



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

OPERATING PERMIT

University of Rhode Island

FINAL PERMIT NO. RI-13-17

(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:

University of Rhode Island
523 Plains Road
Kingston, RI 02881

This permit shall be effective from the date of its issuance. All terms and conditions of the permit are enforceable by the 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

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SECTION I. SOURCE SPECIFIC CONDITIONS

A. Boilers

1. Requirements for Emission Units B001, B002, B003, B004, B101 and B102

The following requirements are applicable to:

- Emission Unit B001, which is a 36.3 MMBTU/hr Babcock and Wilcox water tube boiler, Model No. 9-52, equipped with a Todd/Variflame low-NO_x burner and flue gas recirculation and an oxygen trim system, capable of burning #2 fuel oil and natural gas to produce a maximum of 30,000 lbs/hr of steam. (Approval No. 1468)
- Emission Units B002 and B003, which are 72.4 MMBTU/hr Babcock and Wilcox water tube boilers, Model No. 103-66, equipped with a Todd/Variflame low-NO_x burners and flue gas recirculation and an oxygen trim system, capable of burning #2 fuel oil and natural gas to produce a maximum of 60,000 lbs/hr of steam each. (Approval No. 1469 - 1470)
- Emission Unit B004, which is a 96.5 MMBTU/hr Babcock and Wilcox water tube boiler, Model No. 103-79, equipped with a Todd/Variflame low-NO_x burners and flue gas recirculation and an oxygen trim system, capable of burning #2 fuel oil and natural gas to produce a maximum of 80,000 lbs/hr of steam. (Approval No. 1471)
- Emission Unit B101, which is a 2.51 MMBTU/hr Cleaver Brooks fire tube boiler, Model No. CB 100-600, which burns #2 fuel oil.
- Emission Unit B102, which is a 4.18 MMBTU/hr Hurst fire tube boiler, Model No. N.B. 2461, which burns #2 fuel oil.

a. **Emission Limitations**

(1) **Opacity**

- (a) Visible emissions from Emission Unit B001-B004 shall not exceed 10% opacity (6-minute average). [Approval Nos. 1468-1471(D)(7), 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]
- (b) 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% opacity from Emission Units B101 and B102. [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) **Natural Gas Firing**

(a) **Nitrogen Oxides (as nitrogen dioxide (NO₂))**

- (i) The emission rate of nitrogen oxides discharged to the atmosphere from Emission Unit B001 shall not exceed 0.034 lbs per million BTU heat input or 1.23 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(1)(a)]
- (ii) The emission rate of nitrogen oxides discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.034 lbs per million BTU heat input or 2.46 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(B)(1)(a)]
- (iii) The emission rate of nitrogen oxides discharged to the atmosphere from Emission Unit B004 shall not exceed 0.034 lbs per million BTU heat input or 3.28 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(1)(a)]

(b) **Carbon Monoxide (CO)**

- (i) The emission rate of carbon monoxide discharged to the atmosphere from Emission Unit B001 shall not exceed 0.15 lbs per million BTU heat input or 5.45 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(1)(b)]
- (ii) The emission rate of carbon monoxide discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.15 lbs per million BTU heat input or 10.9 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(B)(1)(b)]
- (iii) The emission rate of carbon monoxide discharged to the atmosphere from Emission Unit B004 shall not exceed 0.15 lbs per million BTU heat input or 14.5 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(1)(b)]

(c) **Total Non-Methane Hydrocarbons (NMHC)**

- (i) The emission rate of total non-methane hydrocarbons discharged to the atmosphere from Emission Unit B001 shall not exceed 0.0028 lbs per million BTU heat input or 0.10 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(1)(c)]
- (ii) The emission rate of total non-methane hydrocarbons discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.0028 lbs per million BTU heat input

or 0.20 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(B)(1)(c)]

- (iii) The emission rate of total non-methane hydrocarbons discharged to the atmosphere from Emission Unit B004 shall not exceed 0.0028 lbs per million BTU heat input or 0.27 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(1)(c)]

(3) **Oil Firing**

(a) **Nitrogen Oxides (as nitrogen dioxide (NO₂))**

- (i) The emission rate of nitrogen oxides discharged to the atmosphere from Emission Unit B001 shall not exceed 0.076 lbs per million BTU heat input or 2.65 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(2)(a)]
- (ii) The emission rate of nitrogen oxides discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.076 lbs per million BTU heat input or 5.31 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(B)(2)(a)]
- (iii) The emission rate of nitrogen oxides discharged to the atmosphere from Emission Unit B004 shall not exceed 0.076 lbs per million BTU heat input or 7.05 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(2)(a)]

(b) **Carbon Monoxide (CO)**

- (i) The emission rate of carbon monoxide discharged to the atmosphere from Emission Unit B001 shall not exceed 0.16 lbs per million BTU heat input or 5.59 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(2)(b)]
- (ii) The emission rate of carbon monoxide discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.16 lbs per million BTU heat input or 11.2 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(B)(2)(b)]
- (iii) The emission rate of carbon monoxide discharged to the atmosphere from Emission Unit B004 shall not exceed 0.16 lbs per million BTU heat input or 14.8 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(2)(b)]

(c) **Sulfur Dioxide (SO₂)**

- (i) All fuel oil burned in Emission Units B001-B004, B101 and B102 from July 1, 2014 through June 30, 2018 shall contain no more than 0.05 percent sulfur by weight (500 ppm). All distillate fuel oil burned in Emission Units B001-B004, B101 and B102 on or after July 1, 2018 shall contain no more than 0.0015 percent sulfur by weight (15 ppm). [Approval Nos. 1468-1471(A)(2)(c)(1), (B)(2)(c)(1), (C)(2)(c)(1), 8.2.1]
- (ii) The emission rate of sulfur dioxide discharged to the atmosphere from B001 from July 1, 2014 through June 30, 2018 shall not exceed 1.83 lbs/hr. [Approval Nos. 1468-1471(A)(2)(c)(2)]
- (iii) The emission rate of sulfur dioxide discharged to the atmosphere from B001 on or after July 1, 2018 shall not exceed 0.05 lbs/hr. [Approval Nos. 1468-1471(A)(2)(c)(3)]
- (iv) The emission rate of sulfur dioxide discharged to the atmosphere from B002 or B003 from July 1, 2014 through June 30, 2018 shall not exceed 3.65 lbs/hr. [Approval Nos. 1468-1471(B)(2)(c)(2)]
- (v) The emission rate of sulfur dioxide discharged to the atmosphere from B002 or B003 on or after July 1, 2018 shall not exceed 0.11 lbs/hr. [Approval Nos. 1468-1471(B)(2)(c)(3)]
- (vi) The emission rate of sulfur dioxide discharged to the atmosphere from B004 from July 1, 2014 through June 30, 2018 shall not exceed 4.85 lbs/hr. [Approval Nos. 1468-1471(C)(2)(c)(2)]
- (vii) The emission rate of sulfur dioxide discharged to the atmosphere from B003 on or after July 1, 2018 shall not exceed 0.15 lbs/hr. [Approval Nos. 1468-1471(C)(2)(c)(3)]

(d) **Particulate Matter**

- (i) The emission rate of particulate matter discharged to the atmosphere from Emission Unit B001 shall not exceed 0.06 lbs per million BTU heat input or 2.09 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(2)(d), 13.2.1]
- (ii) The emission rate of particulate matter discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.06 lbs per million BTU heat input or 4.19 lbs/hr, whichever is more stringent. [Approval Nos. 1468-

