

26 March 2012

Anthony Feole
Associate Director of Facilities & Maintenance
Rhode Island Department of Corrections
39 Howard Avenue
Cranston, RI 02920

Dear Mr. Feole:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your applications for the installation of fuel burning equipment located at the Medium Security Moran Facility, 51 West Street and the Intake Service Center, 18 Slate Street, both in Cranston, RI.

Enclosed are the two minor source permits issued pursuant to our review of your applications (Approval Nos. 2156 and 2157).

Additionally you had provided us an application for a general permit for an emergency generator (a 350 kW Cummins genset) that was installed in March of 2007 at the New Women's Facility on 13 Fleming Road. At the time this genset was installed, the applicable permitting threshold in Air Pollution Control Regulation No. 9 for a diesel-fired emergency generator was a heat input capacity of 5.0 MMBTU/hr or more. The heat input capacity of the Cummins genset is 3.3 MMBTU/hr, therefore you were not required to obtain a permit for this genset.

Be advised that there are certain federal air pollution control regulations that may apply to these gensets. The Caterpillar gensets (Approval Nos. 2156 and 2157) may be subject to the requirements of 40 CFR 63.1-15, Subpart A, "General Provisions" [as indicated in Table 8 to Subpart ZZZZ of 40 CFR 63] and 40 CFR 63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines". Subpart ZZZZ contains an exemption for "institutional emergency stationary reciprocating internal combustion engines". These gensets may be eligible for this exemption. Information on Subpart ZZZZ is available on EPA Region 1's website (<http://www.epa.gov/region1/rice/index.html>).

The Cummins genset 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).

Be advised that the USEPA enforces these requirements.

If there are any questions concerning this permit, please contact me at 222-2808, extension 7430.

Sincerely,

Darren J. Austin
Air Quality Specialist
Office of Air Resources

cc: Cranston Building Official

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

MINOR SOURCE PERMIT

RHODE ISLAND DEPARTMENT OF CORRECTIONS

APPROVAL NO. 2156

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Rhode Island Department of Corrections

For the following:

Installation of a Caterpillar emergency generator Model No. 3508, Serial No. 2992357

1006 HP, 750 kW unit. The emergency generator is to be fired with fuel oil containing

0.0015% sulfur or less, by weight.

Located at: *Medium Security Moran Facility*

51 West Street, Cranston

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve the Rhode Island Department of Corrections from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Douglas L. McVay, Acting Chief
Office of Air Resources

Date of Issuance

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

Permit Conditions and Emission Limitations

RHODE ISLAND DEPARTMENT OF CORRECTIONS

APPROVAL NO. 2157

A. Emission Limitations

1. Sulfur Dioxide

The sulfur content of any liquid fuel burned in the emergency generator shall not exceed 15 ppm by weight.

2. Visible emissions from the emergency generator 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 emergency generator. Startup shall be defined as the first ten minutes of firing following the initiation of firing.

B. Operating Requirements

1. The maximum firing rate for the emergency generator shall not exceed 60 gallons per hour.
2. The emergency generator shall not operate more than 500 hours in any consecutive 12-month period.
3. The emergency generator 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.
4. The emergency generator shall not be operated in conjunction with any voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant or system operator unless such program is

implemented at the same time as ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions.

C. Continuous Monitoring

1. The emergency generator shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time for the unit.

D. Fuel Oil Testing

1. Compliance with the diesel fuel sulfur limit may be determined based on a certification from the fuel supplier. Fuel supplier certifications shall include the following information:
 - a. The name of the fuel supplier;
 - b. The sulfur content of the fuel from which the shipment came or the shipment itself;
 - c. The location of the fuel when the sample was drawn for analysis to determine the sulfur content of the fuel, specifically including whether the fuel was sampled as delivered to the Rhode Island Department of Corrections or whether the sample was drawn from fuel in storage at the fuel supplier's facility or another location;
 - d. The method used to determine the sulfur content of the fuel.
2. As an alternative to fuel supplier certification, the owner/operator may elect to sample the fuel prior to combustion. Sampling and analysis shall be conducted for the fuel in the initial tank(s) of fuel to be fired in the engine and after each new shipment of fuel is received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted.

E. Record Keeping and Reporting

1. The owner/operator shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation and fuel use for the emergency generator for the previous 12-month period.

