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|-----------------------------|---|-----------------------------------|
| <b>Acadia National Park</b> | ) | <b>Departmental</b>               |
| <b>Hancock County</b>       | ) | <b>Findings of Fact and Order</b> |
| <b>Winter Harbor, ME</b>    | ) | <b>Air Emission License</b>       |
| <b>A-866-71-A-T/N</b>       | ) |                                   |

After review of the air emissions license 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., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

A. Introduction

Acadia National Park (United States Department of the Interior, National Park Service) has submitted an air emission license application for the transfer of a portion of the equipment previously licensed under the Naval Security Group Activity, Winter Harbor.

Prior to the transfer, numerous pieces of fuel burning equipment at three area sites were licensed by the DEP as a minor source under license number A-595 issued to the Naval Security Group Activity. The three sites on the single license were: Corea – a non-industrial communication operation located in the Village of Corea in the town of Gouldsboro; Winter Harbor – a housing facility in the Village of Winter Harbor; and Schoodic – a non-industrial administrative operation located within the Schoodic section of Acadia National Park in the town of Winter Harbor.

Acadia National Park has taken ownership of some of this equipment, specifically the five boilers, three emergency generators, paint booth, and dust collector located in the Schoodic section of Acadia National Park. A new license number is assigned, but there is no additional equipment that hasn’t been previously licensed, therefore the new license shall be issued as a transfer.

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B. Emission Equipment

This license addresses the following equipment:

Boilers

| <u>Equipment</u>   | <u>Date of Installation</u> | <u>Maximum Capacity (MMBtu/hr)</u> | <u>Maximum Firing Rate (gal/hr)</u> | <u>Fuel Type, % sulfur</u> | <u>Stack #</u> |
|--------------------|-----------------------------|------------------------------------|-------------------------------------|----------------------------|----------------|
| Bldg. 1001 Boiler  | Pre 1990                    | 1.456                              | 10.4                                | #2 oil, 0.5%               | 1-B            |
| Bldg. 1084a Boiler | Pre 1990                    | 1.330                              | 9.5                                 | #2 oil, 0.5%               | 84a-B          |
| Bldg. 1105 Boiler  | 1985                        | 1.5                                | 10.7                                | #2 oil, 0.5%               | 105-B          |
| Bldg. 1138 Boiler  | 1963                        | 1.86                               | 13.3                                | #2 oil, 0.5%               | 138-B          |
| Bldg. 1141 Boiler  | Pre 1990                    | 1.456                              | 10.4                                | #2 oil, 0.5%               | 141-B          |

Generators

| <u>Equipment</u> | <u>Date of Installation</u> | <u>Maximum Capacity (MMBtu/hr)</u> | <u>Max. Firing Rate (gal/hr)</u> | <u>Fuel Type, % sulfur</u> | <u>Stack #</u> |
|------------------|-----------------------------|------------------------------------|----------------------------------|----------------------------|----------------|
| DGU-1 emergency  | Pre-1990                    | 2.28                               | 16.3                             | Diesel, 0.05%              | DGU-1-G        |
| DGU-2 emergency  | Pre-1990                    | 2.17                               | 15.5                             | Diesel, 0.05%              | DGU-2-G        |
| DGU-20 emergency | 1998                        | 0.896                              | 6.4                              | Diesel, 0.05%              | DGU-20-G       |

Miscellaneous Equipment

Building 1216 Paint Booth.  
Building 1216 Dust Collection System.

C. Application Classification

The application for Acadia National Park does not include the installation of new or modified equipment. Therefore, the license is considered to be a transfer of current licensed emission units only. The application has been processed through Chapter 115 of the Department's regulations.

## 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 Chapter 100 of the Department's regulations. 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 emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

Emissions for the boilers were calculated using EPA AP-42 emission factors from the September 1998 update (Section 1.3). Emissions from the generators were calculated using EPA AP-42 emission factors from the October 1996 update (Section 3.3).

