

New study finds EPA mercury analysis is 'seriously flawed'

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Element mercury (Hg), liquid form. Credit: Wikipedia.



A new study by experts from prominent academic institutions finds that an EPA cost-benefit analysis of its Mercury and Air Toxics Standards is "seriously flawed." The authors assert that the analysis disregards public health benefits, recent scientific findings and transformative change in the electric sector over the past decade. The analysis in question was used to justify a proposed rollback that would leave mercury regulations vulnerable to legal challenges.

Their article, published in *Science*, finds deep flaws in the U.S. Environmental Protection Agency (EPA)'s <u>cost-benefit analysis</u> in support of a proposed rule related to the regulation of hazardous air pollution from coal-burning <u>power plants</u>. The analysis forms part of the foundation for a regulatory proposal to roll back the legal underpinnings of its Mercury and Air Toxics Standards (MATS), which power plants have been complying with since 2016, leaving the standards vulnerable to <u>legal challenges</u>.

Researchers from Harvard, Yale, Claremont McKenna College, UC Berkeley, Georgetown and Resources for the Future (RFF), claim that the EPA "ignores <u>scientific evidence</u>, economic best practice, and its own guidance" in the new analysis. The authors assert that EPA "can and should do better."

"The EPA's new analysis of the cost and benefits of the MATS rule is clearly insufficient. It fails to account for advances in our understanding of the negative health impacts of mercury and changes in electricity generation since 2011, which have led to much lower compliance costs than were originally projected," says RFF Senior Fellow Karen Palmer, a coauthor on the paper. "And, it dismisses an entire category of benefits."

The authors highlight the following flaws in EPA's analysis:

• It disregards economically significant but indirect public health



benefits, or "co-benefits," in a manner inconsistent with economic fundamentals. The expected benefits of reducing particulate matter pollution of \$33-90 billion per year easily exceed the expected costs of \$9.6 billion under EPA's original 2011 analysis of the MATS rule.

- It fails to account for recent science that identifies important sources of direct health benefits from reducing mercury emissions, such as fewer heart attacks.
- It ignores transformative changes in the structure and operations of the electricity sector over the last decade. Shifts from coal to <u>natural gas</u> and <u>renewable sources</u>, including wind and solar power, for <u>electricity generation</u> have decreased the number of power plants that must install pollution control equipment. The investment in pollution control has been about half of what was projected in 2011.

"If finalized, the new rule will undermine continued implementation of MATS and set a concerning precedent for use of similarly inappropriate analyses in the evaluation of other regulations," the authors state.

More information: J. Aldy at Harvard University in Cambridge, MA el al., "Deep flaws in a mercury regulatory analysis," *Science* (2020). <u>science.sciencemag.org/lookup/ ... 1126/science.aba7932</u>

Provided by Resources for the Future

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