

#### **401 KAR 59:260. New blast furnace casthouses.**

RELATES TO: KRS Chapter 224

STATUTORY AUTHORITY: KRS 224.10-100

CERTIFICATION STATEMENT:

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to prescribe administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation provides for the control of emissions from new blast furnace casthouses.

Section 1. Applicability. The provisions of this administrative regulation shall apply to blast furnace casthouses commenced on or after the classification date defined below.

Section 2. Definitions. As used in this administrative regulation all terms not defined herein shall have the meaning given them in 401 KAR 50:010.

(1) "Blast furnace casthouses" means the building or buildings which houses the following operations:

(a) Casting of hot metal from a blast furnace from an opening at the bottom of the furnace through a runner into a torpedo car; and

(b) Casting of the slag from a blast furnace from an opening at the bottom of the furnace through runner(s) into a slag ladle or slag pit.

(2) "Blast furnace" means a furnace producing pig iron by introducing iron-bearing materials, coke, and flux materials into a vessel and introducing heated combustion air to form a reducing gas which is passed counter current to the descending raw materials.

(3) "Classification date" means the effective date of this administrative regulation.

(4) "Control device" means the air pollution control equipment used to remove particulate matter generated in the blast furnace casthouses from the effluent gas stream.

Section 3. Standard for Particulate Matter. No owner or operator of a blast furnace casthouse subject to the provisions of this administrative regulation shall cause to be discharged into the atmosphere from the blast furnace casthouse any gases which:

(1) Exhibit an average opacity in excess of twenty (20) percent.

(2) If such gases exit from a gas cleaner, no owner or operator subject to the provisions of this administrative regulation shall cause to be discharged into the atmosphere any gases which:

(a) Contain particulate matter in excess of 0.010 gr/dscf as tested during pouring of hot metal and slag; or

(b) Exhibit an average opacity in excess of twenty (20) percent.

Section 4. Test Methods and Procedures. Reference methods in Appendix A of 40 CFR 60, except as provided in 401 KAR 50:045, and as supplemented by the procedures in subsection (6) of this section, shall be used to determine compliance with the standards prescribed under Section 3 of this administrative regulation as follows:

(1) Reference Method 5 for the concentration of particulate matter and associated moisture content;

(2) Reference Method 1 for sample and velocity traverses;

(3) Reference Method 2 for velocity and volumetric flow rate;

(4) Reference Method 3 for gas analysis; and

(5) Reference Method 9 for the determination of opacity.

(6) For the purpose of determining compliance with Section 3(1) of this administrative regulation, the following procedures shall be used to supplement Method 9:

(a) A series of consecutive observations taken at fifteen (15) second intervals shall be made during the entire period of time that hot metal and slag are being cast. Compliance shall be based on a comparison of the standards in Section 3(1) of this

administrative regulation with the highest average opacity occurring over any six (6) consecutive minutes during the period of observation. If emissions are being emitted from the roof monitor and other discharge points from the building, the reader shall read and record whichever plume is most opaque at the time of each reading.

(b)

1. In making observations of roof monitor emissions, the reader shall be positioned within a sector seventy (70) degrees either side of a line perpendicular to the long axis of the roof monitor. Within this sector the reader shall be positioned with the sun behind him and generally perpendicular to the axis of the plume that is being observed. On overcast days or if the plume is in a shadow, the reader need not follow the requirement about positioning his back to the sun.

2. In making observations of emissions from other openings in the building, the reader shall be positioned within a sector seventy (70) degrees either side of a line perpendicular to the side of the building nearest which the emissions occur and with a clear view of the emissions. Within this sector the reader shall be positioned with the sun behind him and generally perpendicular to the axis of the plume that is being observed. On overcast days, the reader need not follow the requirement about positioning his back to the sun.

Section 5. Variances. The cabinet may grant a variance from the control requirements of this administrative regulation. Requests for such a variance shall be supported by adequate technical and economic documentation, provided that any alternative strategy shall result in at least an equivalent overall reduction in particulate emissions from the source as would be required by this administrative regulation.

(401 KAR 059:260. 9 Ky.R. 390; eff. 3-2-1983; 10 Ky.R. 434; 1071; eff. 4-1-1984; TAm eff. 8-9-2007; Crt eff. 11-21-2018; Crt eff. 11-20-2025.)