1471(B)(2)(d), 13.2.1]

- (iii) The emission rate of particulate matter discharged to the atmosphere from Emission Unit B004 shall not exceed 0.06 lbs per million BTU heat input or 5.56 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(2)(d), 13.2.1]
- (iv) The permittee shall not cause or permit the emissions of particulate matter in excess of 0.1 pounds per million BTU actual heat input from Emission Units B101 and B102. [13.2.1]

(e) **Total Non-Methane Hydrocarbons (NMHC)**

- (i) The emission rate of total non-methane hydrocarbons discharged to the atmosphere from Emission Unit B001 shall not exceed 0.0014 lbs per million BTU heat input or 0.05 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(A)(2)(e)]
- (ii) The emission rate of total non-methane hydrocarbons discharged to the atmosphere from Emission Units B002 and B003 shall not exceed 0.0014 lbs per million BTU heat input or 0.10 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(B)(2)(e)]
- (iii) The emission rate of total non-methane hydrocarbons discharged to the atmosphere from Emission Unit B004 shall not exceed 0.0014 lbs per million BTU heat input or 0.13 lbs/hr, whichever is more stringent. [Approval Nos. 1468-1471(C)(2)(e)]

b. Operating Requirements

- (1) The maximum firing rate of Emission Unit B001 shall not exceed 36,300 ft³/hr of natural gas or 253.5 gal/hr of #2 fuel oil. [Approval Nos. 1468-1471(D)(1)]
- (2) The maximum firing rate of Emission Units B002 and B003 shall not exceed 72,400 ft³/hr of natural gas or 507.6 gal/hr of #2 fuel oil. [Approval Nos. 1468-1471(D)(2)]
- (3) The maximum firing rate of Emission Unit B004 shall not exceed 96,500 ft³/hr of natural gas or 673.4 gal/hr of #2 fuel oil. [Approval Nos. 1468-1471(D)(3)]
- (4) The permittee shall limit the combined quantity of #2 fuel oil and natural gas combusted in Emission Units B001-B004 to 5,487,365 gallons of #2 fuel oil equivalents or less for any consecutive 12-month period. For purposes of this

limitation, each 243 cubic feet of natural gas shall be considered equivalent to one gallon of #2 fuel oil. [Approval Nos. 1468-1471(D)(4)]

- (5) The flue gas recirculation system for Emission Units B001-B004 shall be in full operation whenever each boiler is in operation, except during low boiler load conditions where flame stability problems preclude the use of the flue gas recirculation system. The low load point is 6,000 lbs. per hour steam. [Approval Nos. 1468-1471(D)(6)]
- (6) The permittee shall tune Emission Units B101 and B102 at least once two years of operation, in accordance with the procedure described in Appendix A of RI APC Regulation No. 27. The tune-up procedure specified in paragraphs (7) and (8) of this subsection is an acceptable substitute procedure for the procedure specified in Appendix A. [27.4.2(c), 29.6.3(b)]
- (7) The permittee shall conduct a performance tune-up of each boiler listed in this section according to paragraph (8) of this subsection and keep records as required in Condition I.A.1.e(12) 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 63.11214(b-c), 40 CFR 63.11223(a), 40 CFR 63 Subpart JJJJJ Table 2 (14) for Emission Units B001-B004, and Table 2 (12) for Emission Units B101 and B102]
- (8) The permittee shall conduct a tune-up of each boiler listed in this section every 5 years to demonstrate continuous compliance as specified in paragraph (8)(a-f) of this subsection and Conditions I.A.1.f(7) of this permit. Each 5 year tune-up must be conducted no more than 61 months after the previous tune-up. [40 CFR 63.11223(b)-(c), 40 CFR 63.11223(c) and (e), 40 CFR 63 Subpart JJJJJ Table 2 (14) for Emission Units B001-B004, and Table 2 (12) for Emission Units B101 and B102]
 - (a) As applicable, inspect the 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, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 72 months from the previous inspection. [40 CFR 63.11223(b)(1), (c) and (e)]
 - (b) 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)]

- (c) 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, not to exceed 72 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 72 months from the previous inspection. [40 CFR 63.11223(b)(3),(c) and (e)]
- (d) 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)]
- (e) 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)]
- (f) If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 days of startup [40 CFR 63.11223(b)(7)]
- (9) 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) and (e)]
- (10) 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)]

c. Monitoring Requirements

- (1) Continuous emission monitoring equipment shall be operated and maintained for opacity when Emission Units B001-B004 are operating on fuel oil. [6.2.1, Approval Nos. 1468-1471(E)(1), 29.6.3(b)]
- (2) Natural gas and fuel oil flows for Emission Units B001-B004 shall be continuously measured. [Approval Nos. 1468-1471(E)(3), 29.6.3(a), 40 CFR 64]

- (3) Steam production shall be monitored continuously for Emission Units B001-B004. [29.6.3(a), 40 CFR 64]
- (4) The oxygen content of the flue gas shall be monitored continuously for Emission Units B001-B004. [29.6.3(a), 40 CFR 64]
- (5) The damper position of the FGR fan for Emission Units B001-B004 shall be monitored continuously. [29.6.3(a), 40 CFR 64]

d. Testing Requirements

(1) Particulates

Compliance with the particulate emissions limitations contained in Condition I.A.1.a(3)(d)(i - iii) 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 emissions testing may be waived if the Director and the USEPA:

- (a) Specifies or approves, in a specific case, the use of a reference method with minor changes in methodology; or
- (b) 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
- (c) 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 particulate 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(3)(d)(i - iii) 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]

(2) Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.A.1.a(1) 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, 40 CFR 60.45c(a)(8)]

(3) **Sulfur Dioxide (SO₂)**

Compliance with the sulfur limitations contained in Condition I.A.1.a(3)(c) of this permit shall be determined by procedures referenced in Condition II.U.2 of this permit. [8.4.1(b), 40 CFR 60.42c(h)(1), 40 CFR 60.44c(h), Approval Nos. 1468-1471(G)(1), 29.6.3(b)]

(4) **Nitrogen Oxides (NO_x)**

Emissions testing for compliance with the NO_x emission limitations for natural gas and fuel oil shall be conducted at least once every five (5) years for Emission Units B001-B004. Emission testing shall comply with the following requirements. [27.5.7(a), Approval Nos. 1468-1471(F)(1), 40 CFR 60.8(a)]

- (a) 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 Office of Air Resources shall be notified at least 60 days prior to any emissions test. [27.5.7(b), Approval Nos. 1468-1471(F)(2)]
- (b) 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), Approval Nos. 1468-1471(F)(3)]
- (c) 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. [27.5.7(d), Approval Nos. 1468-1471(F)(4), 40 CFR 60.8(e)]
- (d) 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), Approval Nos. 1468-1471(F)(5), 40 CFR 60.8(c)]
- (e) 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), Approval Nos. 1468-1471(F)(7)]
- (f) 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, 40 CFR 60.8(f)]

