# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

# **DIVISION OF AIR AND WASTE MANAGEMENT**

Statutory Authority: 7 Delaware Code, Chapter 60, (7 Del.C. Ch. 60)

# PROPOSED

## 1123 Standards of Performance for Steel Plants: Electronic Arc Furnaces

## Regulation No. 23 1123 Standards of Performance for Steel Plants: Electronic Arc Furnaces

# 02/01/1981

#### Section 1 -

## 1.0 Applicability

**1.1** The provisions of this Rregulation are applicable to existing electric arc furnaces over 100 tons capacity and their associated dust-handling equipment in steel plants.

#### 04/18/1983

#### Section 2 -

## 2.0 Definitions

- 2.1 As used in this regulation, all terms not defined herein shall have the meaning given them in 7 Del.C., Chapter 60 and in Regulation No. 1 7 DE Admin. Code 1101.
  - (d)"Capture system" means the equipment (including ducts, hoods, fans, dampers, etc.) used to capture or transport particulate matter generated by an EAF to the air pollution control device.
  - (e)"Charge" means the addition of iron and steel scrap or other materials into the top of an electric arc furnace.
  - (f)"Charging period" means the time period commencing at the moment an EAF starts to open and ending either three minutes after the EAF roof is returned to its closed position or six minutes after commencement of opening of the roof, whichever is longer.
  - (c)"Control device" means the air pollution control equipment used to remove particulate matter generated by an EAF(s) from the effluent gas stream.
  - (n)"Direct shell evacuation system" means any system that maintains a negative pressure within the EAF above the slag or metal and ducts these emissions to the control device.
  - (b)"Dust-handling equipment" means any equipment used to handle particulate matter collected by the control device and located at or near the control device for an EAF subject to this regulation.
  - (a)"Electric arc furnace (EAF)" means any furnace that produces molten steel and heats the charge materials with electric arcs from carbon electrodes. Furnaces from which the molten steel is cast into the shape of finished products, such as in foundry, are not applicable facilities included within the scope of this definition. Furnaces which, as the primary source of iron, continuously feed prereduced ore pellets are not applicable facilities within the scope of this definition.
  - (I)"Heat time" means the period commencing when scrap is charged to an empty EAF and terminating when the EAF tap is completed.
  - (i)"**Meltdown and refining**" means that phase of the steel production cycle when charge material is melted and undesirable elements are removed from the metal.
  - (j)"Meltdown and refining period" means the time period commencing at the termination of the initial charging period and ending at the initiation of the tapping period, excluding any intermediate charging periods.