



**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR RESOURCES**

**OPERATING PERMIT**

***Rhode Island Hospital***

**FINAL PERMIT NO. RI-02-17**

(Renewal date: June 30, 2017)

(Expiration date: June 30, 2022)

**Pursuant to the provisions of Air Pollution Control Regulation No. 29, this operating permit is issued to:**

Rhode Island Hospital  
593 Eddy Street  
Providence, RI 02903

**This permit shall be effective from the date of its issuance. All terms and conditions of the permit are enforceable by USEPA and citizens under the federal Clean Air Act, 42 U.S.C. 7401, et seq., unless specifically designated as not federally enforceable.**

---

Laurie Grandchamp, P.E., Chief  
Office of Air Resources  
Date of Issuance: 06/30/2017

# TABLE OF CONTENTS

| <u>SECTION</u>   | <u>PAGE</u> |
|--|-------------|
| <b>I. SOURCE SPECIFIC CONDITIONS</b> .....                           | 1           |
| Requirements for Emission Units B002, B003, B004 and B005 .....      | 1           |
| Requirements for Emission Unit D005 .....                            | 9           |
| Requirements for Emission Units D002, D003 and D004 .....            | 10          |
| Requirements for Emission Units M001, M002 and M003 .....            | 13          |
| Requirements for Emission Unit T001 .....                            | 18          |
| Requirements for Emission Unit B006 .....                            | 21          |
| Requirements for Emission Units D006 and D007 .....                  | 25          |
| Requirements for Emission Units T002, T003 and T004 .....            | 31          |
| Facility Requirements .....  | 31          |
| <b>II. GENERAL CONDITIONS</b> .....                                  | 32          |
| Annual Emissions Fee Payment .....                                   | 32          |
| Permit Renewal and Expiration .....                                  | 32          |
| Transfer of Ownership or Operation .....                             | 32          |
| Property Rights .....  | 32          |
| Submissions .....  | 33          |
| Inspection and Entry .....   | 33          |
| Compliance .....   | 34          |
| Excess Emissions Due to an Emergency .....                           | 34          |
| Duty to Provide Information .....                                    | 35          |
| Duty to Supplement .....   | 35          |
| Reopening for Cause .....  | 35          |
| Severability Clause .....  | 36          |
| Off-Permit Changes .....   | 36          |
| Section 502(b)(10) Changes .....                                     | 37          |
| Emissions Trading .....  | 38          |
| Emission of Air Contaminants Detrimental to Person or Property ..... | 38          |
| Odors .....  | 38          |
| Visible Emissions .....  | 38          |
| Open Fires .....   | 39          |
| Construction Permits .....   | 39          |
| Fuel Oil .....   | 39          |
| Air Pollution Episodes .....   | 41          |
| Fugitive Dust .....  | 41          |
| Adhesives and Sealants .....   | 41          |
| Architectural and Industrial Maintenance Coatings .....              | 41          |
| Compliance Certifications .....                                      | 41          |
| Permit Shield .....  | 42          |
| Recordkeeping .....  | 43          |
| Reporting .....  | 43          |
| Credible Evidence .....  | 44          |
| Emission Statements .....  | 44          |
| Miscellaneous Conditions .....                                       | 46          |
| <b>III. SPECIAL CONDITIONS</b> .....                                 | 47          |
| Ozone-depleting Substances .....                                     | 47          |
| Prevention of Accidental Releases .....                              | 48          |

## SECTION I. SOURCE SPECIFIC CONDITIONS

---

### A. Requirements for Emission Units B002, B003, B004 and B005

The following requirements are applicable to:

- Emission Unit B002, which is a 80.4 MMBTU/hr Babcock & Wilcox boiler, Model No. FM-3006, equipped with low-NO<sub>x</sub> burners, flue gas recirculation and an oxygen trim system, capable of burning #6 fuel oil and natural gas.
- Emission Unit B003, which is a 62.6 MMBTU/hr Combustion Engineering boiler, Model No. 91473, equipped with low-NO<sub>x</sub> burners, flue gas recirculation and an oxygen trim system, capable of burning #6 fuel oil and natural gas.
- Emission Units B004 and B005, which are 62.6 MMBTU/hr Babcock & Wilcox Model No. FM-1510 boilers, equipped with low-NO<sub>x</sub> burners, flue gas recirculation and an oxygen trim system, capable of burning #6 fuel oil and natural gas.

#### 1. Emission Limitations

##### a. Particulates

The permittee shall not cause or permit the emissions of particulate matter in excess of 0.1 pounds per million BTU actual heat input. [13.2.1]

##### b. Nitrogen oxides (NO<sub>x</sub>)

The permittee shall not cause or allow the emissions of NO<sub>x</sub> in excess of 0.1 pounds per million BTU heat input when operated on natural gas. [27.4.2(a)(1)]

##### c. Opacity

The permittee shall not emit into the atmosphere any air contaminant for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

##### d. Sulfur oxides

The sulfur content of fuel oil used in the boilers in this section or fuel oil stored for use in any boiler in this section shall demonstrate compliance with RI Air Pollution Control Regulation No. 8, "Sulfur Content of Fuels" and Section II.U of this permit. [8.2.1]

## 2. Operating Requirements

- a. When fired with residual oil, each boiler listed in this section shall be equipped with low-NO<sub>x</sub> burners and flue gas recirculation (with a minimum of 10% flue gas recirculation [27.4.2(b)])
- b. The permittee shall conduct a performance tune-up for each boiler listed in this section according to paragraph 2(c) of this subsection and keep records as required in Condition I.A.5.g of this permit to demonstrate continuous compliance. The permittee shall conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. [40 CFR 63.11201(b), 40 CFR 63.11223(a), 40 CFR 63 Subpart JJJJJ Table 2 (14)]
- c. The permittee shall conduct a tune-up of each boiler listed in this section every 5 years to demonstrate continuous compliance as specified in paragraphs (c)(1-6) of this subsection. Each 5 year tune-up must be conducted no more than 61 months after the previous tune-up. [40 CFR 63.11214(b), 40 CFR 63.11223(c), 40 CFR 63 Subpart JJJJJ Table 2 (14)]
  - (1) As applicable, inspect each burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but the permittee shall inspect each burner at least once every 72 months). [40 CFR 63.11223(b)(1) and (c)]
  - (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. [40 CFR 63.11223(b)(2)]
  - (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, but the permittee shall inspect the system controlling the air-to-fuel ratio at least once every 72 months). [40 CFR 63.11223(b)(3) and (c)]
  - (4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. [40 CFR 63.11223(b)(4)]
  - (5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the

adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]

- (6) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup [40 CFR 63.11223(b)(7)]
- d. At all times the permittee shall operate and maintain each boiler listed in this section, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the RI Office of Air Resources and the USEPA that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11205(a)]
- e. The permittee shall set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. [40 CFR 63.11223(c)]

### **3. Monitoring Requirements**

#### a. Opacity

Emission Units B002-B005 shall be equipped with an opacity monitor with audio alarm [6.2.2(a)]. The opacity monitor shall be calibrated to sound the alarm at 20 percent opacity and shall be operated continuously during the combustion of oil. The audio alarm must be located in an area where it will be heard by the operator or other person responsible for the unit. [6.2.3]

- b. Steam flow shall be monitored continuously for Emission Units B002-B005. [29.6.3(a) 40 CFR 64]
- c. The oxygen content of the flue gas shall be monitored continuously for Emission Units B002-B005. [29.6.3(a) 40 CFR 64]
- d. The position of the damper fan for the FGR for Emission Units B002-B005 shall be checked daily. [29.6.3(a) 40 CFR 64]

### **4. Testing Requirements**

#### a. Particulates

Compliance with the particulate emissions limitations contained in Condition I.A.1.a of this permit, shall be determined by emission testing conducted by the permittee according to Method 5 of 40 CFR 60, Appendix A, or another method approved by the Office of Air Resources and the USEPA, shall be used. [13.3.1]

The requirements of particulate emission testing may be waived if the Director and the USEPA:

- (1) Specifies or approves, in a specific case, the use of a reference method with minor changes in methodology; or
- (2) Approves the use of an equivalent or alternative method the results of which he has determined to be adequate for indicating whether the permittee is in compliance; or
- (3) Finds that the permittee has demonstrated by other means to the Director's and the USEPA's satisfaction that the source is in compliance with the relevant emissions standards. [13.3.3]

In the absence of data from emissions testing, the Director and the USEPA may determine that an emissions unit is or is not in compliance with the emissions limitations of Condition I.A.1.a of this permit based on available information including, but not limited to, type of fuel burned, design of unit, efficiency of air pollution control systems, operating and maintenance procedures, and emission test results on similar units. [13.3.2]

b. Nitrogen oxides

Emissions testing to demonstrate compliance with NO<sub>x</sub> control requirements shall be conducted at least once every five (5) years for the boilers listed in this section. Emission testing shall comply with the following requirements: [27.5.7(a), 27.5.2]

- (1) An emissions testing protocol shall be submitted to the RI Office of Air Resources for review a minimum of sixty days (60) prior to the performance of any tests. The Office of Air Resources shall be notified at least 60 days prior to any emission test. [27.5.7(b)]
- (2) All test procedures used for emission testing shall be in accordance with the methods set forth in Appendix A of 40 CFR 60 or another method in Appendix A of 40 CFR 60, or another method approved by the Office of Air Resources and the USEPA. [27.5.7(c)]
- (3) The permittee shall install any and all test ports or platforms necessary to conduct the required emissions testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment. [27.5.7(d)]

