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U.S. Environmental Protection Agency
EPA Docket Center
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1200 Pennsylvania Avenue, NW
Washington, DC 20460

To Whom It May Concern:

On behalf of the National Association of Clean Air Agencies (NACAA), thank you for this opportunity to comment on the proposed National Emissions Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units – Revocation of the 2020 Reconsideration, and Affirmation of the Appropriate and Necessary Supplemental Finding, which were published in the *Federal Register* on February 9, 2022.¹ NACAA is the national, non-partisan, non-profit association of air pollution control agencies in 40 states, including 115 local air agencies, the District of Columbia and four territories. The air quality professionals in our member agencies have vast experience dedicated to improving air quality in the United States. These comments are based upon that experience. The views expressed in these comments do not represent the positions of every state and local air pollution control agency in the country.

EPA is proposing to revoke the finding the agency made on May 22, 2020 that it is not appropriate and necessary to regulate coal- and oil-fired electric utility steam generating units (EGUs) under Section 112 of the Clean Air Act (CAA) and reaffirm the April 25, 2016 finding that it *is* appropriate and necessary to regulate hazardous air pollutant (HAP) emissions from EGUs. EPA is also reviewing another element of the May 22, 2020 action, which is the residual risk and technology review (RTR) of the Mercury and Air Toxics Standards (MATS) and seeks input to further inform its review of the RTR. MATS was issued on February 16, 2012² and, since that time, nearly all sources have complied with the standard, resulting in significant reductions in emissions of mercury and other pollutants.

¹ 87 Fed. Reg. 7,624.

² 77 Fed. Reg. 9,304.

As we will discuss below, NACAA is in favor of EPA's recently proposed reaffirmation of the appropriate and necessary finding for MATS. In a letter on April 10, 2019, NACAA commented in support of this finding as well.³ Additionally, we will provide input related to the reevaluation of the RTR, which we believe should reflect the latest and best information available. We encourage EPA to review NACAA's previous letter on these topics during this rulemaking.

In revisiting the appropriate and necessary finding and the RTR, it is critical that EPA recognize and consider the importance of environmental justice (EJ). EPA must account for and address the unequal impacts of emissions on overburdened communities, including the cumulative impacts of multiple sources of pollution to which those groups are exposed.

“APPROPRIATE AND NECESSARY” DETERMINATION

As NACAA indicated in previous comments, EPA's determinations in 2000 and 2012 and its reaffirmation in 2016 made excellent arguments for finding that it is appropriate and necessary to regulate emissions of HAPs from EGUs under Section 112. We opposed EPA's proposal in 2019 to rescind the appropriate and necessary finding. The following provides details, including reiterating some of the points NACAA made in the past on this issue.

Consideration of Co-Benefits

NACAA supports the consideration of co-benefits in any cost-benefit analysis of MATS and, conversely, opposes the elimination or diminishment of the consideration of co-benefits, as occurred in the 2020 rule. In its 2016 determination, EPA accounted for the monetized and non-monetized benefits of MATS, including HAP-related benefits that could not be quantified or monetized, as well as the monetized co-benefits of reducing pollutants other than HAPs. The benefits exceeded the costs of compliance by three to nine times. EPA concluded that the cost-benefit analysis supported the appropriate and necessary finding. In its subsequent 2020 decision, EPA stated that the approach was flawed because it relied equally on the particulate matter (PM) air quality co-benefits projected to occur from the reductions in HAPs. Instead, the 2020 rule was based on a direct comparison between the cost of compliance with MATS and the benefits specifically associated with reducing emissions of *only* HAPs. This resulted in a conclusion that it was not appropriate and necessary to regulate HAPs from EGUs because the costs of such regulation grossly outweighed the HAP benefits.

As we indicated in our comments at the time of the 2019 proposal, overlooking known benefits in cost-benefit analyses would deviate from basic accounting principles and would overemphasize program costs to regulated industries while profoundly understating public health benefits. EPA and its co-regulators at state and local air agencies have examined and appropriately relied on the co-benefits of air pollution regulations for decades. Excluding them from the MATS analysis would be a dramatic departure from past practice and would artificially ignore some of the very real public health and environmental benefits of MATS that are most readily quantifiable. Failing to consider these benefits would be counter to EPA's primary mission, which is to protect public health.