- (g) 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), Approval Nos. 1468-1471(F)(6)]

e. Recordkeeping Requirements

- (1) The permittee shall, on a monthly basis, no later than 5 days after the first of the month, determine the fuel use in Emission Units B001-B004 for the previous 12 months. The permittee shall keep records of this determination and provide such records to the Office of Air Resources upon request. [Approval Nos. 1468-1471(H)(1)]
- (2) The permittee shall record and maintain records for Emission Units B001-B004 of the amounts of fuel combusted during each day. [40 CFR 60.48c(g)]
- (3) Natural gas and fuel oil flows for Emission Units B001-B004 shall be continuously recorded. [Approval Nos. 1468-1471(E)(3), 29.6.3(a), 40 CFR 64]
- (4) The permittee shall record the monthly fuel usage for Emission Units B101 and B102. [27.6.3]
- (5) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of Emission Units B001-B004. [40 CFR 60.7(b)]
- (6) The permittee shall retain copies of all fuel supplier certifications or fuel oil analyses for each calendar quarter for Emission Units B001-B004. These records shall be made accessible for review by the Office of Air Resources or the USEPA. This quarterly record shall include a certified statement, signed by the permittee, that the records of fuel supplier certifications or fuel oil analyses submitted represent all of the fuel combusted during the quarter. [40 CFR 60.46c(d)(2) and 60.48c(e)(11), Approval Nos. 1468-1471(H)(8)]
- (7) Steam production for Emission Unit B001 shall be recorded continuously. [29.6.3(a), 40 CFR 64]
- (8) The oxygen content of the flue gas shall be recorded continuously for Emission Units B001-B004. [29.6.3(a), 40 CFR 64]
- (9) The permittee shall record the oxygen content of the flue gas, the fuel flow rate and steam production and the damper position of the FGR fan a minimum of once per day for Emission Units B001-B004. The date, time and measurement shall be recorded. [29.6.3(a), 40 CFR 64, Approval No. 1468-1471(E)(2)]
- (10) The permittee shall maintain a record of the boiler load and corresponding FGR damper position based on the most recent adjustment/calibration of the FGR damper control system. for Emission Units B001-B004 [29.6.3(a), 40

CFR 64]

- (11) The permittee shall maintain records of any scheduled and unscheduled maintenance for Emission Units B001-B004. [29.6.3(b)]
- (12) The permittee shall maintain the following records for each boiler listed in this section: [40 CFR 63.11225(c)]
 - (a) 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 Part 63 Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted. [40 CFR 63.11225(c)(1)]
 - (b) The permittee shall keep records to document conformance with the work practices, emission reduction measures, and management practices required by Conditions I.A.1.b(7) and (8) of this permit as specified in paragraph (12)(b)(i) of this subsection. [40 CFR 63.11225(c)(2)]
 - (i) 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)]
 - (ii) For each boiler required to conduct an energy assessment (B001, B002, B003 and B004), the permittee shall keep a copy of the energy assessment report. [40 CFR 63.11225(c)(2)(iii)]
 - (c) 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)]
 - (d) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition I.A.1.b(9) 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)]
- (13) If the permittee switched fuels or made a physical change to the boiler(s) listed in this section and the fuel switch or change resulted in the applicability of a different subcategory within this subpart, in the boiler becoming subject to this subpart, or in the boiler switching out of this subpart due to a fuel change that results in the boiler(s) meeting the definition of gas-fired boiler, as defined in §63.11237, or the permittee has taken a permit limit that resulted in becoming subject to this subpart or no longer being subject to this subpart, the permittee shall provide notice of the date upon when the fuels

were switched, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: [40 CFR 63.11225(g)]

- (a) 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)]
 - (b) The date upon which the fuel switch, physical change, or permit limit occurred. [40 CFR 63.11225(g)(2)]
- (14) The permittee shall maintain on-site a report containing the information in paragraphs (14)(a-c) of this subsection. [40 CFR 63.11223(b)(6)]
- (a) 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)]
 - (b) 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)]
 - (c) 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)]
- (15) The permittee shall prepare a compliance certification report as specified in paragraphs (15)(a-b) of this subsection by March 1 following the date of the 5-year tune-up. [40 CFR 63.11225(b)]
- (a) Company name and address. [40 CFR 63.11225(b)(1)]
 - (b) 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)]

- (16) The permittee shall maintain records verifying that a tune-up has been performed for Emission Units B101 and B102 in accordance with Condition I.A.1.b(6) of this permit. These records shall include the following information:
 - (a) The date the tune-up was performed,
 - (b) The name of the person, who performed the tune-up,
 - (c) The final excess oxygen setting, and
 - (d) The O₂/CO curve or O₂/smoke curve that has been developed as part of the tune-up procedure. [27.6.8, 29.6.3(b)]
- (17) 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)]
- (18) The permittee shall maintain a record of the oxygen concentration measured during the most recent tune-up for boilers B001 – B004. [29.6.3(b)]

f. Reporting Requirements

- (1) The permittee shall notify the Office of Air Resources whenever its fuel usage for Emission Units B001-B004 for any consecutive 12-month period exceeds 5,487,365 gallons of #2 fuel oil equivalents for the combined quantity of natural gas fuel and #2 fuel oil. [Approval Nos. 1468-1471(H)(2)]
- (2) The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.A.1 of this permit or any other applicable air pollution control rules and regulations for Emission Units B001-B004. [Approval Nos. 1468-1471(H)(9)]
- (3) The permittee shall notify the Office of Air Resources whenever the oxygen content of the flue gas for Emission Units B001-B004 is less than 2% or greater than 8%. This notification shall be provided in the semi-annual monitoring report required by condition II.CC.2. [29.6.3(a), 40 CFR 64]
- (4) The permittee shall submit to the RI Office of Air Resources and the USEPA, on a quarterly basis, the quarterly report as specified in paragraph (5) of this subsection for Emission Units B001-B004. Each quarterly report shall be postmarked by the 30th day following the end of the reporting period.

[60.48c(d)]

- (5) The permittee shall retain copies of all fuel supplier certifications or fuel oil analyses for each calendar quarter for Emission Units B001-B004. These records shall be made accessible for review by the Office of Air Resources or the USEPA. This quarterly record shall include a certified statement, signed by the permittee, that the records of fuel supplier certifications or fuel oil analyses submitted represent all of the fuel combusted during the quarter. [40 CFR 60.46c(d)(2) and 60.48c(e)(11), Approval Nos. 1468-1471(H)(8)]
- (6) The permittee shall notify the Office of Air Resources whenever the damper position of the FGR fan for B001 is not in the correct position for the corresponding boiler load. This notification shall be provided in the semi-annual monitoring report required by condition II.CC.2. [29.6.3(a), 40 CFR 64]
- (7) The permittee shall submit, if requested by the Office of Air Resources or USEPA, each report containing the information recorded in Conditions I.A.1.e(14) and (15) of this permit. [40 CFR 63.11223(b)(6), 40 CFR 63.11225(b)]

g. Other Requirements

- (1) To the extent consistent with the requirements of Section I.A.1 of this permit and applicable federal and state laws, Emission Units B001-B004 shall be operated in accordance with the representation of the equipment in the preconstruction permit application prepared by TRC Environmental Corporation dated October 1997 (TRC Project No. 23055). [Approval Nos. 1468-1471(I)(1)]
- (2) The Sulfur Dioxide emission limits and fuel oil sulfur limits in section I.A.1 of this permit shall apply at all times, including periods of startup, shutdown, and malfunction for Emission Units B001-B004. [40 CFR 60.42c(i)]
- (3) The Particulate Matter and opacity standards in section I.A.1 of this permit shall apply at all times, except during periods of startup, shutdown, or malfunction for Emission Units B001-B004. [40 CFR 60.43c(d)]
- (4) Emission Units B001-B004 are subject to the requirements of 40 CFR 60 Subpart A, "General Provisions" and Subpart Dc (Small Industrial-Commercial-Institutional Steam Generating Units). Compliance with all applicable provisions therein is required, unless otherwise stated in this permit. Approval Nos. 1468-1471(I)(3)]
- (5) 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 all Emission Units in Section I.A.1 of this permit. Compliance with all applicable provisions therein is required. [Approval Nos. 1468-

