

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

**AIR POLLUTION CONTROL REGULATION NO. 13**

**PARTICULATE EMISSIONS FROM FOSSIL FUEL FIRED  
STEAM OR HOT WATER GENERATING UNITS**



*Effective: 17 January 1973*

*Last Amended: 19 July 2007*

**AUTHORITY:** These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(s) and 23-23, as amended, and have been promulgated pursuant to the procedures set forth in the R.I. Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35.

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STEAM OR HOT WATER GENERATING UNITS**

**13.1 Definitions**

Unless otherwise expressly defined in this section, the terms used in this regulation shall be defined by reference to the Rhode Island Air Pollution Control General Definitions Regulation. As used in this regulation, the following terms shall, where the context permits, be construed as follows:

- 13.1.1 **"Emergency or standby basis"** means the unit is available for use for limited periods of time only in the case of sudden and unavoidable failure of other generating units.
- 13.1.2 **"Wood residue"** means a waste by-product of the pulp and paper industry which consists of bark, sawdust, slabs, chips, shavings, and mill trims.
- 13.1.3 **"Secondary air"** means air which is introduced to the furnace as compared to primary air which is introduced with the fuel at the burner.
- 13.1.4 **"Rotary cup burner"** means any unit which provides atomization by centrifugally dispersing the fuel from a rotating cup and utilizes natural draft as a secondary air supply.

**13.2 Limitations**

- 13.2.1 No person shall cause or permit the emissions from a fossil fuel or wood residue fired steam or hot water generating unit having a maximum rated heat input capacity of one million Btu per hour or more of particulate matter in excess of .10 pounds per million Btu actual heat input.

13.2.2 New Generating Units

No person shall construct, install or modify a fossil fuel or wood residue fired steam or hot water generating unit designed to burn residual oil or wood residue and having a heat input capacity of one million Btu per hour or more which

utilizes a burner or burners of a design not approved by the Director. Design approval shall be based upon criteria set forth in Subsection 13.3.2 of this regulation. Approval of burner design shall be obtained in conjunction

with the required application for prior approval of the Director to install the fossil fuel fired steam or hot water generating unit (Sections 9.3 and 9.4 of Regulation 9).

### 13.2.3 Existing Generating Units

Prohibition of Rotary Cup Burners - No person shall operate or permit the operation of a fossil fuel fired steam or hot water generating unit burning residual oil and having a heat input capacity of one million Btu per hour or more which utilizes a rotary cup burner or burners of a design not approved by the Director.

## 13.3 Determination of Compliance

13.3.1 Compliance with Section 13.2 shall be determined by emission testing conducted by the owner or operator of the equipment according to Method 5 of Appendix A to Part 60 of Title 40 of the Federal Regulations, or by such other methods which may be approved by the Department for stack testing for particulate emissions.

13.3.2 In the absence of data from emission testing, as required above, the Director may determine that a generating unit is or is not in compliance with Section 13.2 based on information available to him including, but not limited to, type of fuel burned, design of unit, efficiency of air pollution control systems, operating and maintenance procedures, and emission test results on similar units.

13.3.3 The requirement of emission testing in accordance with Subsection 13.3.1 of this regulation may be waived for a specific source if the Director:

- (a) specifies or approves, in a specific case, the use of a reference method with minor changes in methodology; or
- (b) approves the use of an equivalent or alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance; or
- (c) finds that the owner or operator of a source has demonstrated by other means to the Director's satisfaction that the source is in compliance with the relevant emission standards.

## 13.4 Exemptions

13.4.1 Subsection 13.2.3 shall not apply to those generating units for which a demonstration

is made to the satisfaction of the Director that they:

- (a) are used only in an emergency or a standby basis; or
- (b) are able to maintain compliance with applicable regulations.

13.4.2 The emissions limitation in Subsection 13.2.1 shall not apply to those generating units that have received an approval under the provisions of Subsections 8.3.2 and 8.3.3 of Air Pollution Control Regulation No. 8. The following provisions shall apply for the duration of such an approval:

- (a) If a source is approved under Subsection 8.3.2, then the average particulate emission rate in any 24-hour period for all fuel burning devices included in the approved emissions bubble shall not exceed 0.1 pounds per million Btu actual heat input; or
- (b) If a source is approved to burn high sulfur fuel oil under Subsection 8.3.3, then the particulate emissions shall not exceed 0.15 pounds per million Btu actual heat input while high sulfur fuel oil is being burned.

## **13.5 Compliance Schedule**

13.5.1 No person may utilize an unapproved burner unless he complies with the requirements of Subsection 13.5.2. In the event that he chooses to install a new burner or burners, it shall be done in accordance with a schedule of dates submitted to the Director by 1 January 1980 including, but not limited to, the following:

- (a) Final plans for the installation of an approved burner or burners;
- (b) Purchase orders or contracts for installation;
- (c) A progress report on the status of the installation;
- (d) Commencement of installation;
- (e) Completion of installation and final compliance demonstrated as expeditiously as practicable but not later than 31 December 1982; and
- (f) Verifications of parts (b), (c), (d) and (e) within five (5) days through written confirmation to the Chief of the Division.

13.5.2 If an owner or operator of a fossil fuel fired steam or hot water generating unit utilizing an unapproved burner does not install an approvable burner replacement, he must demonstrate compliance with Section 13.2 in accordance with the procedures mandated in Section 13.3 as expeditiously as practicable but not later than 31

December 1982. An owner or operator must also maintain and have available a record of actual maintenance and operating procedures for each boiler.

## **13.6 General Provisions**

### 13.6.1 Purpose

The purpose of this regulation is to limit emissions of particulate matter from fossil fuel fired steam or hot water generating units.

### 13.6.2 Authority

These regulations are authorized pursuant to R.I. Gen. Laws § 42-17.1-2(s) and 23-23, as amended, and have been promulgated pursuant to the procedures set forth in the R.I. Administrative Procedures Act, R.I. Gen. Laws Chapter 42-35

### 13.6.3 Application

The terms and provisions of this regulation shall be liberally construed to permit the Department to effectuate the purposes of state law, goals and policies.

### 13.6.4 Severability

If any provision of this regulation or the application thereof to any person or circumstance, is held invalid by a court of competent jurisdiction, the validity of the remainder of the regulation shall not be affected thereby.

### 13.6.5 Effective Date

The foregoing regulation, "Particulate Emissions from Fossil Fuel Fired Steam or Hot Water Generating Units", as amended, after due notice, is hereby adopted and filed with the Secretary of State this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ to become effective twenty (20) days thereafter, in accordance with the provisions of Chapters 23-23, 42-35, 42-17.1, 42-17.6, of the General Laws of Rhode Island of 1956, as amended.

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W. Michael Sullivan, PhD., Director  
Department of Environmental Management

**Notice Given on: February 21, 2007**

**Public Hearing held: March 23, 2007**

**Filing Date: June 29, 2007**

**Effective Date: July 19, 2007**