³ https://www.4cleanair.org/wp-content/uploads/Documents/MATS_written_comments-04-10-2019-NACAA.pdf

EPA's proposal to dismiss the co-benefits resulting from MATS is contrary to EPA's and the U.S. Office of Management and Budget's (OMB's) own procedures. For example, OMB Circular A-4 states:

Your analysis should look beyond the direct benefits and direct costs of your rulemaking and consider any important ancillary benefits and countervailing risks. An ancillary benefit is a favorable impact of the rule that is typically unrelated or secondary to the statutory purpose of the rulemaking (e.g., reduced refinery emissions due to more stringent fuel economy standards for light trucks)...."⁴

Additionally, EPA's *Guidelines for Preparing Economic Analyses* states: "An economic analysis of regulatory or policy options should present all identifiable costs and benefits that are incremental to the regulation or policy under consideration. These should include directly intended effects and associated costs, as well as ancillary (or co-) benefits and costs."⁵

Updated Information on Costs and Benefits

While NACAA's 2019 comments supported EPA's 2016 "appropriate and necessary" finding, we noted that some of the information in the 2011 Regulatory Impact Analysis (RIA),⁶ upon which EPA relied, did not include important information and was out of date. We stated that if the RIA had been updated, it would have strengthened the appropriate and necessary finding even further. EPA recognized some of the issues in the RIA in a December 14, 2018 memorandum to the docket that described significant underestimations in the calculation of the true benefits of controlling HAPs from EGUs.⁷ In addition to underestimating the benefits, the RIA did not provide an accurate and updated picture regarding the true compliance costs of MATS.

Since the 2011 RIA and EPA's 2016 reaffirmation of the appropriate and necessary finding, the agency has gathered significantly updated and new data, which it presents in this proposal. This information includes the substantial health benefits resulting from MATS emission reductions, which are much greater than first estimated. In just one example, EPA notes that "new risk screening analyses on the connection between mercury and heart disease as well as IQ loss in children across the U.S. further supports the conclusion that HAP emissions from EGUs pose hazards to public health and the environment warranting regulating under CAA section 112."⁸ Additionally, EPA has analyzed data related to the costs associated with MATS and concluded that "the projection in the 2011 RIA was almost certainly a significant overestimate of the actual costs."⁹ This new information on the health benefits and costs of the rule makes the original appropriate and necessary determination, which was already sufficiently convincing, even stronger.

⁴ <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf> (p. 26).

⁵ <https://www.epa.gov/sites/production/files/2017-08/documents/ee-0568-50.pdf> (p. 11-2/p. 208 of PDF).

⁶ <https://www.regulations.gov/document?D=EPA-HQ-OAR-2009-0234-20131>.

⁷ <https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0794-0007> p. 3.

⁸ 87 Fed. Reg. 7,636.

⁹ 87 Fed. Reg. 7,636.

Alternatives for Assessing Benefits and Costs of MATS

EPA is proposing two alternative methods for assessing whether it is appropriate and necessary to regulate emissions of HAPs from EGUs under Section 112, each of which makes the case overwhelmingly in favor of such a determination. As stated above, EPA made excellent arguments for the appropriate and necessary decision in 2000, 2012 and 2016, but the updated information on costs and benefits that EPA has collected renders the determination even more compelling using either of the approaches the agency has outlined.

In EPA's preferred option – the “totality of the circumstances” approach – the agency examines all the advantages from reducing HAP emissions, regardless of whether those benefits can be quantified or monetized. In addition to health risks, EPA also considers the impacts on the environment, as directed by the CAA. EPA explains its consideration of benefits that cannot be quantified or monetized as follows:

[F]or many HAP-related health endpoints, the Agency lacks economic data that would support monetizing HAP impacts, such as willingness to pay studies that can be used to estimate the social value of avoided outcomes like heart attacks, IQ loss, and renal or reproductive failure. In addition, the absence of socio-demographic data such as the number of affected individuals comprising sensitive subgroups further limits the ability to monetize HAP-impacted effects. All of these deficiencies impede the EPA's ability to quantify and monetize post-control HAP-related impacts even though those impacts may be severe and/or impact significant numbers of people. Though it may be difficult to quantify and monetize most post-control HAP-related health and environmental benefits, this does not mean such benefits are small. The nature and severity of effects associated with HAP exposure, ranging from lifelong cognitive impairment to cancer to adverse reproductive effects, implies that the economic value of reducing these impacts would be substantial if they were to be quantified completely. By extension, it is reasonable to expect both that reducing HAP-related incidence affecting individual endpoints would yield substantial benefits if fully quantified, and moreover that the total societal impact of reducing HAP would be quite large when evaluated across the full range of endpoints.¹⁰