2. **Requirements for Emission Units B201, B301, B501, B502, B503, B504, B505, B506, B507, B509, B510, B511, B512, B513, B514, B515, B516, B517, B518, B519, B520 and B521**

The following requirements are applicable to:

- Emission Unit B201, which is a 4.113 MMBTU/hr Weil McLain package boiler, Model No. 1388, which burns natural gas.
- Emission Unit B301, which is a 2.15 MMBTU/hr H.B. Smith cast iron boiler, Model No. 28A-S/W-11, which burns natural gas.
- Emission Units B501, B502, B503, and B504, which are 1.5 MMBTU/hr Patterson-Kelley package boilers, Model No. D1500, which burn natural gas.
- Emission Units B505 and B506, which are 1.00 MMBTU/hr Patterson-Kelley package boilers, Model No. D-1000, which burn natural gas.
- Emission Unit B507, which is a 1.20 MMBTU/hr RITE package boiler, which burns natural gas. B507 is an emergency/standby unit.
- Emission Units B509 and B510, each of which is a 1.500 MMBTU/hr Patterson Kelly Package Boiler, Model No. N-1500, which burns natural gas.
- Emission Units B511 and B512, each of which is a 1.200 MMBTU/hr Patterson Kelly Package Boiler, Model No. N-1200, which burns natural gas.
- Emission Units B513 and B514, each of which is a 1.000 MMBTU/hr PVI Industries Package Boiler, Model No. 1250-1100N400ATPQSD, which burns natural gas.
- Emission Units B515 and B516, each of which is a 1.200 MMBTU/hr PVI Industries Package Boiler, Model No. 1500-1100N400ATPQSD, which burns natural gas.
- Emission Units B517 and B518, each of which is a 1.200 MMBTU/hr PVI Industries Package Boiler, Model No. 1500-900N600ATPQWD, which burns natural gas.
- Emission Unit B519, which is a 3.139 MMBTU/hr RITE Package Boiler, Model No. P75SG, which burns natural gas.
- Emission Units B520 and B521, each of which is a 2.201 MMBTU/hr Broad IX Spectrum DFA Package Boiler, Model No. ICS41-0-15-22RS50/M, which burns natural gas.

a. **Emission Limitations**

(1) **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]

(2) **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]

b. Operating Requirements

The permittee shall tune Emission Units B201, B301, B501, B502, B503, B504, B505, B506, B507, B509, B510, B511, B512, B513, B514, B515, B516, B517, B518, B519, B520 and B521 at least once every two years, in accordance with the procedure described in Appendix A of RI APC Regulation No. 27. [27.4.2(c), 29.6.3(b)]

c. Testing Requirements

(1) **Particulates**

Compliance with the particulate emissions limitations contained in Condition I.A.2.a(1) 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 emissions testing may be waived if the Director and the USEPA:

- (a) Specifies or approves, in a specific case, the use of a reference method with minor changes in methodology; or
- (b) 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
- (c) 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 particulate 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.2.a(1) 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]

(2) **Opacity**

Tests for determining compliance with the opacity limitations specified in Condition I.A.2.a(2) 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. Recordkeeping Requirements

- (1) The fuel usage for Emission Unit B201 shall be measured and recorded monthly using an individual meter for Emission Unit B201. [27.6.3]
- (2) The monthly fuel usage for Emission Units B301, B501, B502, B503, B504, B505, B506, B507, B509, B510, B511, B512, B513, B514, B515, B516, B517, B518, B519, B520 and B521 shall be measured and recorded monthly using a single metering device. [27.6.3(a)]
- (3) The permittee shall maintain records verifying that a tune-up has been performed in accordance with Condition I.A.2.b of this permit. These records shall include the following information:
 - (a) The date the tune-up was performed,
 - (b) The name of the person, who performed the tune-up,
 - (c) The final excess oxygen setting, and
 - (d) The O₂/smoke curve that has been developed as part of the tune-up procedure. [27.6.8, 29.6.3(b)]

B. Emergency Generators and Fire Pumps

1. Requirements for Emission Units G002 and G003

The following requirements are applicable to:

- Emission Unit G002, which is a 343 HP Caterpillar internal combustion engine, Model No. 3406, which burns diesel fuel. G002 is an emergency/standby unit. (Approval Nos. 1468 – 1471) [Located at Heating Plant]
- Emission Unit G003, which is a 1297 HP Caterpillar internal combustion engine/generator set, Model No. 3508, which burns diesel fuel. G003 is an emergency/standby unit. (Approval No. 1698) [Located at Convocation Center]

a. Emission Limitations

(1) **Opacity**

- (a) 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% opacity for Emission Unit G002. [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]
- (b) Visible emissions from Emission Unit G003 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. [Approval No. 1698(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) **Sulfur oxides**

All distillate fuel oil burned in the emergency generators listed in this section from July 1, 2014 through June 30, 2018 shall contain no more than 0.05 percent sulfur by weight (500 ppm). All distillate fuel oil burned in the boiler on or after July 1, 2018 shall contain no more than 0.0015 percent sulfur by weight (15 ppm). [8.2.1, Approval No. 1698(A)(1)]

b. Operating Requirements

- (1) Emission Unit G002 shall not be operated more than 374 hours in any consecutive 12-month period. If the hours of operation for G002 exceed 374 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, Approval Nos. 1468-1471(D)(5)]
- (2) Emission Unit G003 shall not operate more than 500 hours in any 12-month period. [Approval No. 1698(B)(2), 27.2.3]
- (3) The maximum firing rate for Emission Unit G003 shall not exceed 65.8 gallons per hour. [Approval No. 1698(B)(1)]
- (4) Emission Unit G002 shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. This does not include power interruptions pursuant to an interruptible power service agreement. [27.1.4]
- (5) Emission Unit G003 shall be operated only to provide emergency electrical power in the event of a power outage or for maintenance purposes to assure that G003 is in working order. [Approval No. 1698(B)(3), 27.1.4]
- (6) Emission Unit G003 shall not be used in conjunction with any utility voluntary demand reduction program. [Approval No. 1698(B)(4)]

c. Monitoring Requirements

The permittee shall maintain a non-resettable elapsed time meter on each emergency generator listed in this section to indicate, in cumulative hours, the elapsed engine operating time. [Approval No. 1698(C)(1), 27.6.10(b)]

d. Testing Requirements

(1) Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.B.1.a(1) 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]

(2) Sulfur oxides

Compliance with the sulfur limitations contained in Condition I.B.1.a(2) of this permit shall be determined by procedures referenced in Condition II.U.2 of this permit. [29.6.3(b), Approval No. 1698(D)(1)]

e. Recordkeeping Requirement

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 each emergency generator listed in this section for the previous 12-month period. [27.6.10(c), Approval Nos. 1468-1471(H)(3), Approval No. 1698(E)(1)]

f. Reporting Requirements

(1) 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 Emission Units G002 and G003. [27.6.10(d), Approval No. 1698(E)(2)]