- (4) All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitation. [27.5.7(e)]
- (5) All emissions testing must be observed by a representative of the Office of Air Resources to be considered acceptable, unless the Office of Air Resources provides written authorization to the permittee to conduct the testing without an observer present. [27.5.7(f)]
- (6) Compliance with the emission limitations shall be based on one hour average concentrations. Emissions testing shall consist of 3 - one hour test runs. Compliance with the emission limitation must be demonstrated utilizing the arithmetic mean of the test runs. [27.5.5]
- (7) A final report of the results of emission testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing. [27.5.7(g)]

c. Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.A.1.c of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

d. Sulfur oxides

Compliance with the sulfur limitations contained in Condition I.A.1.d of this permit shall be determined by procedures referenced in Condition II.U of this permit. [29.6.3(b)]

## 5. Recordkeeping Requirements

- a. The fuel used in multiple combustion units which have equivalent NO<sub>x</sub> emission rates shall be measured and recorded monthly using a single metering device. If more than one type of fuel is used in the multiple combustion units the amount of each type fuel must be measured and recorded monthly. [27.6.3(a)]
- b. The permittee shall record the steam flow for the boilers listed in this section a minimum of once per day and the date, time and measurement shall be recorded when the boilers are in operation. [29.6.3(a) 40 CFR 64]
- c. The permittee shall record the oxygen content of the flue gas for the boilers listed in this section once per day and the date, time and measurement shall be recorded when the boilers are in operation. [29.6.3(b)]

- d. The permittee shall record the FGR fan damper position for the boilers listed in this section once per day and the date, time and measurement shall be recorded when the boilers are in operation. [29.6.3(a), 40 CFR 64]
- e. The permittee shall maintain records of the range of steam flow, the range of oxygen contents and FGR fan damper setting during the most recent boiler tune-up and calibration. The damper position is verified and established during tune-up and calibration and is automatically adjusted by computer to firing rate. [29.6.3(a), 40 CFR 64]
- f. The permittee shall maintain records of any scheduled and unscheduled maintenance to the boilers listed in this section. [29.6.3(b)]
- g. The permittee shall maintain the following records for each boiler listed in this section: [40 CFR 63.11225(c)]
  - (1) As required in §63.10(b)(2)(xiv), the permittee shall keep a copy of each notification and report that is submitted to comply with 40 CFR 63 Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted. [40 CFR 63.11225(c)(1)]
  - (2) The permittee shall keep records to document conformance with the work practices, emission reduction measures, and management practices required by Conditions I.A.2.b and c in this permit as specified in paragraph (2)(a) of this subsection. [40 CFR 63.11225(c)(2)]
    - (a) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which each boiler was tuned. [40 CFR 63.11225(c)(2)(i)]
    - (b) For each boiler required to conduct an energy assessment, the permittee shall keep a copy of the energy assessment report. [40 CFR 63.11225(c)(2)(iii)]
  - (3) Records of the occurrence and duration of each malfunction of each boiler listed in this section, and/or monitoring equipment. [40 CFR 63.11225(c)(4)]
  - (4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition I.A.2.d of this permit, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11225(c)(5)]

- h. If the permittee switched fuels or made a physical change to the any of the boilers listed in this section and the fuel switch or change resulted in the applicability of a different subcategory within Subpart JJJJJ, in the boiler becoming subject to Subpart JJJJJ, or in the boiler switching out of Subpart JJJJJ due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in §63.11237, or the permittee has taken a permit limit that resulted in the permittee being subject to Subpart JJJJJ or no longer being subject to Subpart JJJJJ, the permittee must provide notice of the date upon which the permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: [40 CFR 63.11225(g)]
  - (1) The name of the owner or operator of the boiler, the location of the boiler, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. [40 CFR 63.11225(g)(1)]
  - (2) The date upon which the fuel switch, physical change, or permit limit occurred. [40 CFR 63.11225(g)(2)]
- i. The permittee shall maintain on-site a report containing the information in paragraphs i(1)-(3) of this subsection. [40 CFR 63.11223(b)(6)]
  - (1) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of each boiler listed in this section. [40 CFR 63.11223(b)(6)(i)]
  - (2) A description of any corrective actions taken as a part of the tune-up of each boiler listed in this section. [40 CFR 63.11223(b)(6)(ii)]
  - (3) The type and amount of fuel used over the 12 months prior to the tune-up of each boiler listed in this section, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11223(b)(6)(iii)]
- j. The permittee shall prepare a compliance certification report as specified in paragraphs j(1-2) of this subsection by March 1 following the date of the 5-year tune-up. [40 CFR 63.11225(b)]
  - (1) Company name and address. [40 CFR 63.11225(b)(1)]
  - (2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The notification shall include the

following certification(s) of compliance, as applicable, and signed by a responsible official: [40 CFR 63.11225(b)(2)]

- (i) “This facility complies with the requirements in §63.11223 to conduct a 5-year tune-up, as applicable, of each boiler.” [40 CFR 63.11225(b)(2)(i)]
  - (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.” [40 CFR 63.11225(b)(2)(ii)]
- k. The permittee shall keep records in a suitable and readily available for expeditious review. The permittee shall keep each record for 5 years following the date of each recorded action. The permittee shall keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded actions. The permittee may keep the records off site for the remaining 3 years. [40 CFR 63.11225(d), 63.10(b)(1)]

## **6. Reporting Requirements**

- a. The permittee shall notify the Office of Air Resources whenever the steam flow exceeds the range set during the most recent tune-up for each boiler listed in this section. [29.6.3(a), 40 CFR 64]
- b. The permittee shall notify the Office of Air Resources whenever the oxygen content is outside the normal operating range of 3-8% when firing fuel oil and 2-8% when firing natural gas. [29.6.3(a), 40 CFR 64]
- c. The permittee shall notify the Office of Air Resources whenever the FGR fan damper is not in the correct position for the corresponding boiler load. [29.6.3(b)]
- d. The permittee shall submit, if requested by the Office of Air Resources or USEPA, each report containing the information recorded in Conditions I.A.5.i-j of this permit. [40 CFR 63.11223(b)(6), 40 CFR 63.11225(b)]

## **7. Other Permit Conditions**

- a. The permittee is subject to the requirements of 40 CFR 63, Subpart A (General Provisions) and Subpart JJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers) for the Emission Units in Section I.A of this permit. Compliance with all applicable provisions therein is required. [40 CFR 63.11235, Subpart JJJJJ Table 8]

## **B. Requirements for Emission Unit D005**

The following requirements are applicable to:

- Emission Unit D005, which is a 587 HP Caterpillar engine/generator set, Model No. 3406, which burns #2 fuel oil. D005 is an emergency/standby unit.

### **1. Emissions Limitations**

#### **a. Sulfur oxides**

The sulfur content of fuel oil used in the emergency generator listed in this section or fuel oil stored for use in emergency generator listed in this section shall demonstrate compliance with RI Air Pollution Control Regulation No. 8, "Sulfur Content of Fuels" and Section II.U of this permit. [8.2.1]

#### **b. Opacity**

The permittee shall not emit into the atmosphere, any air contaminant, for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

### **2. Operating Requirements**

a. D005 shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. [27.1.4]

b. D005 shall be operated less than 500 hours, during any consecutive 12-month period. If the hours of operation for D005 exceeds 500 hours in any 12 month period, the unit shall immediately be in compliance with RACT as specified in APC Regulation No. 27. [27.2.3]

### **3. Monitoring Requirements**

a. The permittee shall maintain a non-resettable elapsed time meter on D005 to indicate, in cumulative hours, the elapsed engine operating time. [27.6.10(b)]

### **4. Testing Requirements**

#### **a. Sulfur oxides**

Compliance with the sulfur limitations contained in Condition I.B.1.a of this permit shall be determined by procedures referenced in Condition II.U of this permit.

b. Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.B.1.b of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

**5. Recordkeeping Requirements**

- a. The permittee shall, on a monthly basis, no later than five days after the first of the month, determine and record the hours of operation for D005 for the previous twelve (12) month period. [27.6.10(c)]

**6. Reporting Requirements**

- a. The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any twelve (12) month period exceeds 500 hours for D005. [27.6.10(d)]

**C. Requirements for Emission Units D002, D003 and D004**

The following requirements are applicable to:

- Emission Unit D002, which is a 1502 HP Caterpillar Internal Combustion Engine/Generator Set, Model No. 3508, which burns #2 fuel oil. D002 is an emergency/standby unit. (Approval No. 1748)
- Emission Units D003 and D004, each of which is a 2847 HP Caterpillar Internal Combustion Engine/Generator Set, Model No. 3516B, which burns #2 fuel oil. D003 and D004 are both emergency/standby units. (Approval No. 1675 and 1676)

**1. Emission Limitations**

a. Sulfur Dioxide

The sulfur content of fuel oil used in the emergency generators listed in this section or fuel oil stored for use in the emergency generators listed in this section shall demonstrate compliance with RI Air Pollution Control Regulation No. 8, “Sulfur Content of Fuels” and Section II.U of this permit. [8.2.1]

b. Opacity

Visible emissions from the emergency generators listed in the section shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one-hour. This visible emission limitation shall not apply during startup of an engine. Engine startup shall be defined as the first ten minutes of firing following the initiation of firing. [1.2, Approval

Nos. 1675-1676 (A)(2), 1748 (A)(2)] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

## **2. Operating Requirements**

- a. The maximum firing rate for D002 shall not exceed 71.3 gallons per hour. [Approval No. 1748 (B)(1)]
- b. The maximum firing rate for D003 and D004 shall not exceed 144.5 gallons per hour each. [Approval Nos. 1675-1676 (B)(1)]
- c. Each emergency generator listed in this section shall not operate more than 500 hours each in any 12-month period. [Approval Nos. 1675-1676 (B)(2), 1748 (B)(2), 27.2.3]
- d. The emergency generators listed in this section shall be operated only to provide emergency electrical power in the event of a power outage or for maintenance purposes to assure that each emergency generator listed in this section is in working order. [Approval Nos. 1675-1676 (B)(3), 1748 (B)(3), 27.1.4]
- e. The emergency generators listed in this section shall not be used in conjunction with any utility voluntary demand reduction program. [Approval Nos. 1675-1676 (B)(4), 1748 (B)(4)]

