



DEPARTMENT ORDER

**Midcoast Regional
Redevelopment Authority
Db: Brunswick Landing
Cumberland County
Brunswick, Maine
A-1049-71-B-M**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Midcoast Regional Redevelopment Authority, doing business as Brunswick Landing, was issued Air Emission License A-1049-71-A-N/T on March 27, 2013 for the operation of emission sources associated with their property development and management company.

Brunswick Landing has requested an amendment to their license in order to remove numerous pieces of equipment. The equipment has been sold to various entities and is no longer owned or operated by Brunswick Landing.

The address for Brunswick Landing's main office is 15 Terminal Road, Suite 200, Brunswick, Maine.

B. Emission Equipment

The following equipment is being removed from Brunswick Landing's current air emission license:

Boiler and Heaters

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur
Building 25, WH #1	1.2	1165 scf/hr	Natural Gas
Building 54, Boiler #1	2.2	15.7 gal/hr 2136 scf/hr	Distillate Fuel, 0.5%S Natural Gas
Building 516, Boiler #1	1.9	13.6 gal/hr 1845 scf/hr	Distillate Fuel, 0.5%S Natural Gas
Building 102, Make-Up Unit #1	1.5	1460 scf/hr	Natural Gas
Building 594, Boiler #1	1.5	10.7 gal/hr 1471 scf/hr	Distillate Fuel, 0.5%S Natural Gas
Building 594, Boiler #2	1.5	10.7 gal/hr 1471scf/hr	Distillate Fuel, 0.5%S Natural Gas

Electrical Generation Equipment

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur
Building 594, Engine #26	2.9	21.4 gal/hr	Distillate Fuel, 0.0015%S
Building 594, Engine #27	2.2	16.4 gal/hr	Distillate Fuel, 0.0015%S

C. 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 Brunswick Landing does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

D. Revision Description

Since the issuance of Brunswick Landing's current license, redevelopment activities on-site have resulted in the transfer by sale of numerous properties at the former Naval Air Station Brunswick (NASB) to private developers and/or companies. Several of the properties which include emissions units that will no longer be owned or operated by Brunswick Landing, and their new owners, are as follows:

Equipment	New Owner
Building 25, WH #1	TBW, LLC
Building 102, Make-up Unit #1	
Building 54, Boiler #1	Cardente Properties
Building 516, Boiler #1	Schott Management
Building 594, Boiler #1	
Building 594, Boiler #2	
Building 594, Engine #26	
Building 594, Engine #27	

II. FINDINGS OF FACT REVISIONS

Since Brunswick Landing will continue to retain a vast inventory of equipment in its other properties and since the total campus-wide natural gas limit (300,000,000 scf/year, based on a twelve-month rolling total) is still appropriate, no additional revisions to the findings of fact are required as part of this minor revision.

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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License Minor Revision A-1049-71-B-M subject to the conditions found in Air Emission License A-1049-71-A-N/T.

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

The following shall replace Specific Conditions (17), (18), (19) and (21) of License A-1049-71-A-N/T:

(17) Make-Up Air Units – Natural Gas – Hangar 6 – Make-Up Units #1 - #4, Building 250 – Make-Up Unit #1

A. The fuel use for the natural gas fired Make-Up Air Units shall be included in the facility-wide limit. The total natural gas use for the facility shall not exceed a total of 300,000,000 scf/year, based on a twelve-month rolling total. Records of annual fuel use shall be kept on a monthly and a twelve-month rolling total basis. [06-096 CMR 115, BACT]

B. Emissions shall not exceed the following for Hangar 6 Make-Up Units #1 and #2:

Equipment	Pollutant	lb/MMBtu	Origin and Authority
Hangar 6, Make-up Units #1 & #2	PM	0.05	06-096 CMR 103(2)(B)(1)(a), BACT

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

Equipment	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Hangar 6, Make-up #1	0.5	0.5	0.1	1.0	0.8	0.1
Hangar 6, Make-up #2	0.5	0.5	0.1	1.0	0.8	0.1
Hangar 6, Make-up #3	0.1	0.1	0.1	0.2	0.2	0.1
Hangar 6, Make-up #4	0.1	0.1	0.1	0.2	0.2	0.1
Building 250, Make-up #1	0.1	0.1	0.1	0.3	0.2	0.1

