

SUBCHAPTER M: METALLURGY
§§106.311, 106.313 - 106.322
Effective September 3, 2009

§106.311. Crucible or Pot Furnace.

Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal are permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.313. Tumblers for Cleaning or Deburring Metal.

All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 pounds or less are permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.314. Shell Core and Mold Machines.

Shell core and shell mold manufacturing machines are permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.315. Sand or Investment Molds.

Sand or investment molds with a capacity of 100 pounds or less used for the casting of metals are permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.316. Metal Inspection.

Equipment used for inspection of metal products is permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.317. Miscellaneous Metal Equipment.

Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means is permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.318. Die Casting Machines.

Die casting machines are permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.319. Foundry Sand Mold Forming Equipment.

Foundry sand mold forming equipment to which no heat is applied is permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.320. Miscellaneous Metallic Treatment.

Electrically heated or sweet natural gas or liquid petroleum gas fueled equipment used exclusively for heat treating, soaking, case hardening, or surface conditioning of metal objects, such as carbonizing, cyaniding, nitriding, carbon nitriding, siliconizing, or diffusion treating is permitted by rule.

Adopted August 9, 2000

Effective September 4, 2000

§106.321. Metal Melting and Holding Furnaces.

Metal melting and holding furnaces as specified in this section are permitted by rule.

(1) crucible furnaces, pot furnaces, or induction furnaces with a holding capacity of 1,000 pounds or less, with the following limitations:

(A) no smelting, reduction, sweating, metal separation, or distilling is conducted;

(B) in ferrous melting furnaces where gray iron or steel is melted:

(i) ductile iron is produced only when emissions are captured by a vent hood and filtered or within a crucible with a lid which allows no visible emissions; and

(ii) the furnace charge is free of oil, grease, and paint;

(C) in nonferrous melting furnaces, only the following metals are melted, poured, or held in a molten state:

(i) aluminum or any alloy containing over 50% aluminum;

(ii) magnesium or any alloy containing over 50% magnesium;

(iii) tin or any alloy containing over 50% tin;

(iv) zinc or any alloy containing over 50% zinc;

(v) copper, brass, or bronze; or

(vi) precious metals;

(D) no lead, leaded brass, leaded bronze, or manganese bronze is melted, poured, or held in a molten state;

(2) aluminum melting or holding furnaces with a holding capacity of 2,000 pounds or less that melt only clean aluminum ingots or pigs and in which no refining, smelting, metal separation, sweating, distilling, or fluxing with chlorine bearing gases is performed.

Adopted August 9, 2000

Effective September 4, 2000

§106.322. Furnaces to Reclaim Aluminum or Copper.

Dry hearth reverberatory type holding chamber aluminum or copper metal reclamation/sweat furnaces in which no fluxing, degassing, or refining is conducted, which operate according to the following conditions and limitations of this section are permitted by rule.

(1) Scrap metal charges shall consist primarily of copper or aluminum metal. Operation of the furnace for reclamation or lead, tin, zinc, or magnesium metals is prohibited.

(2) The maximum furnace charging rate shall be 2,000 pounds per hour or less.

(3) The furnace charge door shall remain closed except during charging and furnace cleaning operations.

(4) The furnace shall be equipped with an afterburner which will provide a minimum retention time of 0.1 second at a minimum temperature of 1,300 degrees Fahrenheit for all furnace exhaust gases.

(5) The incineration of any insulated wire or cable containing chlorine compounds in the insulation, such as polyvinyl chloride insulation, is expressly prohibited.

(6) The owner or operator of the furnace shall initiate and maintain a program of furnace operator training in the recognition of chlorine-bearing wire or cable insulation and shall demonstrate, upon request by the executive director, acceptable proficiency in the recognition of chlorine-bearing wire or cable insulation such as polyvinyl chloride insulation.

(7) Fuel for the furnace shall be sweet natural gas as defined in Chapter 101 of this title (relating to General Air Quality Rules) or liquid petroleum gas, diesel, or Number 2 fuel oil.

(8) Before construction begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7.

Adopted August 9, 2000

Effective September 4, 2000