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Cc:Hutson, Nick; Schillo, Bruce; Dolwick, PatSubject:materials for MATS interagency briefingDate:Monday, January 9, 2023 9:33:00 AM

Attachments: MATS 2023 Final Overview for Interagency Reviewers 01.09.2023.docx

Sofie,

Here is the document that we will be walking through during the MATS EO 12866 interagency briefing this morning.

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Mercury and Air Toxics Standards: Revocation of the 2020 Reconsideration, and Affirmation of the Appropriate and Necessary Supplemental Finding: Overview of Final Rule

Background/Regulatory History

- The 1990 Amendments to the CAA, under section 112(n)(1)(A), established a process for determining whether EGUs should be added to the CAA section 112(c) list of source categories that must be regulated under CAA section 112(d).
- In 2000, after considering the studies required by CAA section 112(n)(1) and other relevant information, EPA issued a finding pursuant to CAA section 112(n)(1)(A) that it was appropriate and necessary to regulate emissions of HAP from coal- and oil-fired EGUs under CAA section 112 ("A&N Finding") and added such units to the list of source categories subject to regulation under CAA section 112(d).
- In 2005, EPA reversed that finding, concluding that it was neither appropriate nor necessary to regulate EGUs under CAA section 112(n)(1)(A), and stating that the effect of its reversal of the 2000 A&N Finding was removal of coal- and oil-fired EGUs from the CAA section 112(c)(1) source category list. EPA concurrently issued the Clean Air Mercury Rule (CAMR), which regulated mercury from new and existing coal-fired EGUs under CAA sections 111(b) and (d).
- In 2008, both the 2005 Revision and CAMR were vacated by the D.C. Circuit (*New Jersey v. EPA*). The D.C. Circuit held that the EPA failed to comply with the requirements of CAA section 112(c)(9) for delisting source categories, and consequently also vacated the CAA section 111 performance standards promulgated in CAMR.
- In 2012, in response to the *New Jersey* decision, EPA conducted additional technical analyses and affirmed its 2000 finding that it was appropriate and necessary to regulate EGUs under CAA section 112 and established air toxics standards for coal- and oil-fired EGUs, commonly known as MATS.
- In 2015, the U.S. Supreme Court ruled that EPA had erred in not taking cost into account in the A&N Finding (*Michigan v. EPA*).
- In 2016, EPA issued a Supplemental Finding that evaluated the costs of complying with MATS and concluded that the A&N Finding was still valid.
- In 2020, EPA reconsidered the 2016 Supplemental Finding and, after primarily comparing the projected costs of compliance to a limited subset of HAP emission reduction benefits that could be monetized, concluded that it was not appropriate and necessary to regulate EGUs under CAA section 112.
- On January 20, 2021, President Biden issued Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." The EO, among other things, instructed EPA to review the 2020 action and consider publishing a notice of proposed rulemaking suspending, revising, or rescinding that action
- On February 9, 2022, EPA published a proposed rule that revoked the 2020 finding and reaffirmed the 2016 finding that it remains appropriate and necessary to regulate HAP emissions from EGUs, even after considering cost.
- After considering the public comments on the 2022 Proposal, the EPA is finalizing its revocation of the 2020
 Final Action and its reaffirmation of the earlier determinations that it is appropriate and necessary to regulate coal- and oil-fired EGUs under section 112 of the CAA.

A&N Finding Under CAA Section 112(n)(1)(A)

• In this final rule, EPA concludes that the methodology used in the 2020 reconsideration was ill-suited to the A&N determination because, among other reasons, it did not give adequate weight to the significant volume

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of HAP emissions from EGUs and the attendant risks remaining after imposition of the other requirements of the CAA. This includes risks from EGU HAP emissions that cannot be monetized.

- Instead, our preferred A&N methodology is to consider all of the impacts of the regulation using a totality-of the-circumstances (TOTC) approach rooted in the Michigan court's direction to pay attention to the advantages and disadvantages of the decision.
- The final rule accomplishes this by first examining the advantages of regulation, including new information on the risks posed by EGU HAP emissions. The rule describes the extensive and significant health risks associated with EGU HAP emissions, including: neurodevelopmental, cardiovascular, carcinogenic, and immunotoxic effects of mercury exposure; health risks associated with non-mercury HAP; as well as ecological effects of methylmercury and acid gas HAP.
- Also consistent with the statutory design of CAA section 112, in considering the advantages of HAP reductions, we consider the distribution of risk reductions, and the statute's clear goal in CAA section 112(n)(1)(C) and other provisions of CAA section 112 to protect the most exposed and susceptible populations, such as communities that are reliant on local fish for their survival.
- We then consider the disadvantages of regulation, principally in the form of the costs incurred to control HAP before they are emitted into the environment. In evaluating the disadvantages of MATS, we begin with the costs to the power industry of complying with MATS.
- In this rule, EPA considers those costs comprehensively, examining them in the context of the effect of those
 expenditures on the economics of power generation more broadly, the reliability of electricity, and the cost of
 electricity to consumers. These metrics are relevant to our weighing exercise because they give us a more
 complete picture of the disadvantages to producers and consumers of electricity imposed by this regulation
 and because our conclusion might change depending on how this burden affects the ability of the industry to
 provide reliable, affordable electricity.
- EPA concludes that the actual cost of complying with MATS was likely significantly less than the EPA's projected estimate in the 2011 RIA primarily because fewer pollution controls were installed than projected, and that unexpected increases in natural gas supply after MATS promulgation led to a dramatic decrease in the price of natural gas and therefore fewer EGUs needing to comply with MATS requirements.
- Based on this TOTC approach, after weighing the risks posed by HAP emissions from EGUs against the costs of reducing that pollution on the industry and society as a whole, EPA concludes it is appropriate to regulate those emissions to protect against adverse health and environmental impacts posed by exposure to HAP emitted by coal- and oil-fired EGUs.
- EPA independently supports the A&N reaffirmation with an alternative benefit-cost analysis which reaches the same conclusion.
- The EPA provided opportunities for public comment on our proposed revocation of the 2020 Final Action and our affirmation that it is appropriate and necessary to regulate coal- and oil-fired EGUs under CAA section 112. We received comments on the broad subjects of health hazards, costs, revocation, the preferred approach, and the alternative approach. These comments are addressed either within the final rule and in the Response to Comment document associated with this action.
 - Commenters that oppose the A&N Finding assert that the TOTC approach does not meaningfully address cost, EPA's cost estimates are incomplete, unquantified benefits are too uncertain to be weighed heavily, and PM benefits should not be considered an advantage of the regulation to be weighed against the disadvantages (the costs). In the view of these commenters, the HAP benefits of MATS do not justify the costs.

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- Commenters that support the reaffirmation of the A&N Finding support the TOTC approach because it
 enables consideration of multiple health impacts, including those on disproportionately burdened
 populations. In the view of these commenters, the advantages of MATS clearly outweigh the
 disadvantages.
 - A subset of commenters support the A&N Finding reaffirmation because it provides regulatory certainty but express concerns about EPA's methodologies. Some supporting commenters urge EPA to go even further in monetizing certain health and environmental benefits that are currently described qualitatively.
- After considering the public comments on the 2022 Proposal, the EPA is finalizing its revocation of the 2020 Final Action and its reaffirmation of the earlier determinations that it is appropriate and necessary to regulate coal- and oil-fired EGUs under section 112 of the CAA.