(2) The permittee shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceed 374 hours for Emission Unit G002. [27.6.10(d), Approval Nos. 1468-1471(H)(4)]

(3) The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.B.1 this permit or any other applicable air pollution control rules and regulations for Emission Units listed in this subsection. [Approval Nos. 1468-1471, 1698(E)(3)]

g. Other Permit Conditions

(1) To the extent consistent with the requirements of Section I.B.1 of this permit and applicable Federal and State laws, Emission Units listed in this subsection shall be operated in accordance with the representation of the equipment in the preconstruction permit application. [Approval Nos. 1468-

1471(F)(1), Approval No. 1698(F)(1)]

- (2) At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate Emission Unit G003 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. 1698(F)(3)]

2. Requirements for Emission Units G004, G005, G007 and G018

The following requirements are applicable to:

- Emission Unit G004, which is a 449 HP Caterpillar internal combustion engine, Model No. 3406, which burns diesel fuel. G004 is an emergency/standby unit. [Located at Eddy Hall]
- Emission Unit G005, which is a 536 HP Caterpillar internal combustion engine, Model No. 3406, which burns diesel fuel. G005 is an emergency/standby unit. [Located at Wyley/Garrahy Hall]
- Emission Unit G007, which is a 713 HP Superior internal combustion engine, Model No. TAD 1641 GE, which burns diesel fuel. G007 is an emergency/standby unit. [Located at Hope Dining]
- Emission Unit G018, which is a 43 HP Caterpillar internal combustion engine, Model No. C2.2 (D30-10) CAT00000PGBE01449, Serial No. E6X00929, which burns diesel fuel. G018 is an emergency/standby unit. [Located at Wellness Center]

a. Emission Limitations

(1) 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) Sulfur oxides

All distillate fuel oil burned in the emergency generators listed in this section from July 1, 2014 through June 30, 2018 shall contain no more than 0.05 percent sulfur by weight (500 ppm). All distillate fuel oil burned in the boiler on or after July 1, 2018 shall contain no more than 0.0015 percent sulfur by weight (15 ppm). [8.2.1, 40 CFR 60.4207(b)]

b. Operating Requirements

- (1) Each emergency engine listed in this section shall not operate more than 500 hours in any 12-month period. [27.2.3, 40 CFR 60.4211(f)(1)]
- (2) The permittee shall operate each emergency generator listed in this section according to the requirements in paragraphs (2)(a-b) 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 (2)(a-b) of this subsection, is prohibited. If the permittee does not operate the emergency generators listed under this section according to the requirements in paragraphs (2)(a-b) 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)]
 - (a) The permittee may operate each emergency engine listed in this section for any combination of the purposes specified in paragraphs (2)(a)(i) of this subsection for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (2)(b) of this subsection counts as part of the 100 hours per calendar year allowed by paragraph (2)(a) of this subsection [40 CFR 60.4211(f)(2)]
 - (i) Each emergency engine 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 manufacturer, 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. Anyone 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 each emergency engine listed in this section beyond 100 hours per year. Each emergency engine listed in this section shall only be used for emergency operation, maintenance and testing. [40 CFR 60.4211(f)(2)(i)]
 - (b) 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 (2)(a) 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)]

- (3) The permittee shall do all of the following: [40 CFR 60.4211(a)]
 - (a) 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)]
 - (b) Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
 - (c) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)(3)]

- (4) 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 shall demonstrate compliance as follows: [40 CFR 60.4211(g)]
 - (a) For G018, the permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate G018 in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or if the permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. [40 CFR 60.4211(g)(1)]

 - (b) For G004, the permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate G004 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. [40 CFR 60.4211(g)(2)]

 - (c) For G005 and G007, the permittee shall keep a maintenance plan and

records of conducted maintenance and shall, to the extent practicable, maintain and operate G005 and G007 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)]

- (5) The permittee shall operate and maintain each emergency generator listed in this section to achieve the emission standards as required in §60.4205 over the entire life of the engine. [40 CFR 60.4206]
- (6) The Emission units listed in this section shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. This does not include power interruptions pursuant to an interruptible power service agreement. [27.1.4]

c. Monitoring Requirements

The permittee shall maintain a non-resettable elapsed time meter on each emergency engine listed in this section to indicate, in cumulative hours, the elapsed engine operating time. [27.6.10(b), 40 CFR 60.4209(a)]

d. Testing Requirements

(1) Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.B.2.a(1) of this permit shall be performed per 40 CFR 60, Appendix A, Method 9. Additionally, all observers shall qualify as per 40 CFR 60, Appendix A, Method 9. [1.3.1, 1.3.2]

(2) Sulfur oxides

Compliance with the sulfur limitations contained in Condition I.B.2.a(2) of this permit shall be determined by procedures referenced in Condition II.U.2 of this permit. [29.6.3(b)]

e. Recordkeeping Requirements

On a monthly basis, no later than fifteen (15) days after the first of each month, the permittee shall determine and record the hours of operation for each emergency

engine listed in this section for the previous 12-month period. [27.6.10(c)]

f. Reporting Requirements

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 each emergency engine listed in this section. [27.6.10(d)]

g. Other Requirements

The permittee is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and Subpart IIII (Standards of Performance for Stationary Compression Internal Combustion Engines) for the Emission Units in Section I.B.2 of this permit. Compliance with all applicable provisions therein is required. [40 CFR 60.4218]

3. Requirements for Emission Units G006, G008, G009, G010, G011, G014, G015, G016 and G017

The following requirements are applicable to:

- Emission Unit G006, which is a 661 HP Cummins internal combustion engine, Model No. DFEJ, which burns diesel fuel. G006 is an emergency/standby unit. (General Permit No. GPEG-74) [Located at Tyler Hall]
- Emission Unit G008, which is a 1072 HP Caterpillar internal combustion engine, Model No. C27TA, which burns diesel fuel. G008 is an emergency/standby unit. (General Permit No. GPEG-73) [Located at Bio Science Center]
- Emission Unit G009, which is a 1214 HP Caterpillar internal combustion engine, Model No. C27TA, which burns diesel fuel. G009 is an emergency/standby unit. (General Permit No. GPEG-104) [Located at Pharmacy Building]
- Emission Unit G010, which is a 601 HP Generac Industrial Systems internal combustion engine, Model No. 5D0400GG1213OD18HPLY3, which burns diesel fuel. G010 is an emergency/standby unit. (General Permit No. GPEG-113) [Located at Hillside Dorm]
- Emission Unit G011, which is a 1214 HP Caterpillar internal combustion engine, Model No. C27, which burns diesel fuel. G009 is an emergency/standby unit. (General Permit No. GPEG-131) [Located at Memorial Union]
- Emission Units G014 and G015, each of which is a 762 HP Caterpillar internal combustion engine, Model No. C15, which burns diesel fuel. G014 and G016 are an emergency/standby unit. (General Permit Nos. GPEG-231 and 245 respectively) [Located at Butterfield Dining and Chem. Building respectively]
- Emission Unit G016, which is a 158 HP Kohler Power System, Model No. 100REOZJF, which burns diesel fuel. G016 is an emergency/standby unit. (General Permit No. GPEG-247) [Located at White Hall]