Just as EPA's preferred approach examines the “totality of the circumstances” with respect to benefits, it also examines costs in a similarly broad manner:

We next weigh those advantages against the disadvantages of regulation, principally in the form of the costs incurred to control HAP before they are emitted into the environment. Consistent with the statutory design, we consider 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.¹¹

¹⁰ 87 Fed. Reg. 7,646.

¹¹ 87 Fed. Reg. 7,628.

EPA's comprehensive analysis of both benefits and costs in the "totality of the circumstances" approach is rational and is philosophically consistent with NACAA's recommendations that EPA fully consider the benefits of regulating EGU HAP emissions, including co-benefits, in analyzing the merits of the regulation.

In EPA's second option for assessing the appropriate and necessary question, the agency relies on a formal benefit-cost analysis (BCA), which also results in the agency's support for the determination. The BCA leads EPA to conclude: "it remains appropriate to regulate HAP emissions from EGUs after considering cost because the BCA issued with the MATS rule indicated that the total net benefits of MATS were overwhelming even though the EPA was only able to monetize one of many statutorily identified benefits of regulating HAP emissions from EGUs."¹² EPA's formal BCA included the co-benefits of reducing PM emissions, which is entirely appropriate, as we stated above and in previous NACAA comments. While EPA notes that the formal BCA process justified the appropriate and necessary determination using information from the 2011 RIA,¹³ the case is even stronger now considering newer data EPA has collected showing the significantly greater benefits and lower costs associated with MATS.

RESIDUAL RISK AND TECHNOLOGY REVIEW METHODOLOGY

EPA's proposal states that the agency will initiate a review of the MATS RTR issued in 2020. When reevaluating the 2020 RTR and determining whether new provisions are needed to ensure the rule is protective and meets the goals of the Clean Air Act, EPA should consider the latest and best information about available controls and risk, especially considering new health-related data and technological advancements that have become available in recent years.

Additionally, EPA has committed itself to addressing environmental justice and the impacts of pollution on overburdened populations. The proposal articulates some of these concerns, noting that:

[e]ven though reducing HAP from EGUs would benefit all Americans by reducing risk and hazards associated with toxic air pollution, it is worth noting that the impacts of EGU HAP pollution in the U.S. have not been borne equally nationwide. Certain communities and individuals have historically borne greater risk from exposure to HAP emissions from EGUs prior to MATS, as demonstrated by the EPA's risk analyses. The individuals and communities that have been most impacted have shouldered a disproportionate burden for the energy produced by the power sector, which in turn benefits everyone—i.e., these communities are subject to a greater share of the externalities of HAP pollution that is generated by EGUs producing power for everyone.¹⁴

¹² 87 Fed. Reg. 7,629.

¹³ 87 Fed. Reg. 7,669.

¹⁴ 87 Fed. Reg. 7,665.

It is imperative that EPA keep those important environmental justice considerations in the forefront when evaluating whether the risk remaining after the implementation of MATS is “acceptable” and determining if additional measures are necessary.

In previous comments, NACAA made recommendations on how the RTR methodology can be improved. We describe those again below.

Concentrations at Census Block Centroids

In assessing the cancer risks related to source categories in RTR evaluations, EPA has often used long-term concentrations affecting the census blocks within 50 kilometers of each facility.¹⁵ As we have noted in the past, such an analysis dilutes the effect of sources’ emissions by estimating the impact at the centroid of the census block instead of at the property line or wherever the maximum exposed individual is. Census blocks can be large geographically, depending on the population density, so the maximum point of impact can be far from the centroid. It could be elsewhere in the census block, including at or near the property line where people may live or work. In previous proposals, EPA itself has alluded to this problem.¹⁶ Further, even if the area near the property line is not developed, over time homes and businesses could locate closer to the facility. While it is possible that population distribution is homogenous over a census block, this assumption is not necessarily accurate in considering the predicted impacts from the location of a source. EPA should ensure that it had identified and used the truly maximum individual risk, irrespective of its location in the census block, rather than using the predicted chronic exposures at the census block centroid as surrogates for the exposure concentrations for all people living in that block.

