

9 December 2014

Lee Vardakas, President
Aegis Energy Services, Inc.
55 Jackson Street
Holyoke, MA 01040

Dear Mr. Vardakas;

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for the installation of fuel burning equipment and air pollution control equipment to be located in the boiler room at 319 Providence Street in West Warwick, Rhode Island.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 2270 and 2271).

If there are any questions concerning this permit, please contact me at 401-222-2808, extension 7177 or at kasandra.mckenzie@dem.ri.gov.

Sincerely,

Kasandra McKenzie, EIT
Air Quality Specialist
Office of Air Resources

cc: Town of West Warwick Building Official

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

MINOR SOURCE PERMIT

AEGIS ENERGY SERVICES, INC.

APPROVAL NOs. 2270 & 2271

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

Aegis Energy Services, Inc.

For the following:

Aegenco, Inc. combined heat and power system, Model No. ThermoPower 75LE, 100.6 BHP, 75kW (approval No. 2270). The combined heat and power system shall be equipped with a three-way non-selective catalytic reduction (NSCR) emissions control package (Approval No. 2271). The combined heat and power system shall be fired with natural gas only.

Located at:

319 Providence Street

West Warwick, Rhode Island

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 *Aegis Energy Services, Inc.* 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, 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

AEGIS ENERGY SERVICES, INC.

APPROVAL NOs. 2270 & 2271

A. Emission Limitations

1. Nitrogen Oxides (as nitrogen dioxide (NO₂))

The emission rate of nitrogen oxides discharged to the atmosphere from the engine shall not exceed 0.35 grams/HP-hr or 0.08 lbs/hr, whichever is more stringent.

2. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from the engine shall not exceed 0.59 grams/HP-hr or 0.13 lbs/hr, whichever is more stringent.

3. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from the engine shall not exceed 0.03 lbs/MMBtu or 0.03 lbs/hr, whichever is more stringent.

4. Visible emissions from the engine 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 the engine. Startup shall be defined as the first ten minutes of firing following the initiation of firing.

B. Operating Requirements

1. Natural gas shall be the only fuel fired in the engine.

2. The maximum firing rate for the engine shall not exceed 930 cubic feet per hour.

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

4. The air pollution control system shall be operated and maintained in accordance with the manufacturer's recommendations.

5. There shall be no bypassing of the air pollution control system at any time.

6. The engine shall be equipped with an O₂ sensor in the exhaust system to sense the amount of oxygen in the engine exhaust. The O₂ sensor shall be replaced every 3,000 operating hours.
7. The inlet and outlet temperature to the NSCR system shall be continuously monitored.
8. The NSCR system shall have access ports at the inlet and outlet of the NSCR system to allow for pressure drop measurements.

C. Record Keeping and Reporting

1. The owner/operator shall, on a monthly basis, no later than 10 days after the first of each month, determine the total quantity of natural gas combusted in the engine. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
2. The owner/operator shall, on a monthly basis, no later than 10 days after the first of each month, determine and record the actual operating hours for the engine for the previous 12-month period.
3. The owner/operator shall maintain records to certify that the O₂ sensor has been replaced at least once every 3000 operating hours.
4. The owner/operator shall, at least once per month, record the following information for each month in which the engine has operated:
 - a. Temperature measurements across the NSCR system, the date of the measurement, and the operating hours of the engine at the time of measurement.
 - b. Pressure drop measurements across the NSCR system, the date of the measurement, and the operating hours of the engine at the time of measurement.

The owner/operator shall keep records of this information and provide such records to the Office of Air Resources or its authorized representative and EPA upon request.

5. 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.
6. 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.

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.

7. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit or any other air pollution control rule or regulation 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.
8. All records required in this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.

D. Malfunctions

1. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rule and regulations was due

to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:

- a. The malfunction was not attributable to improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error;
- b. The malfunction is not part of a recurring pattern indicative of inadequate design, operation or maintenance;
- c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
- d. All possible steps were taken to minimize emissions during the period of time that repairs were performed.
- e. Emissions during the period of time that the repairs were performed will not:
 - (1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
 - (2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
- f. The reason that it would be impossible or impractical to cease the source operation during said period.
- g. The owner/operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.

E. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the combined heat and power system 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 combined heat and power system in a manner consistent with good air pollution control practice for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this permit have been achieved. 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 distributed generator.
4. The owner/operator 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). Compliance with all applicable provisions therein is required.