

revised emission limits for new clay refractory products kilns. The resulting emission limits for HF are a 90 percent reduction or 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed. For HCl, the limits are a 30 percent reduction or 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed.

*Comment:* One commenter questioned the need to establish emission limits for chromium refractory products kilns. He stated that chromium compounds should be treated no differently than any of the other listed HAP. He noted that the use of chromium for refractory products manufacturing has decreased significantly in recent years, and that our own estimates indicate that total chromium compound emissions in 1996 were less than 10 tpy for the entire industry. He also pointed out that the large chromium refractory products facility referenced in the proposal has been shut down.

*Response:* As noted by the commenter, chromium compounds are one of the listed HAP in section 112(b) of the CAA. Chromium, in the form of chromite or chromium oxide, is a principal ingredient in the formulation of many refractory products and is emitted from kilns that fire chromium refractory products. Some of the chromium is emitted in the hexavalent form, which is a known human carcinogen. Under section 112(d) of the CAA, we are required to establish emission standards that are at least as stringent as the MACT floor for all listed HAP that are emitted from major sources. Consequently, regardless of the trend in chromium refractory production, we are required to establish emission limits based on the MACT floor level of control, which for chromium refractory products kilns is the work practice of firing kilns with natural gas or the equivalent.

*Comment:* One commenter opposed the provision in the proposed rule that limits the types of fuels used to fire clay and chromium refractory products kilns. He stated that many refractory products manufacturing industry kilns are designed to use fuels other than natural gas, such as fuel oil, propane, and pulverized coal. The need to use these alternative fuels is of particular importance during natural gas shortages or price increases. He pointed out that during natural gas shortages, residential users receive priority over industrial users of natural gas. He believes that prohibiting the use of these alternative fuels could adversely impact the viability of some refractory products manufacturing operations.

*Response:* We agree with the commenter that the Refractory Products

Manufacturing NESHAP should include appropriate provisions for the use of alternative fuels during specified times of natural gas curtailment and other situations when natural gas is unavailable. We consider such situations analogous to malfunctions, which are addressed in 40 CFR 63.6. Just as an exceedance of emission limits during a malfunction is not considered a violation, as indicated in 40 CFR 63.6(f)(1) and (h)(1), we believe that using other fuels during periods when natural gas is unavailable should also not be considered a violation of the work practice standard for clay and chromium refractory products kilns. We also note that operating permits for existing refractory products manufacturing facilities generally allow the use of fuel oil and other substitutes for natural gas in some situations. Thus, the MACT floor for existing clay and chromium refractory products kilns is the use of natural gas or equivalent fuel except during periods when natural gas is unavailable.

In the final rule, we are allowing owners and operators of affected chromium and clay refractory products kilns to use alternative fuels during periods when natural gas is unavailable due to a supply curtailment or other factors. However, we do not believe that natural gas price increases constitute such a situation, and the final rule makes it clear that natural gas prices cannot be considered the basis for a MACT floor that requires using an alternative fuel. The final rule also requires owners or operators to notify the regulatory authority within 48 hours after the declaration of natural gas curtailment or the interruption of natural gas supply. In addition, the owner or operator must submit a report that details the dates of alternative fuel usage and the amount of alternative fuel used within 10 working days after the facility terminates the use of the alternative fuel.

### C. Compliance Testing and Monitoring

*Comment:* One commenter stated that the requirement to test batch process sources during three separate process cycles is redundant, unnecessary, and burdensome. He believes that it would be adequate to test one process cycle. He pointed out that there are significant variations in product mixes and raw materials from cycle to cycle, and that while it could be argued that testing one cycle is adequate, it could also be argued that testing ten cycles is inadequate for characterizing emissions. He noted that testing during cool-down periods, in particular, is unnecessary.

*Response:* We agree with the commenter that testing batch process sources for three cycles of a "worst-case" batch may be unnecessary to characterize emissions and control device performance. Under the final rule, we are requiring owners and operators of affected batch process sources to perform at least two test runs on each of two separate process cycles. We believe that a second test run is necessary to corroborate the results of the initial test run. However, we also note that each test run on a batch process source must be a minimum of 3 hours in duration, and for many batch process sources, the minimum test run duration is likely to be in excess of 10 hours. Thus, even requiring only two test runs will necessitate at least 20 hours of testing for such sources, and we consider a test of that duration to be adequate for demonstrating compliance with emission limits. We also note that other NESHAP, such as subparts U, JJJ, OOO, and UUUU to 40 CFR part 63, do not require batch process sources to be tested for three test runs.

We are also including in the final rule a separate batch process testing provision for refractory products that are produced infrequently. In such cases, we are allowing owners and operators of affected batch process sources to test a single batch process cycle using two separate sampling trains simultaneously, rather than requiring them to conduct test runs over two separate batch cycles. Many refractory products that are produced in batch process sources are specialty items that may only be manufactured a few times per year. When such products represent the "worst-case" in terms of organic HAP emissions, requiring multiple test runs over separate process cycles could extend the test period over several weeks or months. Production of other refractory products could inadvertently be disrupted while the facility attempts to complete its compliance demonstration. We also point out that requiring performance tests on batch process sources to be conducted over no more than a single process cycle is not without precedent; at least four other NESHAP (subparts U, JJJ, OOO, and UUUU to 40 CFR part 63) require batch process sources to be tested over only a single process cycle. To satisfy this provision of today's final rule, owners or operators will be required to include in the Notification of Performance Test an explanation for why testing two separate batch cycles is impractical.

*Comment:* Two commenters expressed concern with the requirement that the compliance test on an affected source would have to be repeated before