

commenters stated that EPA included an invalid, high data point for manganese in developing the percentage of PM that is PM HAP. We have examined the test run mentioned by the commenters and agree that the run should be voided. Our revised analyses now indicate that the overall percentage of PM that is HAP metals is 0.72 percent.

*PM limit.* Other commenters argued that a PM limit for brick kilns is unnecessary. One commenter noted that metals occur naturally in clays or shales used to make bricks and that PM emissions from BSCP plants are clay dust. The commenter argued that metals are locked into the structure of the clay dust and are not bio-available to affect humans through respiratory adsorption, ingestion, or dermal contact. Some commenters noted that there is limited information on the amount of HAP metals in the PM emitted. Commenters pointed out that EPA is not setting a PM limit for clay refractory kilns. Some commenters disagreed that PM is an adequate surrogate for HAP metals emissions. Commenters also requested that a percent reduction alternative be allowed for the PM standard, similar to the percent reduction limits for HF and HCl.

We agree that PM emitted from BSCP facilities is largely clay dust, and that metals are naturally occurring in clays and shales used to make bricks. Many BSCP facilities apply surface coatings or body additives containing HAP metals to their products, and these coatings are another potential source of HAP metals emissions. These types of additives and coatings are not used in the manufacture of clay refractories.

We have four emission tests for HAP metals from tunnel kilns and all of these tests measured some level of HAP metals emissions including emissions of antimony, arsenic, beryllium, cadmium, chromium, cobalt, mercury, manganese, nickel, lead, and selenium. Based on these data, we believe that all kilns emit some level of HAP metals and, therefore, we are regulating HAP metals emissions. Test data for HAP metals are not available for clay refractories kilns.

We are unaware of any information to support the idea that the HAP metals are locked into the structure of the clay and are not bio-available to affect humans. In the absence of such information and in the interest of protecting public health, we assume conservatively that the HAP metals are bio-available and could affect human health. This assumption is consistent with the conservative approach embodied in the CAA section 112(b)(2) directive that EPA add pollutants to the statutory list

of HAP that “may” present adverse risks to human health and the environment through various exposure routes.

We used PM as a surrogate for HAP metals so that individual emission limits would not be based on the limited and variable data. We examined the available HAP metals test data and calculated that about 95 percent of the HAP metals emissions are in particulate form. Furthermore, the types of control technologies used on BSCP kilns remove PM and would indiscriminately remove particulate HAP metals. The United States Court of Appeals for the District of Columbia Circuit stated in a December 15, 2000 decision (in response to the National Lime Association (NLA) challenge of the use of PM as a surrogate for HAP metals), “if HAP metals are invariably present in cement kiln PM, then even if the ratio of metals to PM is small and variable, or simply unknown, PM is a reasonable surrogate for the metals—assuming \* \* \* that PM control technology indiscriminately captures HAP metals along with other particulates.” Our use of PM as a surrogate for HAP metals in the final BSCP rule is consistent with this decision.

We typically do not include percent reduction as an alternative for PM because a percent reduction standard rewards those facilities that have high inlet PM loadings. We believe that this is different from the percent reduction standards for HF and HCl because facilities do not typically have options for reducing the uncontrolled levels of HF or HCl. Therefore, we are not providing an alternative percent reduction standard for PM.

The revised PM emission limit for existing large tunnel kilns, new and reconstructed small tunnel kilns, existing small kilns that are rebuilt such that they become large kilns, and existing large DLA-controlled tunnel kilns that are rebuilt is based on the use of a DLA. Data from four tests conducted at the outlets of DLA were available for establishing a production-based emission limit, and we selected the highest PM data point as the emission limit in order to account for variability. Today’s final rule contains a PM emission limit of 0.21 kg/Mg (0.42 lb/ton) of fired product for existing large tunnel kilns, new and reconstructed small tunnel kilns, existing small kilns that are rebuilt such that they become large kilns, and existing large DLA-controlled tunnel kilns that are rebuilt. The PM emission limit for new and reconstructed large tunnel kilns is unchanged from proposal (0.060 kg/Mg (0.12 lb/ton) of fired product).

### G. Monitoring Requirements

Numerous comments were received on the proposed monitoring requirements. Some commenters felt that the monitoring, reporting, and recordkeeping requirements were unreasonable. Commenters noted that the monitoring requirements would require additional and higher skilled personnel.

Under section 114(a)(3) of the CAA, owners or operators of major sources are required to conduct enhanced monitoring of affected sources to ensure compliance with applicable emission standards. In response to this mandate, we have incorporated continuous compliance requirements into all part 63 standards, generally in the form of continuous emissions monitoring or continuous parameter monitoring. We believe that continuous monitoring is needed to ensure that emission controls are operated properly. However, 40 CFR 63.8(f) allows owners and operators of affected sources to request approval for alternative monitoring procedures to demonstrate compliance with emission limitations.

Although we have eliminated some of the proposed monitoring requirements (such as fabric filter inlet temperature monitoring) from today’s final rule, we have retained most of the proposed monitoring requirements. We believe that those monitoring requirements are the minimum needed to ensure continuous compliance with the emission limits.

#### 1. Operation, Maintenance, and Monitoring (OM&M) Plan

Some commenters felt that development of an OM&M plan was overly burdensome. One commenter thought the requirement to include OM&M procedures for kiln operation was unjustified. Another commenter noted possible contradictions of OM&M plan requirements and Table 7 of the proposed BSCP rule (the table showing applicability of the General Provisions to part 63).

After reviewing these comments, we decided that OM&M plans do not have to include procedures for monitoring the operation and maintenance of tunnel kilns, and we have written the final rule accordingly. However, we continue to believe that site-specific OM&M plans are necessary to ensure continued proper operation of any control device that is used to comply with the final rule.

Regarding the apparent contradictions between 40 CFR 63.8425(b)(8) through (10) and Table 7 of the proposed rule, we did not cite the General Provisions