

**Comments of Environmental Defense Fund at EPA’s Public Hearing on
National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric
Utility Steam Generating Units Review of the Residual Risk and Technology Review
Proposed Rule**

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Good evening, my name is Richard Yates and I am a U.S. Clean Air Legal Fellow at the Environmental Defense Fund (EDF). I am testifying today to address the serious health impacts from the pollutants regulated under the MATS program to emphasize the importance of EPA’s prompt action to strengthen the limits for EGU hazardous air pollution, or HAP. New evidence since 2011 on the health effects of HAP emissions strongly supports EPA’s swift strengthening of the standards.

In the Clean Air Act, Congress required EPA to set standards reflecting the maximum achievable emissions reductions for hazardous air pollution because Congress understood the importance of protecting the public from this especially dangerous class of pollutants.¹ Congress also required that special attention be given to reducing harm to “sensitive populations.”²

EDF strongly supports the proposed rule’s advancements, which will protect the health of all Americans, but especially the sensitive populations impacted by EGU hazardous pollution who are disproportionately communities of color, Indigenous communities, and low-income communities.³

Mercury emissions from power plants have many harmful health impacts, including cardiovascular effects such as deadly heart attacks and hypertension, as well as neurological effects for children, such as lost IQ points, and delayed development of memory, language, and motor skills.⁴

We also know more than when MATS was first promulgated over a decade ago about the significant health impacts of non-mercury metal HAPs. Metal HAPs include carcinogens like nickel, arsenic, and hexavalent chromium.⁵ The risks from lead, for example, include mortality

¹ 42 U.S.C. § 7412(d). The design of section 112 shows Congress’s interest in ensuring reductions in coal- and oil-fired EGU HAP primarily to protect human health and safety. *See, e.g.*, § 7412(n)(1)(A) (requiring EPA to conduct a study on the public health hazards of HAP as a threshold requirement to determining whether to regulate EGU HAP under section 112).

² § 7412(n)(1)(C).

³ 88 Fed. Reg. 24854, 24892, 24896 (Apr. 24, 2023) (Proposed Rule); EPA, Regulatory Impact Analysis for the Proposed National Emission Standards for Hazardous Air Pollutants, at ES-13 (Apr. 2023).

⁴ *See, e.g.*, Elsie Sunderland et al., *A Template for a State-of-the-Science Assessment of the Public Health Benefits Associated with Mercury Emissions Reductions for Coal-Fired Electricity Generating Units*, at 3, 10-11 (Apr. 2022); Emmett Env’tl. Law & Policy Clinic, *Reconsideration of Supplemental Finding comments at 3-7* (Feb. 7, 2019), <https://www.regulations.gov/comment/EPA-HQ-OAR-2018-0794-1665>.

⁵ Proposed Rule at 24857.

from cardiovascular disease, reduced fertility, and cognitive impairment in children.⁶ In addition to its cancer risk, arsenic has been found to impact respiratory system development and function, and has been linked to liver and kidney damage.⁷ New research on metal toxicity for individuals exposed to mixtures of these metals shows potential risks including immune dysfunction and preterm birth.⁸

Importantly, strengthening limits on emissions of mercury and non-mercury metal HAPs would reduce the pollution exposures felt disproportionately by communities of color and Indigenous communities living near these facilities.⁹

Stronger standards to alleviate these compelling health risks are highly feasible, given the significant advances in control technologies over the last decade. EDF strongly supports EPA's alternative limit of 0.006 lb/MMBtu for non-mercury metal HAP – and a limit as protective as feasible to address these serious hazardous air pollutants. That 75% of units are already achieving the .006 standard demonstrates its high degree of technological feasibility.¹⁰

EDF also supports the proposed closure of the lignite coal loophole, which currently allows lignite-burning plants to emit mercury pollution in quantities far greater than other plants

⁶ See Bruce P. Lanphear et al., *Low-Level Lead Exposure and Mortality in US Adults: A Population-Based Cohort Study*, 3 *Lancet Pub. Health* e177, e183 (2018); Sunil Kumar, *Occupational and Environmental Exposure to Lead and Reproductive Health Impairment: An Overview*, *Indian J. Occup. & Env'tl. Med.* 128 (2018); Alex Hollingsworth et al., *Lead Exposure Reduces Academic Performance: Intensity, Duration, and Nutrition Matter*, at 3, 26 (*Nat'l Bureau of Econ. Res.*, Working Paper No. 28250, 2021).

⁷ See Raina M. Maier et al., *Nat'l Inst. of Env'tl. Health Scis. Superfund Research Ctrs. at the Univ. of Arizona & Univ. of New Mexico, Toxicity Review of Metals Emissions from Coal-Fired Power Plants*, at 29 (Mar. 2022).

⁸ *Id.* at 34-35.

⁹ See, e.g., S. Env'tl. Law Ctr., *Affirmation of the Appropriate and Necessary Supplemental Finding comments at 7-9*, <https://www.regulations.gov/comment/EPA-HQ-OAR-2018-0794-4943> (Apr. 11, 2022) (describing disproportionate threat of mercury and hazardous metal emissions to recreational and subsistence African American fishers in the Southeast region); Mona Dai et al., *Sociodemographic Disparities in Mercury Exposure from U.S. Coal-Fired Power Plants*, at 11 (2023) (submitted manuscript) (finding heightened threat of mercury emissions to Native American populations who tend to consume fish more frequently); Christopher W. Tessum et al., *PM2.5 Polluters Disproportionately and Systemically Affect People of Color in the United States*, 7 *Sci. Advances*, at 1-2 (2021) (finding coal-plant PM 2.5 emissions, which include hazardous metals, disproportionately burden African American populations); Pub. Health & Env'tl. Orgs., *Affirmation of the Appropriate and Necessary Supplemental Finding comments at 47-49* (Apr. 11, 2022), <https://www.regulations.gov/comment/EPA-HQ-OAR-2018-0794-4962> (explaining likely combination of power plant hazardous metal emissions with metals from other sources in multiple exposure pathways, posing particular harm to Indigenous communities in the Southwest).

¹⁰ Proposed Rule at 24871.

are allowed to emit.¹¹ Aligning the standard for lignite facilities with that for other facilities will protect communities from mercury's many health risks.

Finally, EDF strongly supports the proposed rule's continuous emissions monitoring system (CEMS) requirement for particulate matter. CEMS will provide the public with more accurate emissions information to ensure that plants are meeting health protective standards 365 days a year.

We thank EPA for convening this important public hearing on the proposed rule and for considering our views. We respectfully urge EPA to swiftly finalize strong MATS standards to protect the public health.

¹¹ Communities living near lignite-burning facilities in North Dakota and Texas are potentially experiencing unsafe mercury exposures due to the loophole. Mona Dai et al., *Sociodemographic Disparities in Mercury Exposure from U.S. Coal-Fired Power Plants*, at 2 (2023) (submitted manuscript).