20 January 2011

Mr. Joseph Tavares
Facilities Manager
City of East Providence
School Department
80 Burnside Avenue
East Providence, RI 02915

Dear Mr. Tavares,

The Department of Environmental Management, Office of Air Resources, has reviewed and approved your application for the installation of fuel burning equipment at your facility located at 2000 Pawtucket Avenue, East Providence.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval Nos. 2121-2123).

During the course of our review of your application, we determined that the three 10.5 MMBtu/hr Hurst boilers were installed in 2008. The City of East Providence failed to obtain a preconstruction permit prior to the installation of this equipment as required by RI Air Pollution Control Regulation No. 9.

The issuance of this minor source permit will now bring the City of East Providence into compliance with the requirement to obtain a preconstruction permit for these boilers.

If there are any questions concerning this permit, please contact me at 222-2808, extension 7028.

Sincerely,

Aleida M. Whitney
Air Quality Specialist
Office of Air Resources

cc: East Providence Building Official

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

MINOR SOURCE PERMIT

EAST PROVIDENCE HIGH SCHOOL

APPROVAL NOS. 2121-2123

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

City of East Providence

For the following:

Installation of three identical Hurst Boiler & Welding Company 10.5 MMBtu/hr package boilers, Model No. S4-X-250-15 (Approval Nos. 2121-2123). The boilers are equipped with low NOx burners and flue gas recirculation. The boilers will be fired with natural gas, No. 4 fuel oil containing 0.5% sulfur, by weight, or less, or No. 2 fuel oil containing 0.3% sulfur, by weight, or less.

Located at: *2000 Pawtucket Avenue, East Providence*

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 *City of East Providence* **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

EAST PROVIDENCE HIGH SCHOOL

APPROVAL NOS. 2121-2123

A. Emission Limitations

1. Natural Gas Firing

a. Nitrogen Oxides (as nitrogen dioxide (NO_2))

The emission rate of nitrogen oxides discharged to the atmosphere from each boiler shall not exceed 0.036 lb per million BTU heat input or 0.38 lb/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from each boiler shall not exceed 0.037 lb per million BTU heat input or 0.39 lbs/hr, whichever is more stringent.

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from each boiler shall not exceed 0.006 lb per million BTU heat input or 0.06 lb/hr, whichever is more stringent.

2. No. 2 Fuel Oil Firing

a. Nitrogen Oxides (as nitrogen dioxide (NO_2))

The emission rate of nitrogen oxides discharged to the atmosphere from each boiler shall not exceed 0.14 lb per million BTU heat input or 1.49 lbs/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from each boiler shall not exceed 0.039 lb per million BTU heat input or 0.41 lbs/hr, whichever is more stringent.

c. Sulfur Dioxide (SO_2)

(1) All No. 2 fuel oil burned in each boiler shall contain no more than 0.3 percent sulfur by weight.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from each boiler shall not exceed 3.24 lbs/hr.

d. Particulate Matter less than 10 microns (PM-10)

The emission rate of particulate matter less than 10 microns discharged to the atmosphere from each boiler shall not exceed 0.01 lb per million BTU heat input or 0.09 lb/hr, whichever is more stringent.

e. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from the boiler shall not exceed 0.002 lb per million BTU heat input or 0.02 lb/hr, whichever is more stringent.

3. No. 4 Fuel Oil Firing

a. Nitrogen Oxides (as nitrogen dioxide (NO_2))

The emission rate of nitrogen oxides discharged to the atmosphere from each boiler shall not exceed 0.32 lb per million BTU heat input or 3.40 lbs/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from each boiler shall not exceed 0.039 lb per million BTU heat input or 0.41 lbs/hr, whichever is more stringent.

c. Sulfur Dioxide (SO_2)

(1) All No.4 fuel oil burned in each boiler shall contain no more than 0.5 percent sulfur by weight.

(2) The emission rate of sulfur dioxide discharged to the atmosphere from each boiler shall not exceed 5.15 lbs/hr.

d. Particulate Matter less than 10 microns (PM-10)

The emission rate of particulate matter less than 10 microns discharged to the atmosphere from each boiler shall not exceed 0.03 lb per million BTU heat input or 0.31 lb/hr, whichever is more stringent.

e. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from the boiler shall not exceed 0.002 lb per million BTU heat input or 0.02 lb/hr, whichever is more stringent.

4. Visible emissions from each boiler exhaust flue shall not exceed 10% opacity (6-minute average).

B. Operating Requirements

1. The maximum firing rate of each boiler shall not exceed 10,500 ft^3/hr of natural gas, 75.0 gal/hr of No. 2 fuel oil, or 72.4 gal/hr of No. 4 fuel oil.

2. The owner/operator shall limit the quantity of No. 4 fuel oil combusted at the facility to 218,938 gallons or less for any consecutive 12 month period.

3. The flue gas recirculation system for each boiler shall be in full operation whenever each boiler is in operation.

C. Continuous Monitors

1. Continuous emission monitoring equipment shall be installed, operated and maintained for opacity when each boiler is operating on fuel oil.

2. The owner/operator shall record and maintain records of the amount of each fuel combusted during each month.

D. Fuel Oil Testing

1. Compliance with fuel oil sulfur limits may be determined based on a certification from the fuel supplier.

2. Fuel supplier certification shall include the following information:

a. The name of the oil supplier;

b. The sulfur content of the fuel oil from which the shipment came or of the shipment itself;

c. The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to East Providence High School or whether the sample was drawn from oil in storage at the oil suppliers/refiners facility or another location;

d. The method used to determine the sulfur content of the oil.

3. 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 oil in the initial tank of oil to be fired in each boiler and after each new shipment of oil is received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted.

4. Each fuel supplier certification or each fuel oil analysis must demonstrate that the oil for each boiler contains 0.3 percent sulfur by weight or less for No. 2 fuel oil and 0.5 percent sulfur by weight or less for No. 4 fuel oil.

E. Record Keeping and Reporting

1. The owner/operator shall, on a monthly basis, no later than 5 days after the first of the month, determine the fuel use in each boiler for the previous 12 months. 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 notify the Office of Air Resources in writing, within 15 days, whenever the total combined quantity of No. 4 fuel oil combusted in the boilers exceeds 218,938 gallons for any consecutive 12 month period.

3. The owner/operator shall notify the Office of Air Resources in writing of any 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 of 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.

4. The owner/operator shall maintain copies of all fuel supplier certifications or fuel analyses and these copies shall be made accessible for review by the Office of Air Resources or its authorized representative and EPA. These records shall include a certified statement, signed by the owner/operator of the facility, that the records represent all of the fuel combusted in each boiler.

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 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 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.

F. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable federal and state laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility 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 facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

4. Each boiler is subject to the requirements of the Federal New Source Performance Standards § 40 CFR 60, Subparts A (General Provisions) and Dc (Small Industrial-Commercial-Institutional Steam Generating Units). Compliance with all applicable provisions of these regulations is required.