## **3. Monitoring Requirements**

- a. Each engine listed in this section shall each be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time. [Approval Nos. 1675-1676 (C)(1), 1748 (C)(1), 27.6.10(b)]

## **4. Testing Requirements**

- a. Sulfur Dioxide

Compliance with the diesel fuel sulfur limitations contained in Condition I.C.1.a of this permit shall be determined by procedures referenced in Condition II.U of this permit. [Approval Nos. 1675-1676 (D)(1-2), 1748 (D)(1-2)]

- b. Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.C.1.b of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

## **5. Recordkeeping Requirements**

- a. The permittee shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation and fuel use for the engines listed in this section for the previous 12-month period. [Approval Nos. 1675-1676 (E)(1), 1748 (E)(1), 27.6.10(c)]

## **6. Reporting Requirements**

- a. The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceed 500 hours for the emergency generator listed in this section. [Approval Nos. 1675-1676(E)(2), 1748(E)(2), 27.6.10(d)]
- b. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.C of this permit or any other applicable air pollution control rules and regulations. [Approval Nos. 1675-1676(E)(3), 1748(E)(7)]
- c. The permittee shall notify the Office of Air Resources of any noncompliance with the terms of Section I.C of this permit, in writing, within 5 business days of the occurrence and supply the Director with the following information: [Approval Nos. 1675-1676 (E)(7), 1748(E)(8)]
  - (1) The name and location of the facility; [Approval No.1748 (E)(8)(a)]
  - (2) The subject source(s) that caused the noncompliance with the permit term; [Approval No.1748(E)(8)(b)]
  - (3) The time and date of first observation of the incident of noncompliance; [Approval No.1748(E)(8)(c)]
  - (4) The cause and expected duration of the incident of noncompliance; [Approval No.1748(E)(8)(d)]
  - (5) The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate. [Approval No.1748(E)(8)(e)]
  - (6) The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance. [Approval No.1748 (E)(8)(f)]

## **7. Other Requirements**

- a. To the extent consistent with the requirements of Section I.C of this permit and applicable Federal and State laws the emergency generators listed in this section shall be operated in accordance with the representation of the

equipment in the preconstruction permit application. [Approval Nos. 1675-1676 (F)(1), 1748 (F)(1)]

- b. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source. [Approval Nos. 1675-1676 (F)(3), 1748 (F)(3)]

#### **D. Requirements for Emission Units M001, M002 and M003**

The following requirements are applicable to:

- Emission Unit M001, which are two (2) 3M Steri-Vac 5XL above and below sterilization units.
- Emission Unit M002, which are two (2) 3M Steri-Vac 5XL above and below sterilization units.
- Emission Unit M003, which are two (2) 3M Steri-Vac 5XL sterilization units above and XL aerators below.

Emission Units M001, M002 and M003 are associated with air pollution control devices C002, C003 and C004 which are three (3) Donaldson 50 CFM Abators, Model Nos. 1G319274-1, 1G319274-2, and 1G319274-3 respectively.

##### **1. Emission Limitations**

- a. Emissions of ethylene oxide discharged during the sterilization exhaust cycle shall be reduced by 99.9% or greater before being discharged to the atmosphere. [Approval No. 1267-1269(A)(1), Air Toxics Approval No. 1283/04(B)(3)]
- b. Emissions of ethylene oxide discharged during the aeration exhaust cycle shall be reduced by 99.0% or greater, or to the minimum detection limit of the analytical method, before being discharged to the atmosphere. [Approval No. 1267-1269(A)(2), Air Toxics Approval No. 1283/04 (B)(5)]
- c. Emissions of ethylene oxide discharged to the atmosphere from sterilization and aeration, including fugitives, shall not exceed 1.47 lbs. per month (17.6 lbs per year). [Approval No. 1267-1269(A)(3), Air Toxics Approval No. 1283/04 (B)(6)]

## 2. Operating Requirements

- a. The stacks discharging ethylene oxide shall be consistent with the parameters used in the air quality modeling to determine the increase in the ground level ambient concentration of ethylene oxide. The Office of Air Resources, at its sole discretion, may reopen the Air Toxics Operating Permit if it determines that these emission characteristics have changed significantly and that the Air Toxics Operating Permit must be revised to ensure compliance with Air Pollution Control Regulation No. 22.

A summary of these emission characteristics is as follows:

Pollutant emissions from C002, C003 and C004 are discharged through stacks each having a height of 23 feet above grade and a flow rate of 2000 cfm. [Air Toxics Approval No. 1283/04 (C)(1)] [**Not Federally Enforceable**]

- b. Ethylene Oxide shall be used only in the process of sterilization. [Air Toxics Approval No. 1283/04 (B)(1)] [**Not Federally Enforceable**]
- c. Three Donaldson catalytic incineration units, Model 3M Steri-Vac 5XL, shall be used to treat ethylene oxide emissions from the six sterilization units. [Air Toxics Approval No. 1283/04(B)(2)] [**Not Federally Enforceable**]
- d. One Donaldson catalytic incineration unit, Model 3M Steri-Vac 5XL, shall be used to treat ethylene oxide emissions from the two aeration units. [Air Toxics Approval No. 1283/04 (B)(4)] [**Not Federally Enforceable**]
- e. Maximum monthly usage of ethylene oxide at the hospital shall not exceed 68.7 lbs. [Approval No. 1267-1269(B)(1)]
- f. No more than one sterilizer or aerator shall be discharging to a Donaldson abator at any one time. [Approval No. 1267-1269(B)(2)]
- g. The outlet temperature of each control device shall be maintained at or above 280°F whenever ethylene oxide is being discharged to the device. [Approval No. 1267-1269(B)(3)]
- h. C002, C003 and C004 shall be operated according to their design specifications whenever M001, M002, and/or M003 are in operation or are emitting air contaminants. [16.2]
- i. In the case of a malfunction of C002, C003 and/or C004 all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of C002, C003 and/or C004 is expected or may reasonably be expected to continue for longer than 24 hours and if the permittee wishes to operate M001, M002

and/or M003 beyond that period, the Director shall be petitioned for a variance under section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include but is not limited to, the following: [16.3]

- (1) Identification of the specific air pollution control system (i.e. C002, C003 or C004) and the source on which it is installed (M001, M002 or M003), [16.3(a)]
  - (2) The expected period of time that C002, C003 or C004 will be malfunctioning or out of service, [16.3(b)]
  - (3) The nature and quantity of air contaminants likely to be emitted during said period, [16.3(c)]
  - (4) Measures that will be taken to minimize the length of said period, and [16.3(d)]
  - (5) The reasons it would be impossible or impractical to cease the source operation during said period. [16.3(e)]
- j. There shall be no bypassing of C002, C003 and/or C004 during times when the ethylene oxide is being discharged to the device. [Approval No. 1267-1269(F)(1)]

### **3. Monitoring Requirements**

a. Temperature

The outlet temperature of C002, C003 and C004 shall be continuously monitored. [Approval No. 1267-1269 (C)(1)]

b. Catalyst bed activity

The permittee shall, on an annual basis, conduct testing, using the equipment manufacturer's recommended procedures, to determine if the catalyst bed in each control device requires replacement. Testing to evaluate catalyst beds shall not be considered compliance testing. A copy of the results of this testing shall be submitted to the Office within 30 days of completion of the testing. Any catalyst bed determined to be in need of replacement shall be replaced as expeditiously as practicable. [Approval No. 1267-1269(F)(4)]

### **4. Testing Requirements**

- a. All test procedures used for emission testing shall be approved by the Office of Air Resources prior to the performance of any emission test. [Approval No. 1267-1269(D)(3)]

- b. Two copies of an emissions testing protocol shall be submitted to the Office of Air Resources for review and approval prior to the performance of any tests. The permittee shall provide the Office of Air Resources at least 60 days prior notice of any emission test. [Approval No. 1267-1269(D)(2)]
- c. The permittee shall install any and all test ports or platforms necessary to conduct the required testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment. [Approval No. 1267-1269(D)(4)]
- d. All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitations or air quality standards. [Approval No. 1267-1269(D)(5)]
- e. A final report of the results of emissions testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing. [Approval No. 1267-1269(D)(6)]
- f. All stack testing must be observed by the Office of Air Resources or its authorized representatives to be considered acceptable. [Approval No. 1267-1269(D)(7)]
- g. The permittee shall, on an annual basis, conduct testing using the equipment manufacturer's recommended procedures to determine if the catalyst bed requires replacement. Any catalyst bed determined to be in need of replacement shall be replaced as expeditiously as practicable. [Air Toxics Approval No. 1283/04(D)(1)] **[Not Federally Enforceable]**
- h. All test procedures used for emission testing shall be approved by the Office of Air Resources prior to the performance of any emission test. [Air Toxics Approval No. 1283/04(D)(4)] **[Not Federally Enforceable]**
- i. All stack testing must be observed by the Office of Air Resources or its authorized representatives to be considered acceptable. [Air Toxics Approval No.1283/04(D)(5)] **[Not Federally Enforceable]**
- j. Annual testing to evaluate the catalyst bed shall not be construed as a full compliance test. Annual testing shall be conducted in accordance with the approved test protocol and any one of three runs demonstrating proper operation of the catalyst bed shall be acceptable. [Air Toxics Approval No. 1283/04(D)(6)] **[Not Federally Enforceable]**

## 5. Recordkeeping Requirements

- a. The permittee shall maintain the following records:

- (1) The quantity of ethylene oxide, in pounds, used in each sterilizer per day. [Approval No. 1267-1269(E)(1)(a), 29.6.3(b)]
  - (2) The outlet temperature for each control device. [Approval No. 1267-1269(E)(1)(b), 29.6.3(b)]
- b. The permittee shall maintain records of when the catalyst bed is replaced. [Approval No. 1267-1269(E)(4), 29.6.3(b)]
  - c. Temperature