D. Visible emissions from the natural gas units shall each not exceed 10% opacity on a six-minute block average, except for no more than one six-minute block average in a continuous three-hour period. [06-096 CMR 101]

(18) Multi-Fuel Units – Hangar 5 Boilers #1 - #2 & WH #1, Building 86 Boilers #1 - #3, Building 250 Boilers #1 - #3

A. The fuel use for the Multi-Fuel Units shall be included in the facility-wide limit. The total fuel use for the facility shall not exceed 300,000,000 scf/year of natural gas and 1,000,000 gallons/year of ASTM D396 #1 or #2 fuel oil, both based on a twelve-month rolling total. Records of annual fuel use shall be kept on a monthly and a twelve-month rolling total basis. [06-096 CMR 115, BACT]

- B. Records shall be maintained to document these Multi-Fuel Units as natural gas fired boilers, as defined at 40 CFR § 63.11237, or the facility shall comply with the requirements of 40 CFR Part 63, Subpart JJJJJ, as appropriate.
- C. In order to maintain status of 'gas-fired units' under 40 CFR Part 63 Subpart JJJJJ, periodic testing firing ASTM D396 #1 or #2 fuel oil shall not exceed a combined total of 48-hours during any calendar year.
- D. Emissions shall not exceed the following:

Equipment	Pollutant	lb/MMBtu	Origin and Authority
All Multi-Fuel Boilers & WH Unit	PM	0.08 - fuel oil 0.05 - natural gas	06-096 CMR 103(2)(B)(1)(a), BACT

- E. When firing fuel oil, emissions shall not exceed the following [06-096 CMR 115, BACT]:

Equipment	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Hangar 5, Boiler #1	0.4	0.4	2.5	1.5	0.2	0.1
Hangar 5, Boiler #2	0.4	0.4	2.5	1.5	0.2	0.1
Hangar 5, WH#1	0.1	0.1	0.5	0.3	0.01	0.1
Building 86, Boiler #1	0.2	0.2	1.5	0.9	0.1	0.1
Building 86, Boiler #2	0.2	0.2	1.5	0.9	0.1	0.1
Building 86, Boiler #3	0.2	0.2	1.5	0.9	0.1	0.1
Building 250, Boiler #1	0.5	0.5	3.0	1.8	0.2	0.1
Building 250, Boiler #2	0.5	0.5	3.0	1.8	0.2	0.1
Building 250, Boiler #3	0.5	0.5	3.0	1.8	0.2	0.1

- F. When firing natural gas, emissions shall not exceed the following [06-096 CMR 115, BACT]:

Equipment	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Hangar 5, Boiler #1	0.3	0.3	0.1	0.5	0.4	0.1
Hangar 5, Boiler #2	0.3	0.3	0.1	0.5	0.4	0.1
Building 86, Boiler #1	0.2	0.2	0.1	0.3	0.2	0.1
Building 86, Boiler #2	0.2	0.2	0.1	0.3	0.2	0.1
Building 86, Boiler #3	0.2	0.2	0.1	0.3	0.2	0.1
Building 250, Boiler #1	0.3	0.3	0.1	0.6	0.5	0.1
Building 250, Boiler #2	0.3	0.3	0.1	0.6	0.5	0.1
Building 250, Boiler #3	0.3	0.3	0.1	0.6	0.5	0.1

G. Visible emissions from any multi-fuel unit shall each not exceed 10% opacity on a six-minute block average, except for no more than one six-minute block average in a continuous three-hour period. [06-096 CMR 101]

(19) **Emergency Electrical Generating Equipment (excludes Engine #63)**

A. The total facility-wide fuel usage for all emergency generators combined shall be limited to a total of 3,750,000 scf/year of natural gas and 50,000 gallons/year of 0.0015%S diesel fuel, both limits based on a twelve-month rolling totals. [06-096 CMR 115, BACT]

