US Environmental Protection Agency
EPA Docket Center (EPA/DC)
Mail Code: 28221T
Attention: Docket ID No. EPA-HQ-OAR-2018-0794
1200 Pennsylvania Avenue NW
Washington, DC 20460

RE: Proposed Revised Supplemental Cost Finding and Results of Residual Risk and Technology Review

To Whom It May Concern:

The National Tribal Air Association (NTAA) is pleased to submit these comments on EPA’s proposal, “National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units – Reconsideration of Supplemental Finding and Residual Risk and Technology Review.”

The NTAA is a member-based organization with 140 principal member Tribes. The organization’s mission is to advance air quality management policies and programs, consistent with the needs, interests, and unique legal status of Indian Tribes. As such, the NTAA uses its resources to support the efforts of all federally recognized Tribes in protecting and improving the air quality within their respective jurisdictions. Although the organization always seeks to represent consensus perspectives on any given issue, it is important to note that the views expressed by the NTAA may not be agreed upon by all Tribes. Further, it is also important to understand interactions with the organization do not substitute for government-to-government consultation, which can only be achieved through direct communication between the federal government and Indian Tribes.

In June 2015, the U.S. Supreme Court in Michigan v. Environmental Protection Agency, 135 S.Ct. 2699, held that Clean Air Act (CAA) Section 112(n)(1)(A) requires EPA to consider compliance costs before regulating hazardous air pollutants (HAPs) from coal- and oil-fired electric utility steam generating units (EGUs). In 2016, the EPA issued a Supplemental Cost Finding in response to the Supreme Court decision that—after taking account of the cost of compliance with the Mercury and Air Toxic Standards (MATS) rule—found there was no basis for altering the determination that regulation...
of HAPs emitted by power plants was appropriate and necessary.\(^2\)\(^3\) Please note NTAA submitted comments for the “Supplemental Finding That It Is Appropriate and Necessary to Regulate Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units” on August 17, 2011, and we encourage the agency to revisit those comments as well.

On February 7, 2019, EPA published a proposal to replace the 2016 Supplemental Finding, including 1) rescinding the “appropriate and necessary” finding for EPA to regulate HAPs emissions from coal- and oil-fired power plants because the cost of the regulation outweighs the quantified HAP benefits, and 2) presenting the results of Residual Risk and Technology Review (RTR) they conducted for MATS. Additionally, EPA requested comments on whether EPA has the authority to delist and rescind (or to rescind without delisting) EGUs from the list of sources from CAA section 112 (c) and rescind the National Emissions Standards for HAPs (also known as the MATS rule) as well as establishing a subcategory for emissions of acid gas HAPs from existing EGUs firing eastern bituminous coal refuse.

The NTAA has a number of concerns regarding the agency’s proposed revision. These amendments would cause negative impacts on air quality, the environment, and public health/welfare in Indian Country because the rule would not be adequate or effective in minimizing emissions, would potentially create greater costs to the industry already in compliance, and would undermine the justification for MATS. Therefore, the NTAA opposes the agency’s proposed determination that it is not “appropriate and necessary” to regulate HAP emissions from power plants under CAA section 112. We also do not support the basis of finding that the cost of the regulation grossly outweighs the quantified HAP benefits. We request EPA to uphold the 2016 supplemental finding as it incorporates determinations of multiple health benefits of reducing mercury and other air toxins.

Mercury, cadmium, arsenic, etc. are, naturally occurring elements found in the earth’s crust. Threats to human and environmental health arise when these elements are extracted and released into Earth’s biosphere. Some releases are natural and largely unavoidable, e.g.: volcanoes. Other releases are directly attributable to the human compulsion to extract fossil fuels, minerals, etc. from the earth’s crust. The desired fuels, in this case, are coal and oil which contain impurities including sulfur, radionuclides, and, of course, many toxic metals including mercury. These undesirable impurities, when released into the environment, can and do cause great harm to our biosphere, and to human health. Mercury atoms and compounds do not disappear, remaining quite mobile and harmful for decades until deposited to the earth’s crust or surface waters. When we burn fuels containing these atoms, we are knowingly mobilizing mercury, methylmercury, and other harmful substances.