### B. Boilers

#### 1. Building 1001 Boiler and Building 1141 Boiler

The boilers in building 1001 and 1141 are #2 oil fired units each rated at 1.456 MMBtu/hr. The boilers shall each have the following BPT emission limits:  
PM/PM<sub>10</sub> – 0.02 lb/hr (AP-42, Table 1.3-1, 2 lb/1000 gal)  
SO<sub>2</sub> – combustion of 0.5% sulfur #2 fuel oil  
NO<sub>x</sub> – 0.21 lb/hr (AP-42, Table 1.3-1, 20 lb/1000 gal)  
CO – 0.05 lb/hr (AP-42, Table 1.3-1, 5 lb/1000 gal)  
VOC – 0.003 lb/hr (AP-42, Table 1.3-3, 0.34 lb/1000 gal)  
Opacity – 20% opacity on a 6 minute block average

#### 2. Building 1084a Boiler

The boiler in building 1084a is a #2 oil fired unit rated at 1.33 MMBtu/hr. The boiler shall have the following BPT emission limits:  
PM/PM<sub>10</sub> – 0.02 lb/hr (AP-42, Table 1.3-1, 2 lb/1000 gal)  
SO<sub>2</sub> – combustion of 0.5% sulfur #2 fuel oil  
NO<sub>x</sub> – 0.19 lb/hr (AP-42, Table 1.3-1, 20 lb/1000 gal)  
CO – 0.05 lb/hr (AP-42, Table 1.3-1, 5 lb/1000 gal)  
VOC – 0.003 lb/hr (AP-42, Table 1.3-3, 0.34 lb/1000 gal)  
Opacity – 20% opacity on a 6 minute block average

3. Building 1105 Boiler

The boiler in building 1105 is a #2 oil fired unit rated at 1.5 MMBtu/hr. The boiler shall have the following BPT emission limits:

PM/PM<sub>10</sub> – 0.02 lb/hr (AP-42, Table 1.3-1, 2 lb/1000 gal)

SO<sub>2</sub> – combustion of 0.5% sulfur #2 fuel oil

NO<sub>x</sub> – 0.21 lb/hr (AP-42, Table 1.3-1, 20 lb/1000 gal)

CO – 0.05 lb/hr (AP-42, Table 1.3-1, 5 lb/1000 gal)

VOC – 0.004 lb/hr (AP-42, Table 1.3-3, 0.34 lb/1000 gal)

Opacity – 20% opacity on a 6 minute block average

4. Building 1138 Boiler

The boiler in building 1138 is a #2 oil fired unit rated at 1.86 MMBtu/hr. The boiler shall have the following BPT emission limits:

PM/PM<sub>10</sub> – 0.03 lb/hr (AP-42, Table 1.3-1, 2 lb/1000 gal)

SO<sub>2</sub> – combustion of 0.5% sulfur #2 fuel oil

NO<sub>x</sub> – 0.26 lb/hr (AP-42, Table 1.3-1, 20 lb/1000 gal)

CO – 0.07 lb/hr (AP-42, Table 1.3-1, 5 lb/1000 gal)

VOC – 0.004 lb/hr (AP-42, Table 1.3-3, 0.34 lb/1000 gal)

Opacity – 20% opacity on a 6 minute block average

C. Emergency Generators

1. Emergency Generator DGU-1

The emergency generator DGU-1 is rated at 2.28 MMBtu/hr and fires 0.05% sulfur diesel fuel. The generator shall have an operating limit of 500 hours/year on a 12 month rolling total. The generator shall have the following BPT emission limits:

PM/PM<sub>10</sub> – 0.70 lb/hr (AP-42, Table 3.3-1, 0.31 lb/MMBtu)

SO<sub>2</sub> – combustion of 0.05% sulfur diesel oil

NO<sub>x</sub> – 10.1 lb/hr (AP-42, Table 3.3-1, 4.41 lb/MMBtu)

CO – 2.2 lb/hr (AP-42, Table 3.3-1, 0.95 lb/MMBtu)

VOC – 0.8 lb/hr (AP-42, Table 3.3-1, 0.35 lb/MMBtu)

Opacity – 30% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a 3 hour period.

2. Emergency Generators DGU-2

The emergency generator DGU-2 is rated at 2.17 MMBtu/hr and fires 0.05% sulfur diesel fuel. The generator shall have an operating limit of 500 hours/year on a 12 month rolling total. The generator shall have the following BPT emission limits:

PM/PM<sub>10</sub> – 0.7 lb/hr (AP-42, Table 3.3-1, 0.31 lb/MMBtu)

SO<sub>2</sub> – combustion of 0.05% sulfur diesel oil

NO<sub>x</sub> – 9.6 lb/hr (AP-42, Table 3.3-1, 4.41 lb/MMBtu)

CO – 2.1 lb/hr (AP-42, Table 3.3-1, 0.95 lb/MMBtu)

VOC – 0.8 lb/hr (AP-42, Table 3.3-1, 0.35 lb/MMBtu)  
 Opacity – 30% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a 3 hour period.

