2.11 Iron and Steel Plants

2.11.1 Applicability and Designation of Affected Facility

The affected facility to which the provisions of this source category apply is each basic oxygen process furnace (BOPF).

2.11.2 Test Methods and Procedures

(a) In conducting the performance tests required in Section 1.2, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in Section 1.2(b).

(b) The owner or operator shall determine compliance with the particulate matter standards as follows:

(1) The time-measuring instrument of 2.11.3 shall be used to document the time and duration of each steel production cycle and each diversion period during each run.

(2) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 1.50 dscm (53 dscf). Sampling shall be discontinued during periods of diversions.

(i) For affected facilities that commenced construction, modification, or reconstruction on or before January 20, 1983, the sampling for each run shall continue for an integral number of steel production cycles. A cycle shall start at the beginning of either the scrap preheat or the oxygen blow and shall terminate immediately before tapping.

(ii) For affected facilities that commenced construction, modification, or reconstruction after January 20, 1983, the sampling for each run shall continue for an integral number of primary oxygen blows.

(3) Method 9 and the procedures in Section 1.3 shall be used to determine opacity. Observations taken during a diversion period shall not be used in determining compliance with the opacity standard. Opacity observations taken at 15-second intervals immediately before and after a diversion of exhaust gases from the stack may be considered to be consecutive for the purpose of computing an average opacity for a 6-minute period.

(c) To comply with 2.11.3(c), the owner or operator shall use the monitoring devices of 2.11.3(b) (1) and (2) for the duration of the particulate matter runs. The arithmetic average of all measurements taken during these runs shall be used to determine compliance with §2.11.3(c).

2.11.3 Monitoring of Operations

(a) When required (e.g., NSPS sources or as otherwise specified by the Director), the owner or operator of an affected facility shall maintain a single time-measuring
instrument which shall be used in recording daily the time and duration of each steel production cycle, and the time and duration of any diversion of exhaust gases from the main stack servicing the BOPF.

(b) When required (e.g., NSPS sources or as otherwise specified by the Director), the owner or operator of any affected facility that uses venturi scrubber emission control equipment shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(1) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within 250 Pa (1 inch water).

(2) A monitoring device for the continual measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within 5 percent of the design water supply pressure. The monitoring device's pressure sensor or pressure tap must be located close to the water discharge point. The Director must be consulted for approval in advance of selecting alternative locations for the pressure sensor or tap.

(3) All monitoring devices shall be synchronized each day with the time-measuring instrument used under paragraph (a) of this section. The chart recorder error directly after synchronization shall not exceed 0.08 cm (1/32 inch).

(4) All monitoring devices shall use chart recorders which are operated at a minimum chart speed of 3.8 cm/hr (1.5 in/hr).

(5) All monitoring devices are to be recalibrated annually, and at other times as the Director may require, in accordance with the procedures under Section 1.4(b).

(c) Any owner or operator subject to the requirements of paragraph (b) of this section shall report to the Director, on a semiannual basis, all measurements over any 3-hour period that average more than 10 percent below the average levels maintained during the most recent performance test conducted under Section 1.2 in which the affected facility demonstrated compliance with the mass standards. The accuracy of the respective measurements, not to exceed the values specified in paragraphs (b)(1) and (b)(2) of this section, may be taken into consideration when determining the measurement results that must be reported.