maintain records of the amounts of each fuel combusted during each day or, if applicable, monthly records with fuel certifications. [40 CFR §60.48c(g)]

B. B&M shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period and

records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each 6-month period.

- C. The following address for EPA shall be used for any reports or notifications required to be copied to them:

Compliance Clerk
USEPA Region 1
5 Post Office Sq. Suite 100
Boston, MA 02109-3912

(19) Water Heater #1

- A. Water Heater #1 shall fire only natural gas. [06-096 CMR 115, BACT]
B. Emissions shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Water Heater #1	0.09	0.09	0.18	0.15	0.01

- C. Visible emissions from Water Heater #1 shall not exceed 10% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

(20) Fuel Limits

- A. Total fuel oil use for the facility shall not exceed 1,000,000 gal/year of #6 fuel oil based on a 12-month rolling total basis. Fuel records, including gallons fired and percent sulfur, shall be maintained on a monthly basis. [06-096 CMR 115, BPT]
B. Total natural gas use for the facility shall not exceed 600 MMscf/year based on a 12-month rolling total. Fuel records, including scf fired, shall be maintained on a monthly basis. [06-096 CMR 115, BPT]

(21) Emergency Generators #1 and #2

- A. Each of the emergency generators shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 CMR 115]

- B. The fuel sulfur content for Generators #1 and #2 shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 115, BPT]
- C. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 CMR 103(2)(B)(1)(a)
Generator #2	PM	0.12	06-96 R 103(2)(B)(1)(a)

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

Emission Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.09	0.09	0.04	3.22	0.69	0.26
Generator #2	0.27	0.27	0.12	9.88	2.13	0.78

- E. Visible Emissions

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. [06-096 CMR 101]

- F. The Emergency Generators #1 and #2 shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:
1. B&M shall meet the following operational limitations for each of the compression ignition emergency generators:
 - a. Change the oil and filter annually,
 - b. Inspect the air cleaner annually and replace as necessary, and
 - c. Inspect the hoses and belts annually and replace as necessary.

A log shall be maintained documenting compliance with the operational limitations.

[40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 115]

2. Oil Analysis Program Option
B&M 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, B&M must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]
3. Non-Resettable Hour Meter
A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]
4. Maintenance, Testing, and Non-Emergency Operating Situations
 - a. The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). These limits are based on a calendar year. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §63.6640(f) and 06-096 CMR 115]
 - b. B&M shall keep records that include maintenance conducted on the generator(s) and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the B&M shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

5. Operation and Maintenance
The generators shall be operated and maintained according to the manufacturer's emission-related written instructions or B&M shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]
6. Startup Idle and Startup Time Minimization
During periods of startup the facility 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, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]
7. Requirements For Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake hp)
 - a. If B&M operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), beginning January 1, 2015, the fuel fired in the generators shall not exceed 15 ppm sulfur (0.0015%). Any existing fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR §63.6604(b)]
 - b. If B&M operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form is not available in CEDRI at the time

that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

(22) Parts Washers

Parts washers at B&M are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

- A. B&M shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
 1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 2. Wipe cleaning; and,
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 CMR 130:
 1. B&M shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - (i) Waste solvent shall be collected and stored in closed containers.
 - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.

- (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - (v) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
 - (vi) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - (viii) Work area fans shall not blow across the opening of the degreaser unit.
 - (ix) The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

(23) General Process Sources

Visible emissions from any general process source 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. [06-096 CMR 101]

(24) Annual Emission Statement

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

**B&G Foods North America, Inc.
d/b/a Burnham and Morrill Company
Cumberland County
Portland, Maine
A-77-71-M-R (SM)**

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

- (25) B&M 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 19 DAY OF September, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Maure Allen Robert Core 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: June 11, 2012

Date of application acceptance: June 14, 2012

Date filed with the Board of Environmental Protection:

This Order prepared by Edwin Cousins, Bureau of Air Quality.