3. Emergency Generator DGU-20

The emergency generator DGU-20 is rated at 0.896 MMBtu/hr and fires 0.05% sulfur diesel fuel. The generator shall have an operating limit of 500 hours/year on a 12 month rolling total. The generator shall have the following BPT emission limits:

PM/PM<sub>10</sub> – 0.28 lb/hr (AP-42, Table 3.3-1, 0.31 lb/MMBtu)

SO<sub>2</sub> – combustion of 0.05% sulfur diesel oil

NO<sub>x</sub> – 4.0 lb/hr (AP-42, Table 3.3-1, 4.41 lb/MMBtu)

CO – 0.85 lb/hr (AP-42, Table 3.3-1, 0.95 lb/MMBtu)

VOC – 0.31 lb/hr (AP-42, Table 3.3-1, 0.35 lb/MMBtu)

Opacity – 30% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a 3 hour period.

4. Definition of ‘Emergency’ and Emergency Generator Requirements

Per Chapter 100 of the Department’s regulations, the definition of emergency for licensing purposes is the following:

“... any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology based emission limitation under the license, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.”

The emergency stationary internal combustion engines (SICE) are subject to the following:

- each emergency generator shall not operate for more than 500 hour/yr.
- each emergency generator shall fire 0.05% sulfur fuel.
- redundant emergency SICE may operate not more than 500 hours/yr combined.
- the licensee shall keep records of the total hours of operation.
- should the operation exceed 500 hours during any rolling 12 month period, the licensee shall notify the Department within 4 working days of the excess operation.

D. Paint Booth

Acadia National Park shall maintain a fabric filter on the paint booth in Building 1216. Although only a small amount of painting is done, records of estimated paint usage (ie - number of cans used) shall be maintained at the facility. Opacity

from the paint booth vent shall not exceed 10% opacity on a six minute block average basis.

E. Dust Collection

Visible emissions from the pulse-jet dust collector in building 1216 shall not exceed 10% opacity on a six minute block average, except for one six minute average in any continuous one-hour period. Acadia National Park shall keep a log documenting maintenance on the dust collection system.

F. Annual Facility Emissions

Acadia National Park shall be restricted to the following annual licensed emissions on a 12 month rolling total, based on 8760 hours/year operation for the boilers and 500 hours/year for the emergency generators:

**Total Allowable Annual Emission for the Facility**  
 (used to calculate the annual license fee)

| <b><u>Equipment</u></b> | <b><u>PM</u></b> | <b><u>PM<sub>10</sub></u></b> | <b><u>SO<sub>2</sub></u></b> | <b><u>NO<sub>x</sub></u></b> | <b><u>CO</u></b> | <b><u>VOC</u></b> |
|-------------------------|------------------|-------------------------------|------------------------------|------------------------------|------------------|-------------------|
| Boiler 1001             | 0.09             | 0.09                          | 3.2                          | 0.9                          | 0.2              | 1.5               |
| Boiler 1141             | 0.09             | 0.09                          | 3.2                          | 0.9                          | 0.2              | 1.5               |
| Boiler 1084a            | 0.08             | 0.08                          | 2.9                          | 0.8                          | 0.2              | 1.4               |
| Boiler 1105             | 0.09             | 0.09                          | 3.3                          | 0.9                          | 0.2              | 1.6               |
| Boiler 1138             | 0.1              | 0.1                           | 4.1                          | 1.2                          | 0.3              | 2.0               |
| Gen. DGU-1              | 0.2              | 0.2                           | 0.03                         | 2.5                          | 0.5              | 0.2               |
| Gen. DGU-2              | 0.2              | 0.2                           | 0.03                         | 2.4                          | 0.5              | 0.2               |
| Gen. DGU-20             | 0.07             | 0.07                          | 0.01                         | 1.0                          | 0.2              | 0.08              |
| Paint Booth             |                  |                               |                              |                              |                  | 4                 |
|                         |                  |                               |                              |                              |                  |                   |
| <b>TOTALS</b>           | <b>0.9</b>       | <b>0.9</b>                    | <b>16.7</b>                  | <b>11</b>                    | <b>2</b>         | <b>13</b>         |

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

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

Based on the total facility emissions, Acadia National Park is below the emissions level required for modeling and monitoring.