- Emission Unit G017, which is a 53 HP Caterpillar, Model No. C4.4 D40-LC2, which burns diesel fuel. G017 is an emergency/standby unit. (General Permit No. GPEG-275) [Located at Ranger Hall]

a. **Emission Limitations**

(1) **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 - 73, 74, 104, 113, 131, 231, 245, 247, 275(A)(1), 40 CFR 60.4207(b)]

(2) **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 No. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(A)(2)]

(3) **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 - 73, 74, 104, 113, 131, 231, 245, 247, 275(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]

b. **Operating Requirements**

- (1) The maximum firing rate for Emission Unit G006 shall not exceed 30.3 gallons per hour. [General Permit No. GPEG-74(B)(1)]
- (2) The maximum firing rate for Emission Unit G008 shall not exceed 57.2 gallons per hour. [General Permit No. GPEG-73(B)(1)]
- (3) The maximum firing rate for Emission Unit G009 shall not exceed 57.3 gallons per hour. [General Permit No. GPEG-104(B)(1)]
- (4) The maximum firing rate for Emission Unit G010 shall not exceed 28.5 gallons per hour. [General Permit No. GPEG-113(B)(1)]
- (5) The maximum firing rate for Emission Unit G011 shall not exceed 57.3 gallons per hour. [General Permit No. GPEG-131(B)(1)]
- (6) The maximum firing rate for Emission Units G014 and G015 shall not exceed 36.3 gallons per hour. [General Permit Nos. GPEG-231 and GPEG-245(B)(1)]

- (7) The maximum firing rate for Emission Unit G016 shall not exceed 8.2 gallons per hour. [General Permit No. GPEG-247(B)(1)]
- (8) The maximum firing rate for Emission Unit G017 shall not exceed 3.7 gallons per hour. [General Permit No. GPEG-275(B)(1)]
- (9) Each emergency engine listed in this section shall not operate more than 500 hours in any 12 - month period. [27.2.3, 43.4.1(a), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(B)(2), 40 CFR 60.4211(f)(1)]
- (10) The permittee shall operate each emergency generator listed in this section according to the requirements in paragraphs (10)(a-b) 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 (10)(a-b) of this subsection, is prohibited. If the permittee does not operate the emergency generators listed under this section according to the requirements in paragraphs (10)(a-b) 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)]
 - (a) The permittee may operate each emergency engine listed in this section for any combination of the purposes specified in paragraphs (10)(a)(i) of this subsection for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (10)(b) of this subsection counts as part of the 100 hours per calendar year allowed by paragraph (a) of this subsection [40 CFR 60.4211(f)(2)]
 - (i) Each emergency engine 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. Anyone 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. Each emergency engine listed in this section shall only be used for emergency operation, maintenance and testing. [40 CFR 60.4211(f)(2)(i)]

- (b) 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 (10)(a) 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)]
- (11) The permittee must do all of the following: [40 CFR 60.4211(a)]
 - (a) 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)]
 - (b) Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
 - (c) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)(3)]
 - (12) Each emergency engine 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.¹ [43.1.5, General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(B)(3)]
 - (13) Each emergency engine 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

¹ 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 IIII – “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.

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. [43.4.1(b), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(B)(4)]

- (14) 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 shall demonstrate compliance as follows: [40 CFR 60.4211(g)]
 - (a) For the emergency engines listed in this section, the permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate each emergency engine 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)]
- (15) The permittee shall operate and maintain each emergency generator listed in this section to achieve the emission standards as required in §60.4205 over the entire life of the engine. [40 CFR 60.4206]
- (16) The Emission units listed in this section shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. This does not include power interruptions pursuant to an interruptible power service agreement. [27.1.4]

c. Monitoring Requirements

Each emergency engine 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. [27.6.10(b), 43.7.1, General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(C)(1), 40 CFR 60.4209(a)]

d. Testing Requirements

(1) **Sulfur**

Compliance with the sulfur limitations contained in Condition I.B.3.a(1) of this permit shall be determined by procedures referenced in Condition II.U.2 of this permit. [43.8.1(c), General Permit No. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(D)(1)]

(2) **Opacity**

Test for determining compliance with the opacity emissions limitations specified in Condition I.B.3.a(3) 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]

e. Recordkeeping Requirements

(1) 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. [27.6.10(c), 43.8.1(a), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(E)(1)]

(2) 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 Nos. GPEG - 73, 74, 104, 131, 231, 245, 247, 275(E)(5), General Permit No. GPEG - 113(E)(4)]

f. Reporting Requirements

(1) 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 each emergency engine listed in this section. [27.6.10(d), 43.8.1(b), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(E)(2)]

(2) The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.B.3 of this permit or any other applicable air pollution control rules and regulations. [General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(E)(3)]

g. Other Permit Conditions

(1) To the extent consistent with the requirements of Section I.B.3 of this permit and applicable Federal and State laws each emergency engine listed in this section shall be operated in accordance with the representation of the equipment in the permit application. [General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(F)(1)]

- (2) At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate each emergency engine 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 - 73, 74, 104, 113, 131, 231, 245, 247, 275(F)(3)]
- (3) The permittee is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and Subpart IIII (Standards of Performance for Stationary Compression Internal Combustion Engines) for the Emission Units in Section I.B.3 of this permit. Compliance with all applicable provisions therein is required. [General Permit Nos. GPEG - 104, 113, 131, 231, 245, 247, 275(F)(4), 40 CFR 60.4218]

4. Requirements for Emission Units G012, G013, G019 and G020

The following requirements are applicable to:

- Emission Unit G012, which is a 96 HP Generac internal combustion engine, Model No. QT06024GVSX, which burns propane gas. G012 is an emergency/standby unit. Approval No. 2250) [Located at Greenhouse]
- Emission Unit G013, which is an 88 HP Olympian internal combustion engine, Model No. G55LTA2, which burns natural gas. G013 is an emergency/standby unit. (Approval No. 2269) [Located at Automotive]
- Emission Unit G019, which is a 31 HP Kohler internal combustion engine, Model No. 30RESAL-SA1-IC2, Serial No. 2315101, which burns natural gas. G018 is an emergency/standby unit. [Located at Police Dispatch]
- Emission Unit G020, which is a 143 HP Generac internal combustion engine, Model No. WSG1068, Serial No. E182A 040308 0646287, which burns natural gas. G019 is an emergency/standby unit. [Located at Lippitt Hall]

a. Emissions Limitations

- (1) Sulfur Dioxide

The sulfur content of any gaseous fuel burned in the Emission Units listed in this section shall not exceed 10 grains total sulfur per 100 dry standard cubic feet. [Approval Nos. 2250, 2269(A)(1)]

- (2) Opacity

Visible emissions from each emergency engine 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 an emergency generator. Startup shall be defined as the first ten minutes of firing following the initiation of firing. [1.4, Approval Nos. 2250, 2269(A)(2)]

b. Operating Requirements

- (1) The maximum firing rate for G012 shall not exceed 327 cubic feet per hour. [Approval No. 2250(B)(1)]
- (2) The maximum firing rate for G013 shall not exceed 756 cubic feet per hour. [Approval No. 2269(B)(1)]
- (3) Each emergency engine listed in this section shall not operate more than 500 hours in any 12-month period. [27.2.3, Approval Nos. 2250, 2269(B)(2), 40 CFR 60.4243(d)(1)]
- (4) The permittee shall operate each emergency engine listed in this section according to the requirements in paragraphs (4)(a-b) 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, emergency demand response and operation in non-emergency situations for 50 hours per year, as described in paragraphs (4)(a-b) of this subsection, is prohibited. If the permittee does not operate the emergency generators listed under this section according to the requirements in paragraphs (4)(a-b) 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 JJJJ [40 CFR 60.4243(d)]
 - (a) The permittee shall operate each emergency engine listed in this section according to the requirements in paragraphs (4)(a)(i) of this subsection for a maximum of 100 hours per calendar year. [40 CFR 60.4243(d)(2)]
 - (i) Each emergency engine 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. [40 CFR 60.4243(d)(2)(i)]

