

RULE 4693 BAKERY OVENS (Adopted May 16, 2002)

1.0 Purpose

The purpose of this rule is to limit volatile organic compound (VOC) emissions from bakery ovens.

2.0 Applicability

The requirements of this rule shall apply to bakery ovens operated at major source facilities, which emit VOCs during the baking of yeast-leavened products.

3.0 Definitions

3.1 Bakery Oven: an enclosed compartment supplied with heat, typically from the combustion of natural gas, used to bake bread, buns and rolls. This does not include proofing boxes.

3.2 Existing Oven: an oven that was constructed and commenced operation prior to July 1, 2002.

3.3 Fermentation Time: an elapsed time between adding yeast to the dough or sponge and placing it into the oven, excluding retardation time, expressed in hours.

3.4 Leaven: a rise in the dough caused by the permeation of gas through the use of a chemical agent such as baking powder or a fermentation-producing agent such as yeast.

3.5 Major Source: as defined in Rule 2201 (New and Modified Stationary Source Review Rule).

3.6 Proofing Box: A warm, typically 100°F, humid chamber where yeast-leavened dough is allowed to rise to the volume desired for baking.

3.7 Retardation Time: any portion of the elapsed time between adding yeast to dough or sponge and placing the dough or sponge into a bakery oven, where the dough or sponge is refrigerated at temperatures of less than 10 degrees Celsius, for the specific purpose of retarding the fermentation process.

3.8 Uncontrolled VOC Emissions: any VOC emissions released from a bakery oven, before application of add-on air pollution control equipment or process modification.

3.9 Volatile Organic Compound (VOC): as defined in Rule 1020 (Definitions).

3.10 Yeast Percentage: a ratio of the pounds of yeast per hundred pounds of total recipe flour.

#### 4.0 Exemptions

The provisions of this rule shall not apply to equipment used exclusively for the baking of bakery products leavened chemically in the absence of yeast.

#### 5.0 Requirements

No person shall operate a new or existing bakery oven unless the following standards are met:

5.1 Emissions from all oven stacks are vented to an emission collection system.

5.2 The collected emissions are vented to an approved emission control device, which has a control efficiency of at least 95 percent as determined by the test method in Section 6.2.

#### 6.0 Administrative Requirements

##### 6.1 Recordkeeping:

6.1.1 Any person operating a bakery oven subject to this rule shall maintain a daily record of operations, including, but not limited to:

6.1.1.1 the amount of raw material processed for total recipe,

6.1.1.2 yeast percentage,

6.1.1.3 fermentation time, and

6.1.1.4 the type of product baked.

6.1.2 For those ovens subject to the control requirements in Section 5.0, daily records shall also be maintained of the following key operating parameters of control device:

6.1.2.1 temperature,

6.1.2.2 operating pressure of the oven,

6.1.2.3 the product flow rate, and

6.1.2.4 inspection schedules and anticipated ongoing maintenance

regarding the key operating parameters.

6.1.3 Effective and beginning on or after May 16, 2002, records shall be maintained for a minimum of five years and made available for inspection to the APCO upon request.

## 6.2 Test Methods

6.2.1 Testing the control efficiency of the control device shall be done using USEPA Test Methods 18 or an equivalent test method may be used provided it has been approved by the USEPA, CARB, and the APCO.

6.2.2 All test methods referenced in this Section shall constitute the most recent approved version.

## 7.0 Compliance Schedule

No person shall operate a bakery oven subject to this rule unless the following increments of progress are met:

### 7.1 For existing bakery ovens:

7.1.1 By December 2, 2002, submit required applications for permits to operate the control device.

7.1.2 By June 2, 2003, demonstrate compliance with the requirements in Section 5.0.

7.2 For new facilities installing new bakery ovens commencing operations on and after July 1, 2002, be in compliance by December 2, 2002 or by the date of installation, whichever is later.

### 7.3 Alternate Compliance Schedule

For existing facilities with existing oven, sections 7.1.1 and 7.1.2 compliance dates may be postponed by one year if the owner of a bakery oven elects to replace the existing oven with a new oven. Such an election must be made by December 2, 2002 and be in full compliance by December 2, 2003. In approving such an election, the APCO may impose interim conditions or control measures on the existing oven in order to assure compliance pending the installation or construction of the new, replacement oven.

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