

Title 26 DEPARTMENT OF THE ENVIRONMENT

Subtitle 11 AIR QUALITY

Chapter 25 Control of Glass Melting Furnaces

.01 Definitions.

1. A. "All-electric melter" means a glass melting furnace in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, although some fossil fuel may be charged to the furnace as raw material.

B. "Glass melting furnace" means a unit comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass. The unit includes raw material charger systems, heat exchangers, melter cooling systems, exhaust system, fuel supply and electrical boosting equipment, integral control systems, and instrumentation and appendages for conditioning and distributing molten glass to forming apparatuses.

C. "Opal recipe" means raw material formulation of the following approximate proportions:

(1) 72 percent silica;

(2) 15 percent soda;

(3) 10 percent lime and magnesia;

(4) 2 percent alumina; and

(5) 1 percent miscellaneous materials.

.02 Applicability and Exemptions.

1. A. The requirements of this chapter do not apply to frit manufacturing furnaces, flat glass furnaces, and all-electric melters.

B. Any installation or source which is subject to the provisions of this chapter is also subject to the provisions of any other chapter. However, when this chapter establishes an emission standard for a specific installation which differs from a general emission standard in COMAR 26.11.06.01-----09, this chapter takes precedence.

C. This regulation applies only in Areas III and IV.

.03 Visible Emissions from Glass Melting Furnaces.

1. A. General Requirements.

(1) A person may not cause or permit the discharge of emissions of greater than 20 percent opacity from a glass melting furnace.

(2) A person may not cause or permit the discharge of fugitive emissions of greater than 20 percent opacity from a building containing forming and post-forming equipment.

B. Exceptions.

(1) The provisions of §A(1) and (2) of this regulation do not apply to emissions that occur during process modifications or adjustments and that are not greater than 40 percent opacity for a period of not more than 6 consecutive minutes in any 60 minutes.

(2) A person who owns or operates a gas-fired installation subject to this chapter other than an opal recipe glass melting furnace is not eligible for a visible emission exception under COMAR 26.11.06.02B for that installation.

.04 Particulate Matter Emissions from Glass Melting Furnaces.

1. A. General Requirements. A person may not cause or permit the discharge of particulate matter into the outdoor atmosphere from a glass melting furnace in excess of the amount determined using the following equation:

(1) $E = 5 + 0.48 (P)$ where: E = maximum weight discharged per hour (pounds) P = process weight in tons per hour; or (2) $E = 2.27 + 0.24 (P)$ where: E = maximum weight discharged per hour (kilograms) P = process weight in megagrams per hour.

B. Exception. A person who owns or operates an opal recipe glass melting furnace with an interruptible gas service, as defined in COMAR 26.11.09.01C, may exceed the requirements in Regulation .03A and §A of this regulation when gas service is interrupted by the utility if maximum available electric boosting is used in conjunction with an alternative fuel.