- (b) 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 (4)(a) 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 60.4243(d)(3)]
- (5) The permittee may operate each emergency engine listed in this section using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but shall keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee shall be required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. [40 CFR 60.4243(e)]
- (6) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysis/non-selective catalytic reduction. The AFR controller shall be maintained and operated appropriately in order to ensure proper operations of the engines listed in this section to minimize emissions at all times. [40 CFR 60.4243(g)]
- (7) Each emergency engine 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.² [43.1.5, Approval Nos. 2250, 2269(B)(3)]
- (8) Each emergency engine listed in this section shall not be operated in

² 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 JJJJ – “Standards of Performance for Stationary Spark 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 60.4243(d)(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.

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. [43.4.4, Approval Nos. 2250, 2269(B)(4)]

- (9) The Emission units listed in this section shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. This does not include power interruptions pursuant to an interruptible power service agreement. [27.1.4]

c. Continuous Monitoring

Each emergency engine 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. [27.6.10(b), Approval Nos. 2250, 2269(C)(1), 40 CFR 60.4237(c)]

d. Testing Requirements

- (1) Opacity

Tests for determining compliance with the opacity emission limitations specified in Condition I.B.4.a(2) 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]

- (2) The permittee shall comply with the emission standards specified in 40 CFR §60.4233(d) or (e), the permittee shall demonstrate compliance according to one of the methods specified in paragraphs (a) and (b) of this subsection. [40 CFR 60.4243(b)]

- (a) Purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in paragraphs (2)(a)(i-ii) of this subsection. [40 CFR 60.4243(b)(1)]

- (i) If the permittee operates and maintain the certified stationary emergency engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. The permittee shall also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If the permittee adjusts engine settings according to and consistent with the

manufacturer's instructions, your emergency engine will not be considered out of compliance. [40 CFR 60.4243(a)(1)]

(ii) If the permittee does not operate and maintain the certified stationary emergency engine and control device according to the manufacturer's emission-related written instructions, the emergency engine will be considered a non-certified engine, and the permittee shall demonstrate compliance according to (2)(a)(ii)(A) of this subsection, as appropriate. [40 CFR 60.4243(a)(2)]

(A) The permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate G012, G013 and G019 in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test within 1 year of engine startup to demonstrate compliance. [40 CFR 60.4243(a)(2)(i)]

(B) The permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate G020 in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test within 1 year of engine startup to demonstrate compliance. [40 CFR 60.4243(a)(2)(ii)]

(b) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR §60.4233(d) or (e), and the permittee shall demonstrate compliance according to the requirements specified in 40 CFR §60.4244, as applicable, and according to paragraphs (2)(b)(i) of this subsection. [40 CFR 60.4243(b)(2)]

(i) The permittee shall keep a maintenance plan and records of conducted maintenance and 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. In addition, the permittee shall conduct an initial performance test to demonstrate compliance. [40 CFR 60.4243(b)(2)(i)]

e. Recordkeeping Requirements

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 Emission Units G012 and G013 for the previous 12-month period. [27.6.10(c), Approval Nos. 2250,

2269(D)(1)]

f. Reporting Requirements

- (1) 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 Emission Units G012 and G013. [27.6.10(d), Approval Nos. 2250, 2269(D)(2)]
- (2) The permittee shall notify the Office of Air Resources of any anticipated noncompliance with the terms of Section I.B.4 of this permit or any other applicable air pollution control rules and regulations for Emission Units G012 and G013. [Approval Nos. 2250, 2269(D)(3)]

g. Other Conditions

- (1) To the extent consistent with the requirements of this approval and applicable Federal and State laws, Emission Units G012 and G013 shall be designed, constructed and operated in accordance with the representation of the equipment in the preconstruction permit application. [Approval Nos. 2250, 2269(E)(1)]
- (2) At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate Emission Units G012 and G013 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 generators listed in this section. [Approval Nos. 2250, 2269(E)(3)]
- (3) The permittee is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) for the Emission Units in Section I.B.4 of this permit. Compliance with all applicable provisions therein is required. [Approval Nos. 2250, 2269(E)(4), 40 CFR 60.4246]

5. Requirements for Emission Units G001, G021, G022, G023, G024, G025, G026, G027, G028, G029, G030 and G031

The following requirements are applicable to:

- Emission Unit G001, which is a 350 HP KATO internal combustion engine, Model No. 350SS9E, which burns diesel fuel. G001 is an emergency/standby unit. [Located at 30 Acre Well House]
- Emission Units G021 and G022, each of which is a 356 HP Caterpillar internal

combustion engine, which burns diesel fuel. G021 and G022 are an emergency/standby unit. [Located at Barlow/Weldin and Bressler/Butterfield respectively]

- Emission Unit G023, which is a 178 HP Generac internal combustion engine, which burns diesel fuel. G023 is an emergency/standby unit. [Located at Browning Hall]
- Emission Unit G024, which is a 285 HP Superior internal combustion engine, which burns diesel fuel. G024 is an emergency/standby unit. [Located at Coastal Institute]
- Emission Unit G025, which is a 214 HP Kohler internal combustion engine, which burns diesel fuel. G025 is an emergency/standby unit. [Located at Fogarty Hall]
- Emission Unit G026, which is a 214 HP Generac internal combustion engine, which burns diesel fuel. G026 is an emergency/standby unit. [Located at Ice Rink]
- Emission Unit G027, which is a 143 HP Olympian internal combustion engine, which burns diesel fuel. G027 is an emergency/standby unit. [Located at Tootell Gym]
- Emission Unit G028, which is a 114 HP Generac internal combustion engine, which burns natural gas. G028 is an emergency/standby unit. [Located at Ballentine Hall]
- Emission Unit G029, which is a 143 HP Kohler internal combustion engine, which burns natural gas. G029 is an emergency/standby unit. [Located at Chaffee Hall]
- Emission Unit G030, which is a 321 HP Cummins internal combustion engine, which burns natural gas. G030 is an emergency/standby unit. [Located at Dining Services Warehouse]
- Emission Unit G031, which is a 143HP Superior internal combustion engine, which burns natural gas. G031 is an emergency/standby unit. [Located at Potter Building]

a. Emission Limitations

(1) 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) Sulfur oxides

All distillate fuel oil burned in Emission Units G001 and G021-G027 from July 1, 2014 through June 30, 2018 shall contain no more than 0.05 percent sulfur by weight (500 ppm). All distillate fuel oil burned in Emission Units G001 and G021-G027 on or after July 1, 2018 shall contain no more than 0.0015 percent sulfur by weight (15 ppm). [8.2.1]

b. Operating Requirements

- (1) The emergency engines listed in this section shall each be operated less than 500 hours during any consecutive 12-month period. If the hours of operation for any of the emergency engines listed in this section 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]
- (2) The emergency engines listed in this section shall be operated only as a mechanical or electrical power source when the primary power source has been rendered inoperable. This does not include power interruptions pursuant to an interruptible power service agreement. [27.1.4]

c. Monitoring Requirements

The permittee shall maintain a non-resettable elapsed time meter on each of the emergency engines listed in this section to indicate, in cumulative hours, the elapsed engine operating time. [27.6.10(b)]

d. Testing Requirements

(1) Opacity

Tests for determining compliance with the opacity limitations specified in Condition I.B.5.a(1) 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]