Mercury has been used for many purposes for at least 200 years. Fortunately, most of those common uses (e.g.: dental amalgams, thermometers, and fluorescent bulbs) have been abandoned

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in favor of safer, more effective, and less expensive technologies. Atmospheric emissions of mercury from EGUs are in decline, but remain the largest source of mercury releases to the environment. Mercury is a neurotoxin that can damage the nervous and cardiovascular systems. Mercury and its compounds are particularly harmful to young children and pregnant women. Coal-fired plants are the highest emitters of mercury in the US and accounted for 50% of mercury emissions in 2015.\footnote{See \url{https://www.epa.gov/mercury}} Methylmercury, also a byproduct of fossil fuel burning, is a bioaccumulative environmental toxicant that readily forms in aquatic systems, enters the food chain that Tribes and Alaskan Native Villages rely upon for sustenance. The proposal re-examines the consideration of health benefits in the cost-benefit analysis performed for the regulation in the 2016 Supplemental Finding. In addition to reducing mercury emissions from EGUs, the MATS rule also reduces emissions of other toxic metals: sulfur dioxide (SO\textsubscript{2}), nitrogen oxides (NO\textsubscript{x}), fine particulates (PM\textsubscript{2.5}), carbon dioxide (CO\textsubscript{2}), and ozone precursors.

According to the Regulatory Impact Analysis (RIA), the direct benefits and co-benefits of reducing mercury emissions from EGUs range from $33-90 billion.\footnote{Regulatory Impact Analysis for the Final Mercury and Air Toxics Standard. EPA-452/R-11-011. December 2011. \url{https://www.epa.gov/sites/production/files/2015-11/documents/matsriafinal.pdf}} Additionally, due to MATS, EPA expected there would be 4,200-11,000 fewer premature adult deaths. Among these are reductions in chronic bronchitis, heart attacks, aggravated asthma, lost school and work days, and hospital and emergency room visits. Furthermore, carbon emission reductions from EGUs help reduce total global greenhouse gas emissions. These benefits are frequently underestimated because many benefits are difficult to quantify or to monetarily valuate, even though they are real and tangible. The RIA did not calculate the monetized value of many known effects of mercury exposure including neurological effects, developmental delays, memory deficiencies, immunotoxic effects, and others. Furthermore, there are a number of human health and environmental benefits the EPA did not include in the RIA. For example, health and ecosystem effects associated with exposure to mercury can include neurological effects (impaired cognitive development, problems with language, and abnormal social development), associations with genetic, autoimmune, and cardiovascular effects, and adverse effects on ecosystems including wildlife. The co-benefits assessment does not include reducing exposure to SO\textsubscript{2} and NO\textsubscript{x}, reducing nitrogen and sulfate deposition in the ecosystem, reducing visibility impairment, increasing road and air travel safety, as well as improving esthetics for outdoor recreation. Co-benefits from reduced SO\textsubscript{2} and NO\textsubscript{x} emissions are substantial. According to a recent Harvard Center for Climate, Health, and the Global Environment study, it was noted that the health and societal benefits derived from the MATS are likely to be “orders of magnitude larger than previously estimated” by the EPA.\footnote{Harvard University Center for Climate Health, and the Global Environment, “Mercury Matters 2018: A Science Brief for Journalist and Policymakers.” December 2018. \url{https://www.hsph.harvard.edu/c-change/news/mercury-matters-2018-a-science-brief-for-journalists-and-policymakers/}} The public will be burdened with the additional expenses and cost of adverse public health impacts, which are excluded or minimized from EPA’s cost-benefit analyses.

While the cost of regulations is easy to identify and estimate, potential health benefits must be comprehensively identified and carefully analyzed to provide EPA and the public a complete cost-benefit analysis. Federal, state, and local air agencies have analyzed and relied on the co-benefits of air pollution regulations for decades. State and local air agencies rely on co-benefits for compliance planning. These are frequently included as compliance strategies within State Implementation Plans for the National Ambient Air Quality Standards. Excluding or minimizing
co-benefits for this proposed rule and future EPA RIAs would hinder state and Tribal agencies to meet federal air quality standards. Lastly, EPA routinely counts co-benefits of its regulations pursuant to EPA’s Guidelines for Preparing Economic Analysis, and OMB Circular A-4 which governs regulatory analysis under E.O. 12866. NTAA recommends that EPA uphold this accepted and routine approach to the consideration of economic analysis in rulemaking as well as conducting a more in-depth analysis regarding the effects of mercury emissions on Tribal communities.