Facility-Wide and Cumulative Risks

In the 2019 proposal, EPA recognized the importance of considering the impact of emissions from all HAP-emitting operations in a facility to determine the facility-wide and cumulative risks, rather than focusing solely on the source category that is the subject of the regulation.¹⁷ EPA should ensure that it ameliorates risks from HAP exposure in this regulation as well as in rules for other source categories that may contribute to the risks identified in this rulemaking.

Acute Exposure

Previous NACAA comments have raised concerns with EPA’s use of Acute Exposure Guideline Levels (AEGs) or Emergency Response Planning Guidelines (ERPGs) values to address acute exposures in the residual risk assessments. These limits were developed for accident release emergency planning and are not appropriate for assessing daily human exposure scenarios. In the December 2002 EPA document, "A Review of the Reference Dose and Reference Concentration Processes,"¹⁸ EPA stated that the primary purpose of the AEGs

¹⁵ 84 Fed. Reg. 2,690.

¹⁶ 84 Fed. Reg. 2,695.

¹⁷ 84 Fed. Reg. 2,687.

¹⁸ <https://www.epa.gov/sites/default/files/2014-12/documents/rfd-final.pdf>

program is to develop guidelines for once-in-a-lifetime short-term exposures to airborne concentrations of acutely toxic chemicals. They are not meant to evaluate the acute impacts from routine emissions that occur over the life of a facility. Unlike the reference concentrations (RfCs) for chronic exposures, the AEGLs and ERPGs do not include adequate safety and uncertainty factors and cannot be relied upon to protect the public from the adverse effects of exposure to toxic air pollutants. The use of AEGLs or ERPGs in residual risk assessments is not appropriate and does not ensure that public health is adequately protected from the acute impacts of HAP exposure. In the 2019 proposal, EPA correctly included the use of the California Reference Exposure Levels (RELs) to address acute exposures in the residual risk assessments and the agency should continue to use the RELs for these assessments.¹⁹

Allowable Emissions

EPA should consider allowable emissions, rather than actual emissions, as much as possible in evaluating residual risk. Since facility emissions could increase over time for a variety of reasons, and with them the associated impacts, the use of potential or allowable emissions is more appropriate. An analysis based on actual emissions from a single point in time could underestimate the residual risk from a source category. Further, the major source HAP thresholds are based on maximum potential-to-emit, as opposed to actual emissions, and air agencies issue permits based on potential emissions. Limiting the scope of a risk evaluation to actual emissions would be inconsistent with the applicability section of Part 63 rules. In recent proposals, EPA used allowable emissions in parts of the rulemaking, but continued to use actual emissions in other parts of its assessment.²⁰ The agency should use allowable emissions in the future, including in assessing acute health risks.

CONCLUSION

In light of the significant emission decreases that have already occurred and will continue to take place as a result of MATS, and the important benefits to public health that are resulting from these emission reductions, it is critically important that EPA ensure the ongoing success of MATS. Therefore, NACAA supports EPA's proposal to reaffirm the April 25, 2016 finding that it is appropriate and necessary to regulate coal- and oil-fired electric utility steam generating units under Section 112 of the Clean Air Act and to revoke the finding the agency made on May 22, 2020 that it is not appropriate and necessary to regulate EGUs under Section 112. Additionally, EPA should ensure that the RTR reflects the latest and best information about available controls and risk, especially considering the fact that new health-related data and technological advancements have become available in recent years. EPA should consider this updated information when reevaluating the 2020 RTR and determining whether new provisions are needed to ensure the rule is protective and meets the goals of the Clean Air Act. EPA must account for and address the unequal impacts of emissions on overburdened communities, including the cumulative impacts of multiple sources of pollution to which those groups are exposed.

¹⁹ 84 Fed. Reg. 2,691.


²⁰ 84 Fed. Reg. 2,689.

Thank you for this opportunity to comment on the proposal. Please contact us or Mary Sullivan Douglas at NACAA (mdouglas@4cleanair.org) if we can provide additional information.

Sincerely,



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