



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

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COMMISSIONER

STAG IV Belfast, LLC  
Waldo County  
Belfast, Maine  
A-705-71-H-R (SM)

Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal

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 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

STAG IV Belfast, LLC (STAG) has applied to renew their Air Emission License permitting the operation of emission sources associated with their commercial office building. The equipment addressed in this license is located at 21 Schoodic Drive in Belfast, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

**Boilers**

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Manuf. Date</u>	<u>Install. Date</u>	<u>Stack #</u>
B#3	8.0	57.1	No. 2 fuel oil 0.5% S	2009	2010	B#3
B#4	8.0	57.1				B#4
B#5	2.8	19.5		2000	B#5	
B#6	2.8	19.5			B#6	

**Emergency Generators**

<u>Equipment</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Kilowatts KW</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Install. Date</u>	<u>Stack #</u>
G#4	13.8	1500	100.7	Diesel fuel 0.0015% S	1997	G#4
G#5	8.2	800	59.9		1999	G#5
G#6	11.6	1250	84.7		2000	G#6

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PORTLAND  
312 CANCO ROAD  
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PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04679-2094  
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C. Application Classification

The application for STAG does not include the licensing of increased emissions. However, Boilers B#3 and B#4 were either rebuilt or replaced in 2010, which means that these two boilers are considered new and are required to utilize Best Available Control Technology (BACT) to minimize emissions of air pollutants. Therefore, the license is considered to be a renewal of currently licensed emission units and two new units, and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With the fuel use limit on B#3, B#4, B#5, and B#6 and the restrictions in operating hours for the emergency generators, the facility is licensed below the major source thresholds and is considered a synthetic minor.

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 as well as for those sources located in designated non-attainment areas.

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.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Boilers B#3, B#4, B#5, and B#6

STAG operates Boilers B#3, B#4, B#5, and B#6 for facility heating and hot water needs. Boilers B#3 and B#4 are rated at 8.0 MMBtu/hour each, and Boilers B#5 and B#6 are rated at 2.8 MMBtu/hour each. B#3 and B#4 were installed in 2010, and B#5 and B#6 were installed in 2000. Each of the four boilers fires No. 2 fuel oil and exhausts through its own stack, designated Stacks B#3, B#4, B#5, and B#6, respectively.

1. New Source Performance Standards (NSPS)

Because each of the boilers has a maximum heat input less than 10.0 MMBtu/hour, none of these units are subject to the 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.

2. BACT/BPT Findings

The BACT/BPT emission limits for Boilers B#3, B#4, B#5, and B#6 were based on the following:

- PM, PM<sub>10</sub> – 0.08 lb/MMBtu, for B#3 and B#4, 06-096 CMR 115, BACT – 0.12 lb/MMBtu, for B#5 and B#6, derived from 06-096 CMR 103(2)(B)(1)(a)\*
- SO<sub>2</sub> – 0.5 lb/MMBtu, based on firing ASTM D396 compliant #2 fuel oil (0.5% sulfur)
- NO<sub>x</sub> – 0.3 lb/MMBtu, as previously licensed, BPT
- CO – 5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10
- VOC – 0.2 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10
- Opacity – 06-096 CMR 101

\* 06-096 CMR 103 regulates PM emission limits for boilers with heat input capacity equal to or greater than 3.0 MMBtu/hour; PM limits for B#5 and B#6 are derived from 06-096 CMR 103. The PM<sub>10</sub> limits are derived from the PM limits.

The BACT/BPT emission limits for Boilers B#3, B#4, B#5, and B#6 are as follows:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler B#3 (8.0 MMBtu/hr) #2 fuel	0.64	0.64	4.03	2.40	0.29	0.01
Boiler B#4 (8.0 MMBtu/hr) #2 fuel	0.64	0.64	4.03	2.40	0.29	0.01
Boiler B#5 (2.8 MMBtu/hr) #2 fuel	0.34	0.34	1.4	0.84	0.10	0.01
Boiler B#6 (2.8 MMBtu/hr) #2 fuel	0.34	0.34	1.4	0.84	0.10	0.01

Visible emissions from each of the Boilers B#3, B#4, B#5, and B#6 shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period.

STAG shall be limited to 485,714 gallons/year of #2 fuel oil fired in Boilers B#3, B#4, B#5, and B#6, based on a 12-month rolling total.

Prior to January 1, 2016, the fuel oil fired in Boilers B#3, B#4, B#5, and B#6 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

3. 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.

4. National Emission Standards for Hazardous Air Pollutants (NESHAP)

Boilers B#3, B#4, B#5, and B#6 may be subject to 40 CFR Part 63, Subpart JJJJJJ, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. The units are considered existing oil boilers.