**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-866-71-A-T/N subject to the following conditions:

**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 (Title 38 MRSA §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.
- (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.
- (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.
  - (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
  - (6) The license does not convey any property rights of any sort, or any exclusive privilege.
  - (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.
  - (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.
  - (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.
  - (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.
  - (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:
    - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
      - a. 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
- b. pursuant to any other requirement of this license to perform stack testing.
- (ii) 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
- (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (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:
- (i) 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
- (ii) 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
- (iii) 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.
- (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.
- (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.

- (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.

### SPECIFIC CONDITIONS

(16) **Boilers**

1. Buildings 1001, 1084a, 1105, 1138, and 1141 boilers shall fire #2 fuel oil with a sulfur content not to exceed 0.5% by weight. Fuel use records, including receipts documenting sulfur content, shall be maintained on a monthly basis, in addition to the 12 month rolling total.
2. Boiler emissions shall not exceed the following:

| Equipment          |       | PM   | PM <sub>10</sub> | SO <sub>2</sub> | NO <sub>x</sub> | CO   | VOC   |
|--------------------|-------|------|------------------|-----------------|-----------------|------|-------|
| Bldg. 1001 Boiler  | lb/hr | 0.02 | 0.02             | 0.73            | 0.21            | 0.05 | 0.003 |
| Bldg. 1084a Boiler | lb/hr | 0.02 | 0.02             | 0.67            | 0.19            | 0.05 | 0.003 |
| Bldg. 1105 Boiler  | lb/hr | 0.02 | 0.02             | 0.75            | 0.19            | 0.05 | 0.003 |
| Bldg. 1138 Boiler  | lb/hr | 0.03 | 0.03             | 0.93            | 0.26            | 0.07 | 0.004 |
| Bldg. 1141 Boiler  | lb/hr | 0.02 | 0.02             | 0.73            | 0.21            | 0.05 | 0.003 |

3. Opacity from each of the boilers shall not exceed 20% on a 6 minute block average.

(17) **Emergency Generators**

1. Emergency generators DGU-1, DGU-2, and DGU-20 shall fire diesel fuel with a maximum sulfur content of 0.05% by weight. Fuel records shall be maintained documenting sulfur content.
2. Each of the emergency diesel generators shall not exceed 500 hours/year of operation based on a 12 month rolling total. An hour meter shall be maintained and operated on each generator. Records of hours of operation shall be kept on a monthly and 12 month rolling total. The generators shall be used for emergency use only, except when test fired periodically for maintenance purposes.

3. The emergency generator emissions shall not exceed the following:

| Equipment |       | PM   | PM <sub>10</sub> | SO <sub>2</sub> | NO <sub>x</sub> | CO   | VOC  |
|-----------|-------|------|------------------|-----------------|-----------------|------|------|
| DGU-1     | lb/hr | 0.7  | 0.7              | 0.11            | 10.1            | 2.2  | 0.8  |
| DGU-2     | lb/hr | 0.7  | 0.7              | 0.11            | 9.6             | 2.1  | 0.8  |
| DGU-20    | lb/hr | 0.28 | 0.28             | 0.04            | 4.0             | 0.85 | 0.31 |

4. Opacity from each of the generators shall not exceed 30% on a 6 minute block average, except for no more than 2 six minute block averages in a 3 hour period.

(18) **Paint Booth**

1. Acadia National Park shall maintain the fabric filter on the paint booth.
2. Opacity from the paint booth shall not exceed 10% opacity on a six minute block average basis.
3. Records shall be maintained documenting monthly paint cans used. VOC emissions from the paint booth shall not exceed 4 tons/year.

(19) **Dust Collection**

1. Visible emissions from the pulse-jet dust collector shall not exceed 10% opacity on a six minute block average basis, except for one six minute average in any continuous one-hour period.
2. Acadia National Park shall keep a log documenting maintenance on the dust collection system.

(20) **Air Emission License Fee**

Acadia National Park shall pay the annual air emission license fee within 30 days of July 31 of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.

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(21) The term of this Order shall be for five (5) years from the signature below.

DONE AND DATED IN AUGUSTA, MAINE THIS            DAY OF            2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 14, 2002

Date of application acceptance: May 27, 2003

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Kathleen E. Molokie, Bureau of Air Quality.