B. Within the facility-wide fuel limits established in condition 19A, Brunswick Landing shall not operate any emergency generator greater than 500 hours per year, on a twelve-month rolling total basis. A non-resettable hour meter shall be maintained and operated on each emergency generator. [06-096 CMR 115, BPT]

C. Each emergency generator shall only be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. The emergency generator shall not be used for prime power when reliable offsite power is available. A log shall be maintained documenting the date, time, and reason for operation. [06-096 CMR 115, BACT]

D. Except for Engines #53 and #57, the emergency generators each shall fire only diesel fuel with a sulfur limit not to exceed 0.0015% by weight. Emergency Engines #53 and #57 shall fire only natural gas. Compliance shall be based on fuel records from the supplier showing the type of fuel delivered. [06-096 CMR 115, BACT]

E. Emissions for the engines shall not exceed the following [06-096 CMR 115, BACT]:

Equipment	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Hangar 5, Engine #58	0.4	0.4	0.1	13.7	3.0	1.1
Hangar 6, Engine #53	0.1	0.1	0.1	11.0	0.9	0.3
Building 86, Engine #31	0.1	0.1	0.1	3.5	0.8	0.3
Building 200, Engine #4	0.3	0.3	0.1	9.7	2.1	0.8
Building 201, Engine #59*	0.3	0.3	0.1	10.6	2.3	0.9
Building 209, Engine #49	0.5	0.5	0.1	17.2	3.7	1.4
Building 231, Engine #57	0.3	0.4	0.1	20.0	1.5	0.6
Building 250, Engine #47	1.1	1.1	0.1	28.2	7.5	0.8
Building 295, Engine #18-1	0.3	0.3	0.1	12.4	2.6	1.0
Building 295, Engine #18-2	0.3	0.3	0.1	12.4	2.6	1.0
Building 295, Engine #18-3	0.3	0.3	0.1	12.4	2.6	1.0
Building 295, Engine #18-4	0.3	0.3	0.1	12.4	2.6	1.0

Building 537, Engine #46	0.1	0.1	0.1	3.5	0.8	0.3
Building 554, Engine #48	0.2	0.2	0.1	7.1	1.5	0.6
Engine #50 (spare)	0.4	0.4	0.1	13.7	3.0	1.1
Engine #52 (spare)	0.2	0.2	0.1	8.8	1.9	0.7
Engine #55 (spare)	0.1	0.1	0.1	3.1	0.7	0.3

* This equipment is currently owned by the US Department of the Navy, however, there are plans to transfer ownership of this equipment to Brunswick Landing. Requirements contained in this license associated with this equipment will become effective immediately upon completion of the transfer.

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

G. All emergency generators shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. No later than May 3, 2013, Brunswick Landing shall meet the following operational limitations for each of the compression-ignition emergency generators (all emergency generators except Engine #53, Engine #57 and Engine #63):

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
- b. Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, 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. No later than October 19, 2013, Brunswick Landing shall meet the following operational limitations for the spark ignition emergency generator (emergency generator Engines #53 and #57):

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
- b. Inspect spark plugs every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and

- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, 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]

3. 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 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)]
 - b. Brunswick Landing shall keep records that include maintenance conducted on the all generators and the hours of operation of each engines 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 supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), Brunswick Landing must 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. The generator shall be operated and maintained according to the manufacturer's emission-related written instructions or Brunswick Landing 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)]

- (21) In addition to the previously listed equipment, there is equipment that the US Department of the Navy still owns, with the intent of eventually transferring the units to Brunswick Landing. The equipment is as follows:

Electrical Generation Equipment

Equipment	Maximum Input Capacity MMBtu/hr	Maximum Firing Rate	Fuel Type
Building 201, Engine #59	2.4	17.8	Diesel @ 0.0015%S

Brunswick Landing will be responsible for these units once the Department receives documentation stating that the units have been legally transferred to Brunswick Landing.

DONE AND DATED IN AUGUSTA, MAINE THIS 18 DAY OF June, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Paul Mercer*
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1049-71-A-N/T.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 27, 2018

Date of application acceptance: March 5, 2018

Date filed with the Board of Environmental Protection:

This Order prepared by Kevin J Ostrowski, Bureau of Air Quality.