For informational purposes, a summary of the currently applicable federal regulation 40 CFR Part 63, Subpart JJJJJJ requirements is listed below. At this time, the Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, STAG is still subject to the requirements. Notification forms and additional information can be found on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due on September 17, 2011. [40 CFR Part 63.11225(a)(2)]

ii. Boiler Tune-Up Program

(a) A boiler tune-up program shall be implemented to include the tune-up of applicable boilers by March 21, 2012, according to the rule currently in place. [40 CFR Part 63.11196(a)(1)] However, a No Action Assurance letter was issued on March 13, 2012, stating that EPA will exercise its enforcement discretion to not pursue enforcement action for failure to complete the required tune-up by the stated compliance date. The rule is expected to have a future compliance date in either 2013 or 2014 once the final revisions are promulgated.

- (b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months. [40 CFR Part 63.11223(b)(1)]
  2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
  3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. [40 CFR Part 63.11223(b)(3)]
  4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
  5. Measure the concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]
  6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)]
- (c) A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- (d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report has been submitted.
1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size and age of the boiler. [40 CFR Part 63.11223(a)]
  2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the type and amount of fuel used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ, including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

C. Emergency Generators G#4, G#5, and G#6

STAG operates three emergency generators. The emergency generators are rated at 13.8 MMBtu/hour, 8.2 MMBtu/hour, and 11.6 MMBtu/hour, and fire diesel fuel. The generators were manufactured in 1997, 1999, and 2000, respectively.

1. New Source Performance Standards (NSPS)

Emergency Generators G#4, G#5, and G#6 were manufactured prior to April 1, 2006, and have not been modified or reconstructed after July 11, 2005; therefore, these units are not subject to the requirements of 40 CFR Part 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

2. BPT Findings

The BPT emission limits for Generators G#4, G#5, and G#6 are based on the following:

- PM, PM<sub>10</sub> – 0.12 lb/MMBtu, 06-096 CMR 103
- SO<sub>2</sub> – 0.0015 lb/MMBtu, based on firing 0.0015% sulfur fuel
- NO<sub>x</sub> – 3.2 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
- CO – 0.85 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
- VOC – 0.09 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
- Opacity – 06-096 CMR 101

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM<sub>10</sub></u> <u>(lb/hr)</u>	<u>SO<sub>2</sub></u> <u>(lb/hr)</u>	<u>NO<sub>x</sub></u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Generator G#4 (13.8 MMBtu/hr) Diesel	1.66	1.66	0.02	44.16	11.73	1.24
Generator G#5 (8.2 MMBtu/hr) Diesel	0.98	0.98	0.01	26.24	6.97	0.74
Generator G#6 (11.6 MMBtu/hr) Diesel	1.39	1.39	0.02	37.12	9.86	1.04

Visible emissions from each of the diesel emergency generators shall not exceed 20% opacity on a six-minute block average, except for no more than two six-minute block averages in a three-hour period.

Each of the emergency generators shall be limited to 500 hours of operation a year, based on a 12-month rolling total. STAG shall keep records of the hours of operation for each unit.

3. National Emission Standards for Hazardous Air Pollutants (NESHAP)

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 NSPS 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.

Emergency Definition:

Emergency stationary reciprocating internal combustion engine (RICE) is defined in 40 CFR Part 63, Subpart ZZZZ as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. 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. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f).

§63.6640(f) limits maintenance checks and readiness testing of the units to 100 hours per year. Emergency stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year 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 if the regional transmission organization or equivalent balancing authority and transmission operator has determined

there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

40 CFR Part 63, Subpart ZZZZ Requirements:

	<b>Compliance Dates</b>	<b>Operating Limitations* (40 CFR §63.6603(a) and Table 2(d))</b>
Compression ignition (diesel, fuel oil) units:  G#4, G#5, and G#6	No later than May 3, 2013	<ul style="list-style-type: none"> <li>- Change oil and filter every 500 hours of operation or annually, whichever comes first;</li> <li>- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first;</li> <li>- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary</li> </ul>

\* Note: Due to the 500 hour operation limit on each generator, the inspections and oil/filter changes shall be performed annually to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

The generators shall be operated and maintained according to the manufacturer's emission-related written instructions, or STAG shall develop a maintenance plan providing 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)]

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

The generators shall each be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). A

maximum of 15 hours per year (of the 50 hours/year) may be used as part of a demand response program. [40 CFR §63.6640(f)(1)]

STAG shall keep records that include maintenance conducted on the three generators and the hours of operation of each engine recorded through its non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours were spent for non-emergency. If the generators are used for demand response operation, STAG must keep records of the notification of the emergency situation and the time the engine was operated as part of demand response. [40 CFR §63.6655(e) and (f)]

D. Fugitive Emissions

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

E. Annual Emissions

1. Total Annual Emissions

STAG shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on 485,714 gallons/yr of #2 fuel oil fired in Boilers B#3, B#4, B#5, and B#6 and 500 hours of operation per year for each of Generators G#4, G#5, and G#6

