

consistent with the way the emission test data were collected. We do not agree that testing should be performed under conditions that do not represent normal operations, such as suspending certain shop operations. The provisions in 40 CFR 63.7(e) apply and require that sampling be conducted under conditions that are based on representative performance (*i.e.*, performance based on normal operating conditions of the affected source).

2. Testing Multiple Stacks

Comment. Eight commenters believe it is impractical and burdensome to require simultaneous tests of multiple stacks or vents for a control device (*e.g.*, baghouse with eight modules, each with its own fan and stack). Successive testing of each stack or vent could be more manageable, but still has excessive costs. One commenter estimates 42 days of testing could be needed at one plant if each stack and vent must be tested. For these reasons, the proposed rule should be revised to allow for performance tests of a representative exhaust flow where control devices with multiple stacks are used.

Response. We agree and believe that because of the site-specific nature of this problem, decisions should be made on a case-by-case basis by the applicable permitting authority. We have written the final rule such that a source may conduct a representative sampling of stacks subject to the approval of the permitting authority when there are more than three stacks associated with a process.

F. How Did We Revise the Cost Estimates and Economic Impact Analysis?

Comment. Several commenters stated that we significantly underestimated the cost of the proposed rule. At proposal, we estimated a capital cost of \$34 million. The commenters said that the total capital cost was in the range of \$270 to \$320 million. Their estimate includes the cost of controls for plants not included in EPA's estimate as well as higher estimates of the cost for controls and monitoring in general.

Response. Following proposal and the receipt of comments, we contacted facilities to discuss the details of their cost estimates. Some facilities provided the details and basis of their estimates, and we incorporated them into our revised estimates. Other plants did not provide details or documentation; consequently, we developed our best estimate of potential costs for these facilities. In addition, we collected opacity data for most of the operating plants. We used these data to identify

plants that may need to install capture and control systems in the blast furnace casthouse or BOPF shop to meet the 20 percent opacity limit. Our revised capital cost estimate increased to \$93 million.

Comment: Eight commenters urge EPA to update its economic impact analysis to represent current economic conditions of the steel industry and the cumulative effect of all other pending environmental regulatory requirements facing the industry during the same time period.

Response: We agree with the commenters and have performed a revised economic impact analysis. The revised analysis attempts to account for the factors mentioned in the comment. At proposal, we estimated domestic production from integrated steel mills would decline by 3,100 tons, and operating profits were expected to decrease by \$5.2 million annually. With our revised analysis, we estimate domestic production from integrated mills will decline by 73,000 tons, and operating profits will decrease by \$13 million per year. A complete copy of the economic impact analysis is available in the docket.

IV. Summary of Environmental, Energy, and Economic Impacts

A. What Are the Air Emission Impacts?

The installation of new controls and upgrades will result in reductions in emissions of metal HAP and PM. We estimate that five new capture and control systems for the blast furnace casthouses will reduce these emissions by 90 percent, a reduction of 14 tpy of HAP and 2,100 tpy of PM. The new BOPF scrubbers at one plant and upgrades at two others will result in a 50 percent reduction in emissions, 5 tpy of HAP and 350 tpy of PM. Six new capture and control systems for fugitive emissions from BOPF shops will result in a 90 percent reduction in emissions, 48 tpy of HAP and 3,300 tpy of PM.

Most plants currently operate air pollution control equipment sufficient to meet the final rule requirements. We expect the standard to reduce metal HAP emissions from plants that will need to install or upgrade controls by 67 tpy and PM emissions by 5,800 tpy. Nationwide emissions of metal HAP and PM from integrated iron and steel plants will be reduced by nearly 20 percent from current levels.

B. What Are the Cost Impacts?

The nationwide capital and annual costs of new and upgraded capture and control systems are estimated at \$93 million and \$15 million/yr,

respectively. The total nationwide annual costs (including monitoring and recordkeeping) are about \$16 million/yr. These costs are based on a new primary control system (high-pressure drop venturi scrubbers) for one BOPF shop, upgraded primary controls at two others, six new capture and control systems for fugitive BOPF emissions, and five new capture and control systems for blast furnace casthouses. In addition, the estimate includes a capital cost of \$0.9 million and a total annual cost of \$1 million for monitoring, reporting, and recordkeeping.

C. What Are the Economic Impacts?

We conducted a detailed economic impact analysis to determine the impacts of the final rule on both the industry and the U.S. market for steel mill products. We estimate the economic impacts in both areas to be negligible. We project the price of steel mill products, in aggregate, to increase by less than 0.1 percent with domestic production from integrated mills declining by 73,100 short tons. This decline in production at affected integrated mills is somewhat offset by increases at nonintegrated domestic steel producers (15,800 short tons) and foreign imports (49,500 short tons). In terms of industry impacts, the integrated steel producers are projected to experience a slight decrease in operating profits of \$13 million annually, which reflects increased costs of compliance and associated reductions in revenues from producing final steel mill products. In addition, we don't foresee any individual integrated facility being in jeopardy of closure as a result of implementing the rule.

Based on the market analysis, the annual costs to society of today's final rule are projected to be \$15.4 million. As a result of slightly higher prices for steel mill products, the final consumers of these products will incur an additional \$6.2 million annually. Profits at integrated steel mills are expected to decline by \$13 million annually because of directly incurred control costs and reduced product revenues, while nonintegrated steel mills that compete in these markets and are unaffected by today's rule will experience an increase in profits of \$2.2 million. Similarly, foreign steel producers will also experience an increase in profits of \$1.7 million due to the slightly higher prices and increases in imports to the U.S. market. For more information, consult the economic impact analysis supporting the proposed rule.