

9 April 2012

Stephen DiPrete, Controller
Monarch Metal Finishing Co, Inc.
189 Georgia Avenue
Providence, RI 02905

Dear Mr. DiPrete:

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 189 Georgia Avenue, Providence.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 2158).

If there are any questions concerning this permit, please contact me at 222-2808, extension 7415.

Sincerely,

Carlene B. Newman
Air Quality Specialist
Office of Air Resources

cc: Providence Building Official

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

MINOR SOURCE PERMIT

MONARCH METAL FINISHING CO, INC.

APPROVAL NO. 2158

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

Monarch Metal Finishing Co, Inc.

For the following:

Installation of a Cleaver Brooks 5.103 MMBtu/hr, 125 HP firetube boiler Model No. CBI-200-125-150. The boiler shall be fired with natural gas or No. 2 fuel oil containing 0.3 percent sulfur, by weight, or less.

Located at: *Monarch Metal Finishing*

189 Georgia Avenue, Providence - in the boiler room

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 *Monarch Metal Finishing Co, 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 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

MONARCH METAL FINISHING CO, INC.

Approval No. 2158

A. Emission Limitations

1. Natural Gas Firing

a. Nitrogen oxides (as nitrogen dioxide (NO₂))

The emission rate of nitrogen oxides discharged to the atmosphere from the boiler shall not exceed 0.07 lb per million BTU heat input or 0.36 lb/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from the boiler shall not exceed 0.02 lb per million BTU heat input or 0.10 lb/hr, whichever is more stringent.

c. Total Nonmethane Hydrocarbons (NMHC)

The emission rate of total nonmethane hydrocarbons discharged to the atmosphere from the boiler shall not exceed 0.004 lb per million BTU heat input or 0.02 lb/hr, whichever is more stringent.

2. Fuel Oil Firing

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

The emission rate of nitrogen oxides discharged to the atmosphere from the boiler shall not exceed 0.19 lb per million BTU heat input or 0.97 lb/hr, whichever is more stringent.

b. Carbon Monoxide (CO)

The emission rate of carbon monoxide discharged to the atmosphere from the boiler shall not exceed 0.04 lb per million BTU heat input or 0.2 lb/hr, whichever is more stringent.

c. Sulfur Dioxide (SO₂)

- (1) All fuel burned in the boiler shall contain no more than 0.3 percent sulfur by weight.
- (2) The emission rate of sulfur dioxide discharged to the atmosphere from the boiler shall not exceed 1.57 lb/hr.

d. Particulate Matter

The emission rate of particulate matter discharged to the atmosphere from the boiler shall not exceed 0.02 lb per million BTU heat input or 0.10 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 0.01 lb/hr, whichever is more stringent.

3. Visible emissions from the boiler stack shall not exceed 10% opacity (6-minute average).

B. Operating Requirements

1. The maximum firing rate of the boiler shall not exceed 5,103 ft³/hr of natural gas or 36.4 gal/hr of No. 2 fuel oil.

C. Continuous Monitors

1. Continuous emission monitoring shall be installed, operated and maintained for opacity when the boiler is operating on fuel oil. The device shall be calibrated to sound an audio alarm at 10% opacity. The audio alarm must be located in an area where it will be heard by the operator or other person responsible for the boiler.

D. Fuel Oil Testing

1. Compliance with the fuel oil sulfur limits 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 Monarch Metal Finishing or whether the sample was drawn from fuel storage at the fuel supplier's facility or another location; and
 - 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 each fuel burning device and after each new shipment of fuel received. Samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any fuel is combusted.
 3. Each fuel supplier certification or each fuel oil analysis must demonstrate that the oil contains 0.3 percent sulfur by weight or less.

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 total quantity of No. 2 fuel oil and natural gas combusted in this boiler. 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 retain copies of all fuel supplier certifications for each calendar quarter. These records shall be made accessible for review by the Office of Air Resources or EPA. This quarterly record shall include a certified statement, signed by the owner/operator, that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.
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 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.

4. 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.
5. 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.
6. 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. The owner/operator is subject to the requirements of 40 CFR 60, Subpart A (General Provisions) and 40 CFR 63, Subpart JJJJJ (National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources). Compliance with all applicable provisions therein is required.