**Total Licensed Annual Emissions for the Facility**  
**Tons/year**

(used to calculate the annual license fee)

	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>SO<sub>2</sub></u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>VOC</u>
Boilers B#3, B#4, B#5, and B#6	4.1	4.1	17.1	10.2	1.2	0.1
Generator G#4	0.1	0.1	0.1	2.2	0.6	0.1
Generator G#5	0.1	0.1	0.1	1.3	0.4	0.1
Generator G#6	0.1	0.1	0.1	1.9	0.5	0.1
<b>Total TPY</b>	<b>4.4</b>	<b>4.4</b>	<b>17.4</b>	<b>15.6</b>	<b>2.7</b>	<b>0.4</b>

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<sub>2e</sub>).

Based on the facility's fuel use limits, 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, STAG is below the major source threshold of 100,000 tons of CO<sub>2e</sub> per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

### III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling is not required for a renewal if the total emissions of any pollutant released do not exceed the following and there are no extenuating circumstances:

<b>Pollutant</b>	<b>Tons/Year</b>
PM	25
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	100
CO	250

Based on the total facility licensed emissions, STAG is below the emissions level required for modeling.

### 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 A-705-71-H-R 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 emission 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) **Boilers B#3, B#4, B#5, and B#6**

A. Fuel

1. Total fuel use for Boilers B#3, B#4, B#5, and B#6 shall not exceed 485,714 gallons gal/year of #2 fuel oil, on a 12-month rolling total basis.
2. Prior to January 1, 2016, the #2 fuel oil fired in the boiler shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]
3. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Boiler B#3	PM	0.08	06-096 CMR 115, BACT
Boiler B#4			

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

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler B#3 (8.0 MMBtu/hr) #2 fuel	0.64	0.64	4.03	2.40	0.29	0.01
Boiler B#4 (8.0 MMBtu/hr) #2 fuel	0.64	0.64	4.03	2.40	0.29	0.01
Boiler B#5 (2.8 MMBtu/hr) #2 fuel	0.34	0.34	1.4	0.84	0.10	0.01
Boiler B#6 (2.8 MMBtu/hr) #2 fuel	0.34	0.34	1.4	0.84	0.10	0.01

D. Visible Emissions

Visible emissions from each of the Boilers B#3, B#4, B#5, and B#6 shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period.

(17) **Emergency Generators G#4, G#5, and G#6**

- A. The generators are each limited to 500 hours per year of operation, based on a 12-month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 115]
- B. The fuel oil sulfur content for Generators G#4, G#5, and G#6 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 [06-096 CMR 115, BPT]:

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Generator G#4 (13.8 MMBtu/hr) Diesel	1.66	1.66	0.02	44.16	11.73	1.24
Generator G#5 (8.2 MMBtu/hr) Diesel	0.98	0.98	0.01	26.24	6.97	0.74
Generator G#6 (11.6 MMBtu/hr) Diesel	1.39	1.39	0.02	37.12	9.86	1.04

- D. Visible emissions from each of the diesel generators shall not exceed 20% opacity on a six-minute block average, except for no more than two six-minute block averages in a three-hour period. [06-096 CMR 101]
- E. The Emergency Generators G#4, G#5, and G#6 shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:
1. No later than May 3, 2013, STAG shall meet the following operational limitations for each of the compression ignition emergency generators (Generators G#4, G#5, and G#6):
    - a. Change the oil and filter annually,
    - b. Inspect the air cleaner annually, 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. A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]
  3. Maintenance, Testing, and Non-Emergency Operating Situations
    - a. The generators shall each be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). A maximum of 15 hours per year (of the 50 hours/year) may be used as part of a demand response program. These limits are based on a 12-month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §63.6640(f)(1) and 06-096 CMR 115]
    - b. STAG shall keep records that include maintenance conducted on each of the three generators and the hours of operation of each engine recorded through its non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours were spent for non-emergency. If the generators are used for demand response operation, STAG must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR §63.6655(e) and (f)]
  4. The generators shall be operated and maintained according to the manufacturer's emission-related written instructions, or STAG shall develop a maintenance plan providing to the extent practicable for the maintenance and operation of the engine in a manner consistent with good

STAG IV Belfast, LLC  
Waldo County  
Belfast, Maine  
A-705-71-H-R (SM)

16

Departmental  
Findings of Fact and Order  
Air Emission License  
Renewal

air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

(18) **Fugitive Emissions**

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

- (19) STAG 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 11<sup>th</sup> DAY OF September, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

*Melanie L. G. for*  
PATRICIA W. AHC / 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, 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 4, 2012

Date of application acceptance: June 5, 2012

Date filed with the Board of Environmental Protection:

This Order prepared by Jane Gilbert, Bureau of Air Quality.