2. The owner/operator shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceed 500 hours for the emergency generator.
3. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
4. The owner/operator 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 EPA.
5. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
 - a. Change the representation of the facility in the application.
 - b. Alter the applicability of any state or federal air pollution rules or regulations.
 - c. Result in the violation of any terms or conditions of this permit.
 - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

6. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - a. The name and location of the facility;
 - b. The subject source(s) that caused the noncompliance with the permit term;
 - c. The time and date of first observation of the incident of noncompliance;

- d. The cause and expected duration of the incident of noncompliance;
 - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.
 - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
7. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

F. Other Permit Conditions

- 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the emergency generator shall be designed, constructed and operated in accordance with the representation of the equipment in the permit application.
- 2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
- 3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the emergency generator 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 generator.

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

MINOR SOURCE PERMIT

RHODE ISLAND DEPARTMENT OF CORRECTIONS

APPROVAL NO. 2157

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

Rhode Island Department of Corrections

For the following:

Installation of a Caterpillar emergency generator Model No. 3508, Serial No.

1ZF00508, 1341 HP, 1000 kW unit. The emergency generator is to be fired with fuel oil

containing 0.0015% sulfur or less, by weight.

Located at: *Intake Service Center*

18 Slate Street, Cranston

This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve the Rhode Island Department of Corrections from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.

Douglas L. McVay, Acting Chief
Office of Air Resources

Date of Issuance

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES**

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RHODE ISLAND DEPARTMENT OF CORRECTIONS

APPROVAL NO. 2157

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1. Sulfur Dioxide

The sulfur content of any liquid fuel burned in the emergency generator shall not exceed 15 ppm by weight.

2. Visible emissions from the emergency generator 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 emergency generator. Startup shall be defined as the first ten minutes of firing following the initiation of firing.

B. Operating Requirements

1. The maximum firing rate for the emergency generator shall not exceed 80 gallons per hour.
2. The emergency generator shall not operate more than 500 hours in any consecutive 12-month period.
3. The emergency generator 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.
4. The emergency generator shall not be operated in conjunction with any voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant or system

operator unless such program is implemented at the same time as ISO New England, or any successor Regional Transmission Organization, directs the implementation of operating procedures for voltage reductions, voluntary load curtailments by customers or automatic or manual load shedding within Rhode Island in response to unusually low frequency, equipment overload, capacity or energy deficiency, unacceptable voltage levels or other such emergency conditions.

C. Continuous Monitoring

1. The emergency generator shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time for the unit.

D. Fuel Oil Testing

1. Compliance with the diesel fuel sulfur limit may be determined based on a certification from the fuel supplier. Fuel supplier certifications shall include the following information:
 - a. The name of the fuel supplier;
 - b. The sulfur content of the fuel from which the shipment came or the shipment itself;
 - c. The location of the fuel when the sample was drawn for analysis to determine the sulfur content of the fuel, specifically including whether the fuel was sampled as delivered to the Rhode Island Department of Corrections or whether the sample was drawn from fuel in storage at the fuel supplier's facility or another location;
 - d. The method used to determine the sulfur content of the fuel.
2. As an alternative to fuel supplier certification, the owner/operator may elect to sample the fuel prior to combustion. Sampling and analysis shall be conducted for the fuel in the initial tank(s) of fuel to be fired in the engine and after each new shipment of fuel is received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted.

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1. The owner/operator shall, on a monthly basis, no later than 5 days after the first of each month, determine and record the hours of operation and fuel use for the emergency generator for the previous 12-month period.

2. The owner/operator shall notify the Office of Air Resources, in writing, whenever the hours of operation in any 12-month period exceed 500 hours for the emergency generator.
3. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
4. The owner/operator 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 EPA.
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 - a. Change the representation of the facility in the application.
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 - c. Result in the violation of any terms or conditions of this permit.
 - d. Qualify as a modification under APC Regulation No. 9.

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- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

6. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
 - a. The name and location of the facility;
 - b. The subject source(s) that caused the noncompliance with the permit term;

- c. The time and date of first observation of the incident of noncompliance;
 - d. The cause and expected duration of the incident of noncompliance;
 - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.
 - f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
7. All records required as a condition of this approval must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

F. Other Permit Conditions

- 1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the emergency generator shall be designed, constructed and operated in accordance with the representation of the equipment in the permit application.
- 2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
- 3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the emergency generator 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 generator.