

exposure at concentrations above the threshold at iron and steel plants. The EPA conducted this analysis for the pulp and paper standards and decided not to regulate hydrogen chloride emissions. According to the commenters, risk-based standards under section 112(d)(4) would result in no standards, or less stringent and more cost effective standards.

Response. Section 112(d)(4) of the CAA provides EPA with authority, at its discretion, to develop risk-based standards for HAP “... for which a health threshold has been established,” provided that the standard achieves an “ample margin of safety.” Section 112(d)(4) says:

[w]ith respect to pollutants for which a health threshold has been established, the Administrator may consider such threshold level, with an ample margin of safety, when establishing emission standards under this subsection.

As EPA has indicated in the past (*see* 63 FR 18754 and 67 FR 44713), we generally apply section 112(d)(4) of the CAA only to HAP that are not carcinogens because Congress clearly expected that carcinogens would be non-threshold pollutants. The legislative history further indicates that if EPA invokes this provision, it must assure that any emission standard results in ambient concentrations less than the health threshold, with an ample margin of safety, and that the standards must also be sufficient to protect against adverse environmental effects. (*See* S. Rep. No. 228, 101st Cong. at 171.) The EPA is not to consider cost in establishing a standard pursuant to section 112(d)(4).

Therefore, EPA believes it has the discretion under section 112(d)(4) of the CAA to develop risk-based standards for some categories emitting threshold pollutants, which may be less stringent than the corresponding floor-based MACT standard would be. Where EPA develops standards under this provision, we seek to ensure that emissions from every source in the category or subcategory are less than the threshold level to an individual exposed at the upper end of the exposure distribution. We believe that assuring protection to persons at the upper end of the exposure distribution is consistent with the ample margin of safety requirement in section 112(d)(4). (*See* 63 FR 18754 at 18768.)

However, the EPA emphasizes that use of section 112(d)(4) of the CAA authority is wholly discretionary. As the legislative history described above indicates, cases may arise in which other considerations dictate that the

Agency should not invoke this authority to establish less stringent standards, despite the existence of a health effects threshold that is not jeopardized. For instance, EPA does not anticipate that it would set less stringent standards where evidence indicates a threat of significant or widespread environmental effects, although it may be shown that emissions from a particular source category do not approach or exceed a level requisite to protect public health with an ample margin of safety. The EPA may also elect not to set less stringent standards where the estimated health threshold for a contaminant is subject to large uncertainty. Thus, in considering appropriate uses of its discretionary authority under section 112(d)(4), EPA considers other factors in addition to health thresholds, including uncertainty and potential adverse environmental effects, as that phrase is defined in section 112(a)(7) of the CAA.

For several reasons, in this case, we have decided not to exercise our discretion to consider existing threshold levels for manganese in setting the emission standards for metal HAP compounds from integrated iron and steel facilities. This decision is appropriate because we have insufficient data about the nature and degree of public exposures to these emissions, including background exposure levels and other relevant factors, to meaningfully consider whether maximum exposures to manganese emissions from integrated iron and steel facilities would remain below the relevant threshold. In fact, it is clear that facilities in this source category emit significant quantities of manganese, totaling about 250 tpy. Because the commenters did not provide us with any of the detailed site-specific information that we would need to perform an adequate assessment of emissions and exposures, we have concluded that it would be inappropriate to consider the threshold nature of manganese in establishing MACT standards for the integrated iron and steel source category. Additionally, the commenters have supplied no information about the environmental impact of metal emissions from integrated iron and steel plants, and we have no data upon which we can rely for such an environmental assessment.

Moreover, even if we had access to more detailed data regarding emissions, exposures, and environmental impact, it is not clear whether consideration of the manganese health threshold would have any practical effect on the MACT standards established in today's final rule. In particular, emissions from integrated iron and steel plants include

metal HAP besides manganese that are not threshold pollutants (including lead, nickel, and chromium compounds), and these pollutants are controlled using the same control technologies that reduce emissions of manganese. As with manganese, we have no data regarding maximum exposures or environmental impacts from such emissions at integrated iron and steel facilities, and we have no data specifically characterizing these metal emissions. These plants emit about 360 tpy of HAP metal compounds—including about 111 tpy of lead, nickel and chromium compounds. Certain lead, nickel and chromium compounds are listed as carcinogens and have no applicable human health threshold. For additional information, see our guidance document entitled “Guidance on the Major Source Determination for Certain Hazardous Air Pollutants” available on our Web site at <http://www.epa.gov/ttn/oarpg/t3/memoranda/agghapmem.pdf>.

Today's final rule controls all metal HAP emissions (including lead, nickel, and chromium) by using PM as a surrogate. Because we use PM as a surrogate, eliminating only one or some of the metal HAP from consideration would have little if any practical impact on the MACT standards. Consequently, we believe the MACT standards finalized today are appropriate and will reduce emissions of all HAP at integrated iron and steel plants to the levels currently being achieved by the best-performing facilities.

D. How Did We Revise the Emission Limitations?

1. Sinter Cooler Emissions

Comment. Seven commenters explain that some exhaust systems on the sinter plant discharge end are designed to capture emissions at the point where sinter is loaded onto the sinter cooler and portions of the sinter cooler itself. In situations where cooler emissions are exhausted in part or in whole to the discharge end control system, the commenters request that the cooler stack emissions standard of 0.03 gr/dscf (for existing facilities) apply to the discharge end baghouse.

Response. We disagree and have written the final rule to clarify that the limit of 0.02 gr/dscf for the discharge end applies even when other emissions are ducted to the control device. The most effective technology for controlling emissions from the discharge end is a baghouse, and a properly-designed and operated baghouse can achieve 0.02 gr/dscf on a continuing basis. An emission limit of 0.03 gr/dscf is too high to be representative of the MACT floor, and