

does not reflect what is currently achieved by the five best-performing sources.

2. Sinter Plant Oil Content Requirement

Comment. Sinter plants in Maryland and Indiana already must comply with rules that regulate the oil and grease content for the sinter plant raw material blend. The rules limit VOC emissions to no more than 0.25 lb/ton of sinter (except Indiana allows 0.36 lb/ton during non-ozone season). Maryland requires VOC testing and Indiana provides the option of VOC testing or sampling for oil content. Seven commenters recommend VOC testing as an option in the final rule because most plants in these states already use them; some comments also suggest a 30-day rolling average for VOC.

Response. We reviewed data submitted by two plants that showed VOC emissions correlated with oil content. LTV Steel (now owned by International Steel Group) performed simultaneous testing of oil content and VOC emissions, correlated the results, and showed that an oil content of 0.024 percent was equivalent to the State VOC limit of 0.25 lb/ton of sinter. As a result, the State allowed them to use alternative monitoring procedures. Based on our review of the data, we believe that maintaining the VOC at a level of 0.2 lb/ton or lower will ensure that the operating limit of 0.02 percent oil is maintained. Consequently, we have written the final rule to include an alternative emission limitation for VOC of 0.2 lb/ton of sinter. A plant electing the alternative limit is required to measure VOC emissions (total gaseous nonmethane organics as carbon) in source emissions using EPA Method 25 in 40 CFR part 60, appendix A (or a previously approved method). As with the oil content, the VOC limit is based on a 30-day rolling average. The 30-day average provides additional flexibility because it allows an occasional high daily value to be averaged with lower values on other days to achieve compliance. We believe the 30-day average accounts for day-to-day variability and enhances the achievability of the limit.

3. ESP Operating Limit

Comment. For plants required to use COMS to monitor ESP, the proposed rule establishes an enforceable operating limit based on the opacity observed during the initial performance test. Eight commenters argue that COMS data should not be used for compliance determinations because of measurement uncertainties and unreliability. They point to the recognized limitation for

measuring opacity below 10 percent and provide supporting data comparing COMS measurements in ESP stacks to EPA Method 9 data. Like the steel pickling MACT standard, COMS data should be used only to indicate if the ESP is operating properly and to institute corrective action as appropriate; subsequent EPA Method 9 observations may be appropriate in the event of a high number of measured excursions. These commenters also object to the operating limit for ESP equipped with COMS because EPA has not demonstrated a correlation between opacity and PM emissions from BOPF controlled by ESP to support using opacity as a surrogate for PM. A COMS opacity reading that is above that observed during a performance test does not necessarily indicate an exceedance because the high reading could have been caused by water vapor or another interference. The commenters believe EPA has not demonstrated that the tiny amount of data collected during the initial performance test would be representative of the opacity performance of ESP over the full range of foreseeable operating conditions. Thirty 6-minute averages taken over a 3-hour period will not adequately characterize the range of 87,600 6-minute averages generated over an entire year. Thus, EPA has not demonstrated that a limit set in this manner would be consistently achievable by well-operated and maintained equipment under the most adverse operating conditions over time.

Response. We believe that opacity is well established as a surrogate for PM. However, we understand the concerns of the commenters with respect to variability and have written the procedures in the final rule for determining the COMS operating limit to account for variability. The opacity operating limit is based on measurement of 6-minute averages during the performance test, and then calculating the 99 percent upper confidence limit on the mean of a normal distribution of the average opacity values. This statistical approach will account for normal variability and still provide assurance that the ESP is operating properly.

4. Operating Limits for Capture Systems

Comment. Nine commenters believe that an enforceable range of operating limits applicable under all operating conditions cannot be determined from the initial performance test for damper systems. Fixed damper positions for one set of operating conditions are not appropriate due to varying simultaneous operations, normal process variations,

and seasonal variations. The final rule should allow sources to specify multiple operating scenarios or ranges of operation in the operation and maintenance plan and require plants to meet the values in the plan rather than those set in the initial performance test. Eight of these commenters also recommend that the final rule include an alternative allowing continuous monitoring of fan amperage, like the provisions included in the proposed standards for coke plants.

Response. We investigated this issue further, and based on the additional information we received, we agree that fixed damper settings are not practicable or desirable in many cases. For example, damper settings may need to be changed in the BOPF shop depending on the operations underway at the time, such as hot metal transfer, desulfurization, charging, oxygen blowing, and tapping. We have written the final rule to provide flexibility and have modeled it after the MACT standard for primary copper smelters. The owner or operator must specify in the operation and maintenance plan the damper settings that will be used under different operating scenarios and for seasonal variations. These damper settings must be checked once per day. We have also added fan amperage as an acceptable alternative, consistent with the MACT standards for coke ovens and for primary copper smelters.

E. How Did We Revise the Performance Test Requirements?

1. Overlapping Cycles

Comment. Some plants have the capability of overlapping cycles of two separate furnaces (e.g., they may blow one furnace while another is being tapped). It appears that EPA's database is comprised of tests conducted on single furnaces. For this reason, seven commenters ask EPA to clarify that testing of primary emissions from BOPF is to be conducted during the steel production cycle of a single furnace. Other shop operations may be suspended during the testing. This approach is consistent with the manner in which the data were collected.

Response. We specify in the final rule exactly when owners or operators must test primary emissions from BOPF. For closed hood BOPF, plants must sample only during the primary oxygen blow. For open hood BOPF, plants must sample during the steel production cycle. We clarified that the steel production cycle begins when scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel. These requirements are