

29 April 2011

Mr. Kevin Schmidt  
Vice President, Manufacturing  
Aspen Aerogels, Inc.  
30 Forbes Road, Bldg A  
Northborough, MA 01532

Dear Mr. Schmidt:

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 3 Dexter Road, East Providence, RI.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval No. 2126).

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

*ASPEN AEROGELS, INC.*

APPROVAL NO. 2126

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

*Aspen Aerogels, Inc.*

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**For the following:**

*Installation of a Cleaver Brooks 12.247 MMBtu/hr firetube boiler Model No. CBLE-700-300-125HW. The boiler will be fired with natural gas.*

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**Located at:** *3 Dexter Road, East Providence*

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**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 *Aspen Aerogels, 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.**

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**Douglas McVay, Acting Chief  
Office of Air Resources**

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**Date of Issuance**

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

Permit Conditions and Emission Limitations

**ASPEN AEROGELS, INC.**

**Approval No. 2126**

A. Emission Limitations

1. Nitrogen Oxides (as nitrogen dioxide (NO<sub>2</sub>))

The emission rate of nitrogen oxides discharged to the atmosphere from the boiler shall not exceed 0.035 lb per million BTU heat input or 0.43 lbs/hr, whichever is more stringent.

2. 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 0.49 lbs/hr, whichever is more stringent.

3. 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 0.05 lb/hr, whichever is more stringent.

4. 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 12,247 ft<sup>3</sup>/hr of natural gas.

C. 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 natural gas combusted in this boiler (Approval No. 2126) and the existing 6 MMBtu/hr Cleaver Brooks 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 notify the Office of Air Resources in writing of the date of actual start-up of the boiler, no later than 15 days after such date.
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.

D. 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. This 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.
5. The existing 6 MMBtu/hr Cleaver Brooks water tube boiler can remain in service and shall be operated only when the 12.247 MMBtu/hr Cleaver Brooks firetube boiler (Approval No. 2126) is out of service. The existing 6 MMBtu/hr Cleaver Brooks Boiler can be operated for maintenance and testing, however under no circumstances are the two boilers to operate simultaneously.