

discussed, in order to confirm and refine our emissions estimates for the best-performing units. The available data clearly indicate that ESP perform better than venturi scrubbers in controlling emissions from open hood shops. We have test data for five ESP that are similar in design, each of which, based on design and operating data, are among the best-performing units at open hood shops. The data include multiple tests at some plants, and these data indicate there is variability in performance from test to test and from run to run. The plant averages ranged from 0.007 to 0.019 gr/dscf, and individual tests (three-run averages) ranged from 0.004 to 0.019 gr/dscf. We calculated the 95th percentile for each plant. The median of the 95th percentiles for the top-performing plants is 0.019 gr/dscf. We rounded this value to two decimal places and chose 0.02 gr/dscf to represent the MACT floor for existing units.

The best-controlled open hood shop averaged 0.0066 gr/dscf with a 95th percentile of 0.01 gr/dscf, which we chose to represent the MACT floor for new sources.

We proposed a limit of 0.024 gr/dscf for new and existing closed hood BOPF primary control systems based on the performance of existing units using venturi scrubbers. All of the closed hood shops use venturi scrubbers as the primary control device. The test data and design information indicated that shops having high-energy venturi scrubbers with a pressure drop of 50 inches of water or more are the best-performing sources. We have recent test data for only one closed hood shop. However, we have data from 1971 to 1978 for high-energy venturi scrubbers on closed hood shops. These data include four BOPF shops that are currently operating. The test results range from 0.021 to 0.024 gr/dscf. For purposes of today's final rule, we did not include Kaiser Steel because the plant has been closed for several years. We calculated the 95th percentile for each plant. The median of the 95th percentiles for the top-performing plants is 0.027 gr/dscf. We rounded this value to two decimal places and chose 0.03 gr/dscf to represent the MACT floor for existing sources.

The best-controlled closed hood shop averaged 0.021 gr/dscf with a 95th percentile of 0.027 gr/dscf. We rounded the 95th percentile to two decimal places and chose 0.03 gr/dscf to represent the MACT floor for new sources.

Comment. Six commenters said EPA used test data dating from 1971 through 1978 to establish the limit for closed

hood systems. These commenters believe the data do not reflect current configurations or actual performance and cannot be used to establish the floor. Many systems have been upgraded to increase capture efficiency (including some furnaces used to establish the standard). Because there are little or no data for these sources, the commenters recommend that EPA use existing State implementation plans (SIP) to determine the floor. Another commenter agrees, adding that the test data used to support the 0.024 gr/dscf limit ranged up to 0.031 gr/dscf and represent the minimum anticipated variation of emissions from a MACT floor technology source. The proposed limit is more stringent than existing SIP and may not be achievable by plants using MACT floor controls. The analysis does not consider the current PM limit of 0.03 gr/dscf for plants in Ohio, which the commenter believes should be the limit.

Response. The test data for closed hood shops are not just from tests in 1971 to 1978—there is a 1992 test for Geneva Steel. The commenters did not provide any information on the nature of the upgrades or rationale as to their effect on emissions. For closed hood systems, testing is performed only during the oxygen blow with the capture hood tightly fitted to the furnace. Our understanding is that capture system upgrades have been made primarily to improve the capture of fugitive emissions from charging and tapping, which are not included in the performance testing for closed hood furnaces. In addition, the operating conditions of the scrubbers during the tests (e.g., pressure drops of 50 inches of water or more) are representative of the way these scrubbers are currently operated. Data for venturi scrubbers in other similar processes indicate that high-pressure drop scrubbers can achieve control levels of 0.03 gr/dscf or less. We believe the statistical approach that we used to confirm and refine emissions estimates for the floor analysis accounts for inherent variability over time. We believe that source test data provide a better picture of actual performance than the use of State limits as the commenter suggests. Moreover, based on our analysis of the emission tests, we have identified as MACT an emissions limit of 0.03 gr/dscf which is consistent with the emissions limits that the commenters identified as appropriate.

5. PM Standards for Ancillary Operations at BOPF Shops

Comment. According to eight commenters, the three data points for

hot metal transfer and desulfurization are not sufficient to define the floor, accurately represent current operating conditions, or reflect a level that is consistently achievable under the most adverse foreseeable circumstances over time. If sufficient data are not available, EPA should use existing State limits, if it can show that the level of control is realistically achievable under the most adverse anticipated circumstances over time. The commenters also question that the data used for characterizing performance were collected using the same test procedures specified in the proposed rule (average of three 1-hour tests during actual operation of the processes). Using data from a test method other than the required compliance method to set a standard does not meet CAA requirements.

Response. We proposed a PM standard of 0.007 gr/dscf for a control device serving BOPF ancillary processes based on the performance of existing units using baghouses. We reviewed the emissions data and confirmed the tests were conducted using EPA Method 5 (40 CFR part 60, appendix A). Every test result was presented as the average of three runs, which is consistent with our performance test requirements. Several test reports confirmed that sampling was conducted under normal operating conditions, and none of the reports indicated conditions were not normal. The tests used a sampling time of 1 hour or more to ensure an adequate sample volume was collected. As explained earlier, in response to another comment, EPA believes that it is preferable to use actual performance test data to determine the MACT floor when there are adequate such data available to reasonably characterize the level of performance of the relevant sources. The commenters did not provide us with any additional facts or data to show that any of the data we relied upon are invalid. For the reasons described above, we believe that these data are adequate to reasonably estimate the performance of the best sources for purposes of establishing a MACT floor, and these estimates more accurately reflect the actual performance of the best-performing sources than would estimates based on State permit data. Moreover, the approach that we used to confirm and refine the emissions estimates for the top-performing sources assures that we have adequately accounted for variability over time, and, therefore, addresses the concerns of the commenter.

We re-evaluated the emissions test data for ancillary operations based on the statistical approach previously discussed, in order to confirm and