

Section 112(d)(3) of the CAA specifies that we set standards for existing sources that are no less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources (for which the Administrator has emissions information) where there are 30 or more sources in the category or subcategory. Our interpretation of average emission limitation is that it is a measure of central tendency, such as the arithmetic mean or the median. If the median is used when there are at least 30 sources, then the emission level achievable by the source and its APCD that is at the bottom of the top 6 percent of the best-performing sources (*i.e.*, the 94th percentile) represents the MACT floor control level. We based our MACT floors for each BSCP subcategory on this interpretation. Nineteen percent (22 of 115) of the existing large tunnel kilns located at synthetic minor sources or major sources are controlled by a DLA (12), DIFF (4), DLS/FF (4), or WS (2). Because more than 6 percent of the large tunnel kilns reduce emissions by some technique, emissions reductions from these kilns are required under the CAA. We then considered which of these controls are proven to be applicable to existing tunnel kilns, and we ranked these kilns to determine the appropriate MACT emission limits. We consider the 12 DLA to be equivalent and believe that this type of control can be applied to any existing large tunnel kiln without causing potentially significant production problems. We consider the performance of all of the DLA to be equivalent because there currently are two types of DLA in the industry (supplied by two manufacturers), and we have test data for both designs that show HF removal efficiencies that are within 1 percent of one another. We excluded DIFF and DLS/FF from our ranking of controls for existing sources because of the reported problems caused by applying DIFF and DLS/FF to existing kilns. We excluded WS from our ranking of controls for existing sources because many facilities do not have proven wastewater disposal options. Therefore, we only considered DLA in our ranking, and accordingly, the 94th percentile source (the 7th best-controlled source) is a DLA-controlled kiln. Therefore, the MACT floors for existing large tunnel kilns are based on the level of control achieved by a DLA. We have DLA outlet test data for 7 of the 12 existing large DLA-controlled tunnel kilns, and therefore, we are confident that our test data are within the best-controlled 6 percent of sources. Furthermore, the single best-performing

source, based on our available DLA outlet data, is one of the three sources for which a control efficiency is available.

Section 112(d)(2) of the CAA dictates how we must establish MACT. The MACT can either be established at the MACT floor, or can be some control level more stringent than the MACT floor or beyond-the-floor. Section 112(d)(2) of the CAA states that:

Emissions standards promulgated under this subsection and applicable to new or existing sources of hazardous air pollutants shall require the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies * * *.

Although section 112(d)(3) of the CAA does not allow us to consider cost when determining MACT floors, we do consider costs when we examine beyond-the-floor control options according to section 112(d)(2) of the CAA. We acknowledge the commenters' concerns regarding the cost of the proposed standards. We determined that beyond-the-floor control measures would not be appropriate for existing large BSCP kilns because of retrofit costs arising from technical difficulties in retrofitting DIFF, DLS/FF, or WS. Thus, the emission limits for existing large tunnel kilns in today's final rule are based on the level of control achievable with a DLA.

It is our goal to set emission standards that reflect the performance of the best-controlled sources. Once we identified the subset of the best-controlled BSCP sources (*i.e.*, DLA-controlled kilns), we used the highest emission level associated with these best performers to set the emission standard because it was our intent to set emission limits that reflect the performance that the best-controlled sources continually achieve considering variability. All sources, including the best-controlled sources, have variability in emissions. For example, data (individual test runs) from two tests conducted on one DLA-controlled kiln showed HF control efficiencies that ranged from 91.6 percent to 96.4 percent. This variability may result from APCD performance, and also could result from uncertainty associated with the test methods. Commenters have agreed with our approach to setting the production-based emission limits at or slightly

higher than the highest data point, because this approach accounts for variability in the performance of individual sources, variability that could exist across the industry, and uncertainty in the test methods used to measure emissions. Furthermore, use of the highest emission level associated with the best performers prevents sources within the best-controlled subset from having to remove their existing APCD and replace it with a new one that may or may not achieve slightly better performance.

We believe and intend that a well-operated DLA will achieve the emission limits set forth in this rulemaking. However, concerns have recently been raised that if high concentrations of sulfur exist in the kiln exhaust gas stream, the ability of a well-operated DLA to reduce the target acid gas HAP emissions (*i.e.*, HF and HCl) may be compromised. The data we have does not suggest that these concerns are justified. If the EPA receives information showing that they are, EPA will take prompt action to resolve the issue through rulemaking and ensure that a facility with a well-operated DLA will be in compliance with the rule. The EPA will also work with any affected facilities to ensure that they are not subject to inappropriate sanctions before we are able to complete such a rulemaking.

D. New Source MACT

Several commenters disagreed that a large (design capacity equal to or greater than 9.07 Mg/hr (10 tph) of fired product) tunnel kiln equipped with DIFF, DLS/FF or WS was the best-controlled similar source for all new tunnel kilns. The commenters expressed concern that the DIFF, DLS/FF or WS controls proposed for all new tunnel kilns have not been demonstrated on smaller kilns. The commenters argued that emissions from small (*e.g.*, less than 9.07 Mg/hr (10 tph)) and large tunnel kilns are different because the required airflow and pollutant loading is different. The commenters stated that controls such as DIFF, DLS/FF, or WS do not decrease in size or cost for kilns below 9.07 Mg/hr (10 tph) design capacity. The commenters thought that the proposed standards for new tunnel kilns would prevent future construction of and upgrades to smaller kilns. The commenters recommended that a throughput cutoff be provided for new and reconstructed kilns. One commenter suggested that EPA create a size-cutoff for new kilns, where the best-controlled similar source for smaller new kilns is a DLA-controlled kiln, and DLS/FF, DIFF, or WS for the larger