According to the Center for American Progress, mercury air pollution from EGUs has declined more than 81 percent nationwide from 2011 to 2017. In 2018, a study analyzed regional benefits from air quality improvements due to many Clean Air Act rules for coal-fired power plants, including the MATS. The study found these rules are extremely effective in emissions reductions across the midwestern, southern, and eastern portions of the U.S., and if policy decisions weakened the MATS rule for power plants, these regions would see increased concentrations of air pollution. By changing how benefits are calculated, this proposal would undercut the justification for mercury standards and potentially set precedent that could undermine other rules, resulting in detrimental health consequences and ecosystem impacts.

In the 2016 Supplement Cost Finding, the calculated cost to the industry for implementing these pollution controls was US$7.4 - $9.6 billion annually and the savings from co-benefits was estimated at US$37 - $90 billion annually. However, the new proposal limits health benefits to cutting mercury emissions to US$4 - $6 million annually, excluding the co-benefits. The MATS are already fully implemented and the power sector has made changes to meet the MATS requirements, and some plants have permanently shut down operations. It should be noted a number of owners and operators of EGUs have already paid more than $18 billion combined over 6 years since the rule was promulgated to install technology to reduce mercury emissions. The actual cost to the industry is far lower than the estimates provided in 2012.

In addition, bituminous coal refuse-fired EGUs referenced in the proposal are already in compliance with the MATS standards. While EPA is permitted to distinguish among classes, types, and sizes of sources within a category or subcategory, this action must be reasonable and well supported and not used as a means for existing EGUs to circumvent statutory requirements. EPA claims the technology is infeasible and too expensive but these conclusions are not supported by the record. Many compliance costs for operating and capital were overestimated due to 1) decreased costs in controls for mercury and acid gases, 2) Continuous Emission Monitors assist

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plant operators to optimize these controls 3) overestimates in some retrofit costs.\textsuperscript{10,11,12} EPA has not provided updated cost estimates and relies on an RIA that does not reflect current scientific and technical information of the local impacts and cost-benefit analysis of mercury pollution. Therefore, EPA should not establish a subcategory for emissions of acid gas HAPs from existing EGUs firing eastern bituminous coal refuse.

**Tribal Consultation**

Over 200 federally recognized Tribes have reservation lands within a 50-mile radius of EGUs.\textsuperscript{13} Further, “Elemental mercury has an atmospheric lifetime of about one year,” during which it can travel very far from its source.\textsuperscript{14} Tribes in the northeast, west, and Alaska are largely riverine and sustenance fishing is part of their culture. Methylated mercury, originating from mercury deposition due to combustion in coal plants, has been on the downward slope of impact recently. This new change of rule will effectively reverse that healthful trend and accelerate in the opposite direction. In addition to mercury emissions, EGUs emit a number of highly toxic substances including carcinogens, acid gases, arsenic, nickel, and lead. These substances are especially dangerous to human health. When mercury is deposited in surface waters or runs off into streams and impoundments, it can be converted to methylmercury that can accumulate up the aquatic food chain and lead to high concentrations in predatory fish. According to the National Academy of Science, the population at highest risk is the children of women who consumed large amounts of fish and seafood during pregnancy.\textsuperscript{15} In 2011, the Minnesota Department of Health found 8% of newborn babies born in the Lake Superior basin had mercury blood levels above the EPA standard for methylmercury.\textsuperscript{16} Tribal communities face disproportionate health and environmental impacts from EGU emissions through cultural and subsistence activities. Many Tribes fish for subsistence purposes and their methylmercury exposure may be more than two times greater than the general population.\textsuperscript{17} EPA has failed to conduct an analysis of its proposal that properly incorporates Tribal impacts on cultural and subsistence activities. Pursuant to the 1984 *EPA Policy for the Administration of Environmental Programs on Indian Reservations*, Executive Order 13175 (Nov. 6, 2000), and the EPA Policy on Consultation and Coordination with Indian Tribes (May 4, 2