(2) Sulfur oxides

Compliance with the sulfur limitations contained in Condition I.B.5.a(2) of this permit shall be determined by procedures referenced in Condition II.U.2 of this permit. [29.6.3(b)]

e. Recordkeeping Requirements

On a monthly basis, no later than fifteen (15) days after the first of each month, the permittee shall determine and record the hours of operation for each of the emergency engines listed in this section for the previous 12-month period. [27.6.10(c)]

f. Reporting Requirements

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 any of the emergency engines listed in this section. [27.6.10(d)]

C. Tanks

1. **Requirements for Emission Units T001, T002, and T003**

The following requirements are applicable to:

- Emission Units T001, T002, and T003, which are No. 2 fuel oil storage tanks. Each tank has storage capacity of 29,600 gallons.

a. **Recordkeeping Requirements**

The permittee shall maintain records showing the dimension and storage capacity of T001, T002, and T003. These records shall be maintained for the life of the vessel.
[40 CFR 60.116b(a)-(b)]

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 I
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. 1468-1471(L)(2), Approval No. 1698(F)(2), Approval Nos. 2250, 2269(E)(2), General Permit No. GPEG-73, 74, 113, 131, 231, 245, 247, 275(F)(2)]
 - d. Nothing in this condition shall limit the ability of the 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)]

Re-openings 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, 40 CFR 60.15]

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, Approval Nos. 1468-1471(G)(1), Approval No. 1698(D)(1), General Permits Nos. GPEG-73,74, 104, 113, 131, 231, 245, 247(D)(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), Approval Nos. 1468-1471(G)(1), Approval No. 1698(D)(1), General Permits Nos. GPEG-73, 74, 104, 113, 131, 231, 245, 247, 275(D)(1)]
 - (1) the name of the supplier and the date the fuel oil was received from the supplier; and, [8.4.1.b(1), Approval Nos. 1468-1471(G)(1)(a), Approval No. 1698(D)(1)(a), General Permits Nos. GPEG-73, 74, 104, 113, 131, 231, 245, 247, 275(D)(1)(a)]
 - (2) the sulfur content of the fuel oil and the ASTM method used to determine the sulfur content of the fuel oil; and, [8.4.1.b(2), Approval Nos. 1468-1471(G)(1)(b) and (G)(1)(d), Approval No. 1698(D)(1)(b) and (D)(1)(d), General Permits Nos. GPEG-73, 74, 104, 113, 131, 231, 245, 247, 275(D)(1)(b) and (D)(1)(d)]
 - (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), Approval Nos. 1468-1471(G)(1)(c), Approval No. 1698(D)(1)(c), General Permits Nos. GPEG-73, 74, 104, 113, 131, 231, 245, 247, 275(D)(1)(c)]

- 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, Approval Nos. 1468-1471(G)(2), Approval No. 1698(D)(2), General Permits Nos. GPEG-73, 74, 104, 113, 131, 231, 245, 247, 275(D)(2)]
 - 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 all fuel supplier certifications or fuel oil analysis shall be maintained by the permittee 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 No. 1698(E)(4), 1468-1471(H)(8), General Permits Nos. GPEG-73, 74, 104, 131, 231, 245, 247, 275(E)(5), General Permit No. GPEG-113(E)(4)]
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. They 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. 1468-1471, 1698, 2250, 2269 General Permit Nos. GPEG – 73, 74, 104, 113, 131, 231, 245, 247, 275; 40 CFR 63 Subpart A, ZZZZ, JJJJJ, 40 CFR 60 Subpart A, Dc, Kb, III, Consent Agreement No. 95-50-AP and RI APC Regulation Nos. 1, 4, 5, 6, 7, 8, 9, 10, 13, 14, 17, 27, 28, 29, 33, 39, 43 and 44. [29.6.12(a)(1)]
2. The Office of Air Resources has determined that units B001, B002, B003, B004, B059, B101, B102, B201, B301, B501, B502, B503, B504, B505, B506, B507, B510, B511, B512, B513, B514, B515, B516, B517, B518, B519, B520, B521, G001, G002, G003, G004, G005, G006, G007, G008, G009, G010, G011, G012, G013, G014, G015, G016, G017, G018, G019, G020, G021, G022, G023, G024, G025, G026, G027, G028, G029, G030, G031, T001, T002 and T003 are not subject to the following: Rhode Island APC Regulation Nos. 3, 11, 12, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 30, 31, 32, 35, 36, 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 the 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 Clean Air 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, maintain records of and 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 for Units B001, B002, B003, B004, T001, T002, and T003 shall be maintained at the permittee's Lippitt Hall - Power Plant facility. All records and supporting information required by this permit for Units B059, B510, B511, B512, B513, B514, B515, B516, B517, B518, B519, B520, B521, G004, G005, G006, G007, G008, G009, G010, G011, G012, G013, G014, G015, G016, G017, G018, G019, G020, B201, B301, B501, B502, B503, B504, B505, B506, B507 and B508 shall be maintained at the permittee's Utilities Engineer's Office. All records and supporting information required by this permit for Unit G001 shall be maintained at the permittee's Lippitt Hall - Power Plant facility. All records and supporting information required by this permit for Units G002 and E001 shall be maintained at the permittee's 523 Plains Road facility. All records and supporting information required by this permit for Unit G003 shall be maintained at the permittee's Ryan Center facility. All records and supporting information required by this permit shall be maintained 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 the 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. [8.5.2, 14.2.1, 27.6.11, 29.6.4(a)(2), 39.2.2(b), 40 CFR 60.48c(i), 40 CFR 63.11225(d), Approval Nos. 1468-1471(H)(10), Approval No. 1698(E)(8), Approval Nos. 2250, 2269(E)(7), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(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.

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 15th unless otherwise specified. [14.2.2] 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. [14.2.3]
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 of this permit. [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. 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. 1698(E)(7), Approval Nos. 2250, 2269(E)(6), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(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. [40 CFR 60.7(a)(4), Approval Nos. 1468-1471(H)(7), Approval No. 1698(E)(6), Approval Nos. 2250, 2269(E)(5), General Permit Nos. GPEG - 73, 74, 104, 113, 131, 231, 245, 247, 275(E)(6)]

CC. 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), 52.12(c), 52.33(a)]

DD. Emission Statements

1. The permittee shall submit annually an emission statement which includes information for both VOC and NO_x if facility wide actual emissions are 25 tons per year of either pollutant. Emission statements shall be submitted to the Office of Air Resources on April 15th 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_x, 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_x 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_x,
 - (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_x 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 40 CFR 60.2 and 40 CFR 63.2 the Clean Air Act as amended in 1990 or the referenced regulation as applicable.
- 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

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

A. Ozone-depleting Substances

1. 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.
2. 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 Section 112(r)(1) of the Clean Air Act. 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.