The outlet temperature of each control device shall be continuously recorded. [Approval No. 1267-1269(C)(1), 29.6.3(b)]

## 6. Reporting Requirements

- a. The permittee shall notify the Office of Air Resources of any noncompliance with the terms of Section I.D of this permit, in writing within 48 hours of the occurrence. [Approval No. 1267-1269(E)(3)]
- b. The permittee shall submit the results of the testing in Condition I.D.4.g of this permit to the Office of Air Resources within 30 days of completion of the testing. [Air Toxics Approval No. 1283/04(D)(1)] [**Not Federally Enforceable**]
- c. The permittee shall submit two copies of an emissions testing protocol to the Office of Air Resources for review and approval prior to the performance of any test. [Air Toxics Approval No. 1283/04(D)(2)] [**Not Federally Enforceable**]
- d. The permittee shall provide the Office of Air Resources at least 60 days prior notice of any emissions test. [Air Toxics Approval No. 1283/04(D)(3)] [**Not Federally Enforceable**]

## 7. Other Requirements

- a. To the extent consistent with the requirements of Section I.D of this permit and applicable federal and state laws, the facility shall be operated in accordance with the representation of the facility in the preconstruction permit application. [Approval No. 1267-1269(F)(2)]
- b. The permittee is subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" [as indicated in Table 1 to Subpart WWWW of 40 CFR 63] and 40 CFR 63, Subpart WWWW, National Emission Standards for Hospital Ethylene Oxide Sterilizers. Compliance with all applicable provisions therein is required, unless otherwise stated in this permit. The permittee must comply with applicable requirements in Subpart WWWW no later than December 29, 2008. [40 CFR 63.10382(a), 40 CFR 63.10384(a), 40 CFR 63.10440]

## **E. Requirements for Emission Unit T001**

The following Stage I Vapor Controls requirements are applicable to:

- Emission unit T001, which is an underground 3,000-gallon gasoline storage tank.

### **1. Operating Requirements**

- a. No person may transfer or cause or allow the transfer of gasoline from any delivery vessel into emission unit T001 unless the emission unit is equipped with a submerged fill pipe and the vapors displaced from the emission unit during filling are processed by a vapor control system in accordance with Condition I.E.1.b. [11.5.2.1]
- b. The vapor control system required by Condition I.E.1.a shall include: [11.5.2.2]
  - (1) All vapor connections and lines for T001 shall be equipped with closures that seal upon disconnect. [11.5.2.2(a)]
  - (2) The vapor line from T001 to the gasoline cargo tank shall be vapor-tight, as defined in Air Pollution Control Regulation (APC) 11 Subsection 11.1.14. [11.5.2.2(a)(1)]
  - (3) The Stage I vapor control system shall be designed such that the pressure in the tank truck does not exceed 18 inches of water pressure or 5.0 inches water vacuum during product transfer. [11.5.2.2(c)]
  - (4) The vapor recovery and product adaptors and the method of connection with the delivery elbow shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations. [11.5.2.2(d)]
  - (5) If a gage well separates from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom T001 as specified in APC Regulation 11 Subsection 11.1.8. [11.5.2.2(e)]
  - (6) Liquid fill connections shall be equipped with vapor-tight caps. [11.5.2.2(f)]
- c. The permittee shall repair, replace or modify any worn out or malfunctioning component or element of design. [11.5.2.4(c)]
- d. The operator shall maintain and operate the Stage I vapor control system in accordance with the specifications and the operating and maintenance procedures specified by the permittee. [11.5.2.5(a)]

- e. The Stage I vapor control system required in Condition I.E.1.a shall be subject to the following conditions: [11.5.2.6(a)]
  - (1) The gasoline dispensing system shall be equipped with a CARB-certified Enhanced Vapor Recovery (EVR) Stage I pressure-vacuum (PV) vent valve; [11.5.2.6(a)]
  - (2) The gasoline dispensing system, except those systems with co-axial tank systems, shall be equipped with CARB-certified EVR Stage I rotatable product and vapor adaptors; [11.5.2.6(b)]
  - (3) Any component of a Stage I vapor control system that is replaced after December 25, 2013 shall be replaced with a CARB-certified EVR Stage I component; [11.5.2.6(d)]
  - (4) On and after December 25, 2020, gasoline dispensing systems must be equipped with a CARB-certified EVR Stage I vapor control system or a Stage I vapor control system composed of EVR components; [11.5.2.6(e)]
  - (5) A stainless steel UL-approved spill container that is not EVR certified may be used in the place of an EVR spill container provided that the spill container is not designed to attach to the Stage I vapor control system. [11.5.2.6(g)]

## **2. General Requirements**

- a. The permittee shall use the following measures to minimize vapor releases to the atmosphere: [11.5.3.1]
  - (1) Minimize gasoline spills; [11.5.3.1(a)]
  - (2) Clean up spills as expeditiously as practicable; [11.5.3.1(b)]
  - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and [11.5.3.1(c)]
  - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [11.5.3.1(d)]

## **3. Testing Requirements**

- a. Visually inspect the facility's Stage I vapor control system weekly; [11.5.2.7(a)]
- b. Perform the following Stage I vapor control system tests at least once every twelve months: [11.5.2.7(b)]

- (1) A Pressure Decay 2-inch Test, using CARB test procedure TP-201.3, demonstrating that the static pressure of the system meets the following specification: [11.5.2.7(b)(1)]

$$P_f = 2e^{-500.887/v}$$

Where:

$P_f$  = Minimum allowable final pressure, inches of water.

$v$  = Total ullage affected by the test, gallons.

$e$  = Dimensionless constant equal to approximately 2.718.

$2$  = The initial pressure, inches water;

- (2) A Vapor Tie Test, using the San Diego Air Pollution Control District test procedure TP-96-1, section 5.1.9; [11.5.2.7(b)(2)]
  - (3) A Pressure/Vacuum Vent Valve Test, using CARB test procedure TP-201.1E; [11.5.2.7(b)(3)]
  - (4) For facilities with EVR rotatable product adaptors and/or vapor adaptors, a Static Torque Rotatable Adaptor Test, using CARB test procedure TP-201.1B; and [11.5.2.7(b)(4)]
  - (5) For facilities with a Stage I EVR system, either a Leak Rate of Drop Tube/Drain Valve Assembly Test using CARB test procedure TP-201.1C or a Leak Rate of Drop Tube/Overfill Prevention Devices Test using CARB test procedure TP-201.1D. [11.5.2.7(b)(5)]
- c. Notify the Office of Air Resources of the date that testing will be conducted at least seven (7) days in advance of testing and certify to the Department in writing within 15 days of the test that testing has been completed. Such certification shall be signed by the permittee and shall include a list of Stage I EVR components operating at the facility and the results of the tests required in this subsection. Test results shall be signed and certified as accurate by the person who conducted the tests. [11.5.2.7(c)]
  - d. Immediately replace any component of a Stage I vapor control system that is not operating properly with a properly functioning comparable EVR component. [11.5.2.7(d)]

#### **4. Recordkeeping Requirements**

- a. Maintain the following records for a period of five years and make those records available for inspection by representatives of the Office of Air Resources or the EPA on request: [11.5.2.7(e)]
  - (1) The dates and results of weekly visual inspections as required in Condition I.E.3.a of this permit; [11.5.2.7(e)(1)]

- (2) The dates and results of tests performed pursuant to Condition I.E.3.b of this permit; [11.5.2.7(e)(2)]
- (3) Identification of Stage I vapor control system components that are replaced, the replacement components installed, and dates of such replacements, and [11.5.2.7(e)(3)]
- (4) Gasoline throughput quantities. [11.5.2.7(e)(4)]

## **5. Reporting Requirements**

- a. The operator shall promptly notify the permittee of any schedule maintenance or malfunction requiring replacement or repair of major components in the system. [11.5.2.5(b)]

## **F. Requirements for Emission Unit B006**

The following requirements are applicable to:

- Emission Unit B006, which is a 89.66 MMBTU/hr Nebraska boiler, Model No. NS-D-58-ECON-SH, equipped with a NatCom low-NO<sub>x</sub> burner and flue gas recirculation, capable of burning natural gas only. (Approval No. 1777)

### **1. Emission Limitations**

- a. Nitrogen oxides (as nitrogen dioxide (NO<sub>2</sub>))

The emission rate of nitrogen oxides discharged to the atmosphere from B006 shall not exceed 0.036 pounds per million BTU heat input or 3.24 lbs/hr, whichever is more stringent. [Approval No. 1777(A)(1)(a)]

- b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from B006 shall not exceed 0.037 pounds per million BTU heat input or 3.31 lbs/hr, whichever is more stringent. [Approval No. 1777(A)(1)(b)]

- c. Total Non-methane Hydrocarbons (NMHC)

The emission rate of total non-methane hydrocarbons discharged to the atmosphere from B006 shall not exceed 0.004 pounds per million BTU heat input or 0.36 lbs/hr, whichever is more stringent. [Approval No. 1777(A)(1)(c)]

- c. Particulates

The permittee shall not cause or permit the emissions of particulate matter in excess of 0.1 pounds per million BTU actual heat input. [13.2.1]

d. Opacity

Visible emissions from the B006 exhaust flue shall not exceed 10 percent opacity. [Approval No. 1777(A)(2), 1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

**2. Operating Requirements**

- a. The maximum firing rate of B006 shall not exceed 87,598 ft<sup>3</sup>/hr of natural gas. [Approval No. 1777(B)(1)]
- b. The flue gas recirculation system shall be in full operation whenever B006 is in operation. [Approval No. 1777(B)(2)]

**3. Monitoring Requirements**

- a. Natural gas flow to B006 shall be continuously measured. [Approval No. 1777(C)(1)]
- b. The damper position of the FGR system for emission unit B006 shall be monitored continuously. [29.6.3(a), 40 CFR 64]
- c. Steam flow shall be monitored continuously for B006. [29.6.3(a), 40 CFR 64]
- d. The oxygen content of the flue gas shall be monitored continuously for B006. [29.6.3(a), 40 CFR 64]

**4. Testing Requirements**

a. Particulates

Compliance with the particulate emissions limitations contained in Condition I.F.1.d of this permit, shall be determined by emission testing conducted by the permittee according to Method 5 of 40 CFR 60, Appendix A, or another method approved by the Office of Air Resources and the USEPA, shall be used. [13.3.1]

The requirements of particulate emission testing may be waived if the Director and the USEPA:

- (1) Specifies or approves, in a specific case, the use of a reference method with minor changes in methodology; or
- (2) Approves the use of an equivalent or alternative method the results of which he has determined to be adequate for indicating whether the permittee is in compliance; or

- (3) Finds that the permittee has demonstrated by other means to the Director's and the USEPA's satisfaction that the source is in compliance with the relevant emissions standards. [13.3.3]

In the absence of data from emissions testing, the Director and the USEPA may determine that an emissions unit is or is not in compliance with the emissions limitations of Condition I.F.1.d of this permit based on available information including, but not limited to, type of fuel burned, design of unit, efficiency of air pollution control systems, operating and maintenance procedures, and emission test results on similar units. [13.3.2]

b. Nitrogen oxides

- (1) Emissions testing for B006 shall be conducted at least once every five (5) years to determine compliance with the nitrogen oxide emission limitation. [Approval No. 1777(D)(1)]
- (2) A stack testing protocol shall be submitted to the Office of Air Resources for review a minimum of sixty days (60) prior to the performance of any stack tests. The permittee shall provide the Office of Air Resources at least 60 days prior notice of any stack test. [Approval No. 1777 (D)(2)]
- (3) All test procedures used for stack testing shall be approved by the Office of Air Resources and the USEPA prior to the performance of any stack tests. [Approval No. 1777(D)(3)]
- (4) The permittee shall install any and all test ports or platforms necessary to conduct the required stack testing, provide safe access to any platforms and provide the necessary utilities for sampling and testing equipment. [Approval No. 1777(D)(4)]
- (5) All testing shall be conducted under operating conditions deemed acceptable and representative for the purpose of assessing compliance with the applicable emission limitation. [Approval No. 1777(D)(5)]
- (6) All stack testing must be observed by a representative of the Office of Air Resources to be considered acceptable, unless the Office of Air Resources provides written authorization to the permittee to conduct the testing without an observer present. [Approval No. 1777(D)(6)]
- (7) A final report of the results of stack testing shall be submitted to the Office of Air Resources no later than 60 days following completion of the testing. [Approval No. 1777(D)(7)]

c. Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.F.1.e of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

**5. Recordkeeping Requirements**

- a. Natural gas flow to B006 shall be continuously recorded. [Approval No. 1777(C)(1)]
- b. The permittee shall, on a monthly basis, no later than 5 days after the first of the month, determine the total quantity of natural gas combusted in B006. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval No. 1777 (E)(1), 40 CFR 60.48c(g)(2)]
- c. The permittee shall record the steam flow for B006 a minimum of once per day and the date, time and measurement shall be recorded the boiler is operating. [29.6.3(a), 40 CFR 64]
- d. The permittee shall record the oxygen content of the flue gas for B006 once per day and the date, time and measurement shall be recorded the boiler is operating. [29.6.3(b)]
- e. The permittee shall check the damper position of the FGR system for emission unit B006 once per day and record the date and time the check took place, the boiler load (steam flow). The damper position is verified and established during boiler tune-up and calibration and automatically adjusted by computer to the firing rate. [29.6.3(a), 40 CFR 64]
- f. The permittee shall maintain records of the range of steam flow, the range of oxygen contents and the range of percent flue gas recirculated during the most recent boiler tune-up and recent stack test. [29.6.3(a)-(b)]
- g. The permittee shall maintain records of any scheduled and unscheduled maintenance to emission unit B006. [29.6.3(b)]

**6. Reporting Requirements**

- a. The permittee shall notify the Office of Air Resources whenever the steam flow exceeds the range set during the most recent boiler tune-up and recent stack test. [29.6.3(a), 40 CFR 64]
- b. The permittee shall notify the Office of Air Resources whenever the oxygen content is outside the normal operating range of 2-8% when firing natural gas. [29.6.3(a) 40 CFR 64]

- c. The permittee shall notify the Office of Air Resources whenever the damper position of the FGR system for B006 is not the correct position for the corresponding boiler load. This notification shall be provided in the semi-annual monitoring report required by Condition II.AA.2. [29.6.3(a), 40 CFR 64]
- d. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.F of this permit or any other applicable air pollution control rules and regulations. [Approval No. 1777 (E)(6)]

**7. Other Requirements**

- a. To the extent consistent with the requirements of this permit and applicable federal and state laws, the facility shall be operated in accordance with the representation of the facility in the permit application dated October 2002. [Approval No. 1777(F)(1)]
- b. B006 is subject to the requirements of the Federal New Source Performance Standards 40 CFR 60, Subparts A (General Provisions), and Dc (Small Industrial-Commercial-Institutional Steam Generating Units). Compliance with all applicable provisions of these regulations is required. [Approval No. 1777(F)(3)]
- c. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate B006 in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source. [Approval No. 1777(F)(4)]
- d. The Office of Air Resources may reopen and revise this permit if it determines that:
  - (1) a material mistake was made in establishing the operating restrictions in Condition I.G.1; or,
  - (2) inaccurate emission factors were used in establishing the operating restrictions in Condition I.G.1; or,
  - (3) emission factors have changed as a result of stack testing or emissions monitoring. [Approval No. 1777(f)(2)(F)(5)]

**G. Requirements for Emission Units D006 and D007**

The following requirements are applicable to:

- Emission Unit D006, which is a 2937 HP Caterpillar engine/generator set, Model No. 3516CDITA, which burns #2 fuel oil. D006 is an emergency/standby unit. (General Permit No. GPEG-6)
- Emission Unit D007, which is consist of twin 757 HP Volvo engine/generator sets mounted on a common base frame, Model No. TAD1641GE, each of which burns #2 fuel oil. D007 is an emergency/standby unit. (General Permit No. GPEG-90)

## 1. Emission Limitations

### a. Sulfur Dioxide

The sulfur content of any liquid fuel burned in the emergency engines listed in this section shall not exceed 15 ppm by weight. [General Permit Nos. GPEG-6, 90(A)(1), 40 CFR 60.4207(b)]

### b. Carbon Dioxide

The emission rate of carbon dioxide discharged to the atmosphere from the emergency engines listed in this section shall not exceed 1900 lbs/MWh. [General Permit Nos. GPEG-6, 90(A)(2)]

### c. Opacity

Visible emissions from the emergency engines listed in this section shall not exceed 10% opacity except for a period or periods aggregating no more than three minutes in any one-hour. [1.2] This visible emission limitation shall not apply during startup of the emergency engines listed in this section. Startup shall be defined as the first ten minutes of firing following the initiation of firing. [General Permit Nos. GPEG-6, 90(A)(3)] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]

## 2. Operating Requirements

- The maximum firing rate for D006 shall not exceed 138.9 gallons per hour. [General Permit No. GPEG-6(B)(1)]
- The maximum firing rate for D007 shall not exceed 62.5 gallons per hour, (31.25 gallons per hour for each engine). [General Permit No. GPEG-90(B)(1)]
- D006 shall not operate more than 300 hours in any 12-month period. [General Permit No. GPEG-6(B)(2), 40 CFR 60.4211(f)(1)]
- D007 shall not operate more than 500 hours in any 12-month period. [General Permit No. GPEG-90(B)(2), 40 CFR 60.4211(f)(1)]

e. The permittee shall operate each emergency generator listed in this section according to the requirements in paragraphs e(1-2) of this subsection. In order for the emergency generators listed in this section to be considered an emergency generator, any operation other than emergency operation, maintenance and testing, and emergency demand response, as described in paragraphs e(1-2) of this subsection, is prohibited. If the permittee does not operate the emergency generators listed under this section according to the requirements in paragraphs e(1-2) of this subsection, the emergency generator will not be considered an emergency engine and must meet all requirements for non-emergency engines as specified under 40 CFR Part 60 Subpart III. [40 CFR 60.4211(f)]

(1) The permittee may operate each of the emergency engines listed in this section for any combination of the purposes specified in paragraphs e(1)(a) of this subsection for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (2) of this subsection counts as part of the 100 hours per calendar year allowed by paragraph (1) of this subsection [40 CFR 60. 4211(f)(2)]

(a) Each emergency engines listed in this section may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacture, the vendor or the insurance company associated with the emergency engines listed in this section. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The permittee may petition the RI Office of Air Resources and the USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the emergency engines listed in this section beyond 100 hours per year. The emergency engines listed in this section shall only be used for emergency operation, maintenance and testing. [40 CFR 60.4211(f)(2)(i)]

(2) Each emergency generator listed in this section may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph e(1) of this subsection. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]

- f. The permittee must do all of the following: [40 CFR 60.4211(a)]
- (1) Operate and maintain each emergency generator listed in this section and control device (of any) according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
  - (2) Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
  - (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)(3)]
- g. Each emergency engines listed in this section shall be used only during emergencies or for maintenance or testing purposes. Emergency means an electric power outage due to a failure of the electrical grid, on-site disaster, local equipment failure, or public service emergencies such as flood, fire, or natural disaster. Emergency shall also mean periods during which ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions. [43.1.5, Approval Nos. GPEG-6, 90(B)(3)]
- h. Each emergency engines listed in this section shall not be operated in conjunction with any voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant or system operator unless such program is implemented at the same time as ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions. <sup>1</sup> [43.4.1, Approval Nos. GPEG-6, 90(B)(4)]
- i. Each engine must be installed and configured according to the manufacturer's emissions related specifications, except as permitted in Condition 2.j of this subsection. [40 CFR 60.4211(c)]

---

<sup>1</sup> Be advised that on May 4, 2016, the U.S. Court of Appeals for the D.C. Circuit **vacated** the provisions of 40 CFR 60, Subpart III – “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”, which allowed emergency engines to operate for up to 100 hours for emergency demand response when the Reliability Coordinator has declared an Energy Emergency Alert Level 2 or for voltage or frequency deviations of 5 percent or greater below standard voltage or frequency. Specifically, the provisions in 40 CFR 60.4211(f)(2)(ii)-(iii) were vacated. Therefore, if you plan to operate your emergency generator to address voltage or frequency deviations or in emergency demand response, you must apply for a modification to your minor source permits to allow the units to be operated in non-emergency situations.

- j. If the permittee does not install, configure, operate, and maintain each emergency generator listed in this section and control device (if any) according to the manufacturer's emission-related written instructions, or if the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows: [40 CFR 60.4211(g)]
  - (1) For the emergency generators listed in this section the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate each emergency generator listed in this section in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation for 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g)(3)]
- k. The permittee must operate and maintain each emergency generator listed in the section to achieve the emission standards as required in §60.4205 over the entire life of the engine. [40 CFR 60.4206]

### **3. Monitoring Requirements**

- a. The emergency engines listed in this section shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time for the unit. [43.7.1, General Permit Nos. GPEG-6, 90(C)(1), 40 CFR 60.4209(a)]

### **4. Testing Requirements**

- a. Sulfur

Compliance with the sulfur limitations contained in Condition I.G.1.a of this permit shall be determined by procedures referenced in Condition II.U.2 of this permit. [43.8.1(c), General Permit Nos. GPEG-6, 90 (D)(1)]

- b. Opacity

Test for determining compliance with the opacity emissions limitations specified in Condition I.G.1.c of this permit shall be performed per 40 CFR

60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

## **5. Recordkeeping Requirements**

- a. The permittee shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation for each emergency engine listed in this section for the previous 12-month period. [43.8.1(a), General Permit Nos. GPEG-6, 90(E)(1)]
- b. The permittee shall maintain copies of all fuel supplier certifications and these copies shall be made accessible for review by the Office of Air Resources or its authorized representative and USEPA. [General Permit No. GPEG-6(E)(4), General Permit No. GPEG-90(E)(5)]
- c. The permittee must keep records of the operation of D007 in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

## **6. Reporting Requirements**

- a. The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceeds 300 hours for D006. [43.8.1(b), General Permit No. GPEG-6(E)(2)]
- b. The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceeds 500 hours for D007. [43.8.1(b), General Permit No. GPEG-90(E)(2)]
- c. The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.G or any other applicable air pollution control rules and regulations. [General Permit Nos. GPEG-6, 90(E)(3)]

## **7. Other Requirements**

- a. To the extent consistent with the requirements of Section I.G of this permit and applicable Federal and State laws, the emergency engines listed in this section shall be designed, constructed and operated in accordance with the representation of the equipment in the permit application. [General Permit Nos. GPEG-6, 90(F)(1)]
- b. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the emergency engines listed in this section in a manner consistent with good air pollution control practice for minimizing emissions. Determination of

whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the emergency engines listed in this section. [General Permit Nos. GPEG-6, 90(F)(3)]

- c. The permittee is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and Subpart III (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) for the emission units in Section I.G of this permit. Compliance with all applicable provisions therein is required. [40 CFR 60.4218, General Permit No. GPEG-90(F)(4)]

## **H. Requirements for Emission Units T002, T003 and T004**

The following requirements are applicable to:

- Emission unit T002, which is an aboveground 3,050 gallon ultra-low sulfur diesel storage tank.
- Emission unit T003, which is an aboveground 3,200 gallon ultra-low sulfur diesel storage tank.
- Emission unit T004, which is an aboveground 3,200 gallon ultra-low sulfur diesel storage tank.

There are no specific requirements for T002, T003 and T004. This does not relieve the permittee from compliance with the provisions of the General Conditions, outlined in Section II of this permit, as they apply to T002, T003 and T004.

## **I. Facility Requirements**

1. The combined quantity of natural gas and diesel fuel oil combusted in B006, D002, D003 and D004 shall be limited to 1,296,000,000 cubic feet of natural gas equivalents or less for any consecutive 12-month period. For purposes of this limitation, each gallon of diesel fuel oil combusted in D002 shall be considered equivalent to 9158 cubic feet of natural gas. Each gallon of diesel fuel oil combusted in either D003 or D004 shall be considered equivalent to 6,405 cubic feet of natural gas. [Approval No. 1777 (B)(3)(a)]
2. The permittee shall notify the Office of Air Resources, in writing within 30 days, whenever the fuel usage for B006, D002, D003 and D004 exceeds 1,296,000,000 cubic feet of natural gas equivalents in any consecutive 12-month period for the combined quantity of natural gas and diesel fuel oil. [Approval No. 1777 (E)(2)]

## SECTION II. GENERAL CONDITIONS

---

### A. Annual Emissions Fee Payment

The permittee shall pay an annual emissions fee as established in Air Pollution Control Regulation No. 28 "Operating Permit Fees". [29.6.8(d)]

### B. Permit Renewal and Expiration

This permit is issued for a fixed term of 5 years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least 12 months prior to the date of permit expiration. Upon receipt of a complete and timely application for renewal, this source may continue to operate subject to final action by the Office of Air Resources on the renewal application. In such an event, the permit shield in Condition II.AA of this permit shall extend beyond the original permit term until renewal. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by the Office of Air Resources any additional information identified as being needed to process the application. The application for renewal shall include the current permit number, description of permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. [29.6.8(a), 29.4.2(c), 29.4.6]

### C. Transfer of Ownership or Operation

This permit is nontransferable by the permittee. Future owners and operators must obtain a new operating permit from the Office of Air Resources. A change in ownership or operational control of this source is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Office of Air Resources. [29.10.1(a)(4)]

### D. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [29.6.8(c)(4)]

**E. Submissions**

1. Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to:

RIDEM - Office Air Resources  
Compliance Assurance Section  
235 Promenade St., Room 230  
Providence, RI 02908

2. Any records, compliance certifications and monitoring data required by the provisions of this permit to be submitted to USEPA shall be sent to:

USEPA Region 1  
Office of Environmental Stewardship  
Director, Air Compliance Program  
Attn: Air Compliance Clerk  
5 Post Office Square Suite 100  
Boston, MA 02109-3912

3. Any document submitted shall be certified as being true, accurate, and complete by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. [29.6.8(e)]

**F. Inspection and Entry**

1. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter this facility at all reasonable times for the purpose of: [29.6.8(f)(1)]
  - a. having access to and copying at reasonable times any records that must be kept under the conditions of this permit; [29.6.8(f)(2)]
  - b. inspecting at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and [29.6.8(f)(3)]
  - c. sampling or monitoring, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements. [RIGL 23-23-5(7), 29.6.8(f)(4), Approval Nos. 1675-1676 (F)(2), Approval No. 1748(F)(2), Approval No. 1777(F)(2), General Permit Nos. GPEG-6, 90(F)(2)]

Nothing in this condition shall limit the ability of USEPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the Clean Air Act.

## **G. Compliance**

1. The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Clean Air Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Any noncompliance with a permit condition designated as not federally enforceable constitutes a violation of state rules only and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. [29.6.8(c)(1)]
2. For each unit at the facility for which an applicable requirement becomes effective during the permit term, the permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [29.6.5(a)]
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [29.6.8(c)(2)]

## **H. Excess Emissions Due to an Emergency**

As the term is used in this condition an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, 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. [29.6.11(b)]

Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain a health based air quality standard.

The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that: [29.6.11(a) & 29.6.11(c)]

1. an emergency occurred and that the permittee can identify the cause(s) of the emergency; [29.6.11(c)(1)]
2. the permitted facility was at the time being properly operated; [29.6.11(c)(2)]

3. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and [29.6.11(c)(3)]
4. the permittee submitted notice of the emergency to the Office of Air Resources within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirements of Condition II.CC.3 of this permit. [29.6.11(c)(4)]

The permittee shall have the burden of proof in seeking to establish the occurrence of an emergency. [29.6.11(d)]

**I. Duty to Provide Information**

The permittee shall furnish to the Office of Air Resources, within a reasonable time, any pertinent information that the Office of Air Resources may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Office of Air Resources copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [29.6.8(c)(5)]

**J. Duty to Supplement**

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the Office of Air Resources. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit. [29.5.4]

**K. Reopening for Cause**

The Office of Air Resources will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

1. Additional requirements under the Clean Air Act become applicable to a major source 3 or more years prior to the expiration date of this permit. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit, unless this permit or any of its terms and conditions have been extended. [29.6.13(a)]
2. The Office of Air Resources or the Administrator determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. [29.6.13(c)]

3. The Office of Air Resources or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [29.6.13(d)]

Reopening shall not be initiated before a notice of intent to reopen is provided to the permittee by the Office of Air Resources at least 30 days in advance of the date that this permit is to be reopened, except that the Office of Air Resources may provide a shorter time period (but not less than five days) in the case of an emergency. [29.9.5(b)]

Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. [29.9.5(a)]

All permit conditions remain in effect until such time as the Office of Air Resources takes final action. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [§70.6(a)(6)(iii)]

**L. Severability Clause**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [29.6.8(b)]

**M. Off-Permit Changes**

1. The permittee is allowed to make certain changes that are not addressed or prohibited by this permit without a permit revision, provided that the following conditions are met: [29.11.2(a)]
  - a. Each such change shall not violate any term or condition of this permit. [29.11.2(b)]
  - b. Each change shall comply with all applicable requirements. [29.11.2(b)]
  - c. Changes under this provision may not include changes or activities subject to any requirement under Title IV or modifications under any provision of Title I of the Clean Air Act. [29.11.2(a)]
  - d. Before the permit change is made, the permittee must provide contemporaneous written notice to the Office of Air Resources and the USEPA Region I, except for changes that qualify as insignificant activities in Appendix A of APC Regulation No. 29. This notice shall describe each change, including the date, and change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change. [29.11.2(c)]

- e. The permit shield does not apply to changes made under this provision. [29.11.2(d)]
  - f. The permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes, including any other data necessary to show compliance with applicable ambient air quality standards. The record shall reside at the permittee's facility. [29.11.2(e)]
- 2. Changes made pursuant to this provision shall not be exempt from the requirement to obtain a minor source permit pursuant to the requirements of Air Pollution Control Regulation No. 9, if applicable. [29.11.2(a)]
  - 3. Changes made pursuant to this provision shall be incorporated into this permit at the time of renewal. [29.11.2(f)]

**N. Section 502(b)(10) Changes**

- 1. The permittee is allowed to make changes within this permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, whether expressed therein as a rate of emissions or in terms of total emissions and are not Title I modifications. This class of changes does not include:
  - a. changes that would violate applicable requirements; or
  - b. changes to federally-enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements. [29.11.1(a), 29.1.36]
- 2. The permittee shall provide written notice to the Office of Air Resources and the USEPA Region I of any change made under this provision. The notice must be received by the Office of Air Resources no later than fourteen (14) days in advance of the proposed changes. The notice shall include information describing the nature of the change, the effect of the change on the emission of any air contaminant, the scheduled completion date of the planned change and identify any permit terms or conditions that are no longer applicable as a result of the change. The permittee shall attach each notice to its copy of this permit. [29.11.1(a)(1), 29.11.1(a)(2)]
- 3. The permittee shall be allowed to make such change proposed in its notice the day following the last day of the advance notice described in paragraph 2 if the Office of Air Resources has not responded nor objected to the proposed change on or before that day. [29.11.1(b)]
- 4. Any permit shield provided in this permit does not apply to changes made under this provision. If subsequent changes cause the permittee's operations and emissions to revert to those anticipated in this permit, the permittee resumes

compliance with the terms and conditions of the permit, and has provided the Office of Air Resources and USEPA with a minimum of fourteen (14) days advance notice of such changes in accordance with the provisions of paragraph 2, the permit shield shall be reinstated in accordance with terms and conditions stated in this permit. [29.11.1(c)]

5. Changes made pursuant to this provision shall be incorporated into the operating permit at the time of renewal. [29.11.1(d)]

**O. Emissions Trading**

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [29.6.6(a)]

**P. Emission of Air Contaminants Detrimental to Person or Property**

The permittee shall not emit any air contaminant which either alone or in connection with other emissions, by reason of their concentration or duration, may be injurious to human, plant or animal life, or cause damage to property or which unreasonably interferes with the enjoyment of life or property. [7.2]

**Q. Odors**

1. The permittee shall not emit or cause to be emitted into the atmosphere any air contaminant or combination of air contaminants which creates an objectionable odor beyond the property line of this facility. [17.2]
2. A staff member of the Office of Air Resources shall determine by personal observation if an odor is objectionable, taking into account its nature, concentration, location, duration and source. [17.3]

**R. Visible Emissions**

1. Except as may be specified in other provisions of this permit, the permittee shall not emit into the atmosphere, from any emission unit, any air contaminant, for a period or periods aggregating more than three minutes in any one hour, which is greater than or equal to 20 percent opacity. [1.2] Where the presence of uncombined water is the only reason for failure to meet this requirement, such failure shall not be a violation of this permit. [1.4]
2. Tests for determining compliance with the opacity limitations specified in this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers must qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

**S. Open Fires**

It shall be unlawful for the permittee to burn any material in an open fire, except as provided in APC Regulation No. 4, Section 4.3. [4.2]

**T. Construction Permits**

It shall be unlawful for the permittee to construct, install, modify or cause the construction, installation or modification of any stationary source subject to the provisions of APC Regulation No. 9 without obtaining either a minor source permit or a major source permit from the Director. [9.2.1]

**U. Fuel Oil**

1. Unless the Director determines, pursuant to Conditions II.U.7 and 8 of this permit, that a shortage of fuel oil meeting the requirements of this permit exists, the permittee shall not use or store fuel oil having a sulfur content in excess of the following, except for use with marine vessels and motor vehicles: [8.2.1, 8.3.3]
  - a. Through 30 June 2018, all distillate or biodiesel fuel oil burned at the facility shall contain no more than 0.05 percent sulfur by weight (500 ppm);
  - b. On or after 1 July 2018 all distillate or biodiesel fuel oil burned at the facility shall contain no more than 0.0015 percent sulfur by weight (15 ppm).
  - c. Through 30 June 2018, all residual fuel oil burned at the facility shall contain no more than 1.0 percent sulfur by weight;
  - d. On or after 1 July 2018 all residual fuel oil burned at the facility shall contain no more than 0.5 percent sulfur by weight (5000 ppm).
2. Fuel oil stored at the facility that met the applicable requirements of subsection II.U.1 at the time the fuel oil was received for storage at the facility may be stored for use after the effective date in II.U.1. [8.3.2]
3. Compliance with the sulfur in fuel limitations contained in this section shall be determined by procedures referenced below or deemed equivalent by the Director. Such procedures shall include but not be limited to any of the following: [8.4.1]
  - a. Emission testing conducted by the permittee according to the Reference Methods of Appendix A to 40 CFR 60; or [8.4.1.a]
  - b. For each shipment of fuel oil, the permittee shall obtain a certification from the fuel supplier which contains: [8.4.1.b, 29.6.3(b)]
    - (1) the name of the supplier and the date the fuel oil was received from the supplier; and, [8.4.1.b(1)]

- (2) the sulfur content of the fuel oil; and, [8.4.1.b(2)]
    - (3) the date and location of the fuel oil when the sample was drawn for analysis to determine the sulfur content of the fuel oil, specifically including where the fuel oil was sampled; or [8.4.1.b(3)]
  - c. Laboratory analysis of fuel oils by the permittee or by the supplier. Sampling and analysis shall be conducted after each new shipment of fuel oil is received by the permittee. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel oil is combusted. All fuel oil must be sampled and analyzed in accordance with applicable ASTM methods or another method which has the prior approval of or are required by the Director; or [27.6.6, 8.4.1.c]
  - d. A continuous monitoring system for the measurement of sulfur dioxide that meets the performance specifications in Appendix B of 40 CFR 60. The monitoring equipment shall also be installed, calibrated, operated, and maintained in accordance with the procedures in Appendix B of 40 CFR 60 and the minimum specifications in Appendix P of 40 CFR 51. [8.4.1.d]
4. The Director may require, under his supervision, the collection of fossil fuel samples for the purpose of determining compliance with the sulfur limitations in this permit. [8.4.3]
5. For residual oil, the fuel supplier's certification shall also contain the following information:
  - (a) The nitrogen content of the oil and the ASTM method used to determine the nitrogen content of the oil,
  - (b) The location of the oil when the sample was drawn for analysis to determine the nitrogen content of the oil, specifically including whether the oil was sampled as delivered to the permittee or whether the sample was drawn from oil in storage at the oil suppliers/refiners facility or another location. [27.6.5 (a)-(d)]
6. Copies of the fuel oil certification or fuel oil analyses shall be maintained at the facility and be made accessible for review by the Office of Air Resources or its authorized representatives and USEPA. These records shall include a certified statement, signed by a responsible official, that the records represent all of the fuel combusted during each quarter. [8.5.1, 27.6.7, Approval Nos. 1675-1676 (E)(4), 1571(E)(5), 1748(E)(5), GPEG-6(E)(4), GPEG-90(E)(5)]
7. The Director may, upon application, defer compliance with Conditions II.U.1 of this permit where compliance is not possible because of breakdowns or malfunction of equipment, acts of God, other unavoidable casualties or for good cause shown; provided that the order shall not defer compliance for more than three (3) months. [8.7.1]

8. The Director shall notify the Administrator within five (5) business days after issuing an order deferring compliance with Conditions II.U.1 of this permit. [8.7.2]

**V. Air Pollution Episodes**

Conditions justifying the proclamation of an air pollution alert, air pollution warning or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. If the governor declares an air pollution alert, air pollution warning or air pollution emergency, the permittee shall comply with the applicable requirements contained in APC Regulation No. 10. [10.1]

**W. Fugitive Dust**

The permittee shall not cause or permit any materials, including but not limited to sand, gravel, soil, aggregate and any other organic or inorganic solid matter capable of releasing dust, to be handled, transported, mined, quarried, stored or otherwise utilized in any way so as to cause airborne particulate matter to travel beyond the property line of the facility without taking adequate precautions to prevent particulate matter from becoming airborne. Such precaution shall be in accordance with good industrial practice as determined by the Director and/or shall be other reasonable fugitive dust prevention measures as determined by the Director. [5.3]

**X. Adhesives and Sealants**

Except as provided in subsections 44.2.2-44.2.4 of Air Pollution Control Regulation No. 44, the permittee shall comply with all applicable provisions of Air Pollution Control Regulation No. 44 if the permittee sells, offers for sale supplies or manufactures any adhesive, sealant, adhesive primer or sealant primer for use within the State of Rhode Island or uses or solicits the use of any adhesive, sealant, adhesive primer or sealant primer within the State of Rhode Island. [44.2.1]

**Y. Architectural and Industrial Maintenance Coatings**

Except as provided in subsection 33.2.2 of Air Pollution Control Regulation No. 33, the permittee shall comply with all applicable provisions of Air Pollution Control Regulation No. 33 if the permittee sells, offers for sale, or supplies or manufactures an architectural coating for use within the State of Rhode Island or applies an architectural coating for compensation, or solicits the application of any architectural coating within the State of Rhode Island. [33.2.1]

**Z. Compliance Certifications**

1. The permittee shall submit a certification of compliance with permit terms and conditions annually. [29.6.5(c)(1)]
2. The certification shall describe the following:

- a. the permit term or condition that is the basis of the certification; [29.6.5(c)(3)a]
  - b. the current compliance status; [29.6.5(c)(3)(b)]
  - c. whether compliance was continuous or intermittent; and [29.6.5(c)(3)c]
  - d. the methods used for determining compliance, currently and over the reporting period. [29.6.5(c)(3)d]
3. All compliance certifications shall be submitted to the Office of Air Resources and to the USEPA Region I. It shall be submitted within 60 days following the end of the reporting period which is the calendar year unless otherwise specified. [29.6.5(c)(4)]
  4. All compliance certifications shall be certified as being true, accurate, and complete by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. [29.6.8(e)]

**AA. Permit Shield**

1. Compliance with the terms and conditions of this permit shall be deemed compliance with all requirements applicable to the source in the following: Approval Nos. 1267-1269, 1675-1676, 1748, 1777, General Permits No. GPEG-6 and GPEG-90, Air Toxics Approval No. 1283/04; 40 CFR 60 Subpart A, III, 40 CFR 63 Subpart A, JJJJJ and RI APC Regulations Nos. 1, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 16, 17, 22, 27, 28, 29, 33, 43 and 44. [29.6.12(a)(1)]
2. The Office of Air Resources has determined that Emission Units B002, B003, B004, B005, B006, D002, D003, D004, D005, D006, D007, T001, T002, T003, T004, M001, M002 and M003 are not subject to the following: RI APC Regulations Nos. 3, 12, 15, 19, 20, 21, 23, 25, 26, 30, 31, 32, 35, 36, 39, 46 and 47. [29.6.12(a)(2)]
3. Nothing in this permit shall alter or affect the following:
  - a. the provisions of Section 303 of the Clean Air Act, including the authority of USEPA under that Section. [29.6.12(c)(1)]
  - b. the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [29.6.12(c)(2)]
  - c. the applicable requirements of the acid rain program consistent with Section 408 of the Act. [29.6.12(c)(3)]
  - d. the ability of the USEPA to obtain information under Section 114 of the Act. [29.6.12(c)(4)]

4. If it is determined that this operating permit was issued based on inaccurate or incomplete information provided by the permittee, this permit shield shall be void as to the portions of this permit which are affected, directly and indirectly, by the inaccurate or incomplete information. [29.6.12(d)]

**BB. Recordkeeping**

1. The permittee shall, at the request of the Director, provide data on operational processes, fuel usage, raw materials, stack dimensions, exhaust gas flow rates and temperatures, emissions of air contaminants, steam or hot water generator capacities, types of equipment producing air contaminants and air pollution control systems or other data that may be necessary to determine if the facility is in compliance with air pollution control regulations. [14.2.1]
2. All records and supporting information required by this permit shall be maintained at the permittee's 593 Eddy Street facility for a period of at least 5 years from the date of sample monitoring, measurement, report or application, and shall be made available to representatives of the Office of Air Resources and USEPA upon request. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [11.10.3.9(a-e), 11.5.3.2, 14.2.1, 29.6.4(a)(2), 27.6.11, Approval Nos. 1675-1676 (E)(8), 1748 (E)(9), Approval No. 1777(E)(8), 40 CFR 60.48c(i), General Permit Nos. GPEG-6, 90(E)(8)]
3. The permittee shall keep records of required monitoring information that include the following:
  - a. The date, place, and time of sampling or measurements; [29.6.4(a)(1)a]
  - b. The date(s) analyses were performed; [29.6.4(a)(1)b]
  - c. The company or entity that performed the analyses; [29.6.4(a)(1)c]
  - d. The analytical techniques or methods used; [29.6.4(a)(1)d]
  - e. The results of such analyses; and [29.6.4(a)(1)e]
  - f. The operating conditions as existing at the time of sampling or measurement. [29.6.4(a)(1)f]

**CC. Reporting**

1. The information recorded by the permittee pursuant to Condition II.BB.1 of this Section shall be summarized and reported at least annually to the Director. It shall be submitted by April 15<sup>th</sup> unless otherwise specified. Information submitted pursuant to this condition will be correlated with applicable emissions limitations and other applicable emissions information and will be available for public inspection. [14.2.2, 14.2.3]

2. The permittee shall submit reports of any required monitoring for each semiannual period ending 30 June and 31 December of each calendar year. These reports shall be due to the Office of Air Resources no later than forty-five (45) days after the end of the reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with condition II.Z.4. [29.6.4(b)(1)]
3. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. A copy of any such report shall be sent to the USEPA Region I. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. Each report must be certified by a responsible official consistent with Condition II.Z.4 of this permit. [29.6.4(b)(2), Approval No. 1777(E)(7)]
4. The Office of Air Resources shall be notified in writing of any planned physical change or operational change to the emissions units and control devices identified in this permit. Such notification shall include information describing the nature of the change, information describing the effect of the change on the emissions of air contaminants and the scheduled completion date of the planned change. Any change which may result in an increased emission rate of any air contaminant shall be subject to approval of the Office of Air Resources. [Approval Nos. 1267-1269(E)(5), Approval Nos. 1675-1676 (E)(6), Approval No. 1748 (E)(6), Approval No. 1777(E)(5), General Permit Nos. GPEG-6, 90(E)(6)]

**DD. Credible Evidence**

For the purpose of submitting compliance certifications or establishing whether or not the permittee has violated or is in violation of any provision of this permit, the methods listed in this permit shall be used, as applicable. However, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the permittee would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed. [40 CFR 51.212(c), 51.12(c), 52.33(a)]

**EE. Emission Statements**

1. The permittee shall submit annually an emission statement which includes information for both VOC and NO<sub>x</sub> if facility wide actual emissions are 25 tons per year of either pollutant. Emission statements shall be submitted to the Director on April 15<sup>th</sup> of each year unless otherwise specified. The permittee may apply to the Office of Air Resources to be allowed to discontinue submitting annual emission statements if actual emissions at the facility decrease to below 10 tons per year as a result of a permanent process change. [14.3.1]

The permittee shall submit an emission statement in a format approved by the Office of Air Resources. The emission statement shall contain the following information: [14.3.2]

- a. A certification that the information contained in the emission statement is accurate and complete to the best knowledge of the certifying individual.
- b. The full name, title, signature, date of signature, and telephone number of the certifying individual.
- c. Facility identification information, including the full name, physical location, mailing address, latitude, longitude, and four digit SIC code(s).
- d. Process data pertaining to each process emitting VOC and/or NO<sub>x</sub>, including:
  - (1) Annual and typical ozone season daily fuel use,
  - (2) Annual and typical ozone season daily process rate(s), and
  - (3) Process throughput while air pollution control equipment was not in operation.
- e. Operating data pertaining to each process emitting VOC and/or NO<sub>x</sub> during the reporting year, including:
  - (1) Percentage annual throughput,
  - (2) Average hours of operation per day during the reporting year and on a typical ozone season day,
  - (3) Average number of days of operation per week during the reporting year and during a typical ozone season week, and
  - (4) Weeks of operation during the reporting year and during the peak ozone season.
- f. Control equipment information, including:
  - (1) Specific primary and secondary control equipment for each process emitting VOC and/or NO<sub>x</sub>,
  - (2) Current overall control efficiency for each piece of control equipment (indicated by percent capture and percent destruction or removal), and
  - (3) Control equipment downtime during the reporting year and during the peak ozone season.
- g. Emissions information, including:
  - (1) Actual annual and typical ozone season daily emissions of VOC and NO<sub>x</sub> for each process. Emissions should be reported in tons per year and in pounds per day.
  - (2) A description of the emission calculation method and, if applicable, emission factor(s) used, and
  - (3) The calendar year for which emissions are reported.
- h. Any additional information required by the Director to document the facility's emission statements.

**FF. Miscellaneous Conditions**

1. This permit may be modified, revoked, reopened, reissued or terminated for cause. The filing of a request, by the permittee, for a permit modification, revocation and reissuance or termination or of a notification of planned changes or anticipated noncompliance does not release the permittee from the conditions of this permit. [29.6.8(c)(3)]
2. Any application for a permit revision need only submit information related to the proposed change. [29.4.3(c)]
3. Terms not otherwise defined in this permit shall have the meaning given to such terms in the referenced regulation.
4. Where more than one condition in this permit applies to an emission unit and/or the entire facility, the most stringent condition shall apply.

## SECTION III. SPECIAL CONDITIONS

---

### A. Ozone-depleting Substances

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

1. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers containing a class I or class II substance that is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR 82.106.
  - b. The placement of the required warning statement must comply with the requirements of 40 CFR 82.108.
  - c. The form of the label bearing the required warning statement must comply with the requirements of 40 CFR 82.110.
  - d. No person may modify, remove or interfere with the required warning statement except as described in 40 CFR 82.112.
  
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVAC) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices of 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment of 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152) must comply with recordkeeping requirements of 40 CFR 82.166.
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair equipment requirements of 40 CFR 82.156.

- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
3. If the permittee manufactures, transforms, imports or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners".

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the airtight sealed refrigeration system used as refrigerated cargo or system used on passenger buses using HCFC-22 refrigerant.

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

## **B. Prevention of Accidental Releases**

This section contains air pollution control requirements that are applicable to this facility, and the United States Environmental Protection Agency enforces these requirements.

Your facility is subject to the requirements of the General Duty Clause, under 112(r)(1) of the CAA Amendments of 1990. This clause specifies that owners or operators of stationary sources producing, processing, handling or storing a chemical in any quantity listed in 40 CFR Part 68 or any other extremely hazardous substance have a general duty to identify hazards associated with these substances and to design, operate and maintain a safe facility, in order to prevent releases and to minimize the consequences of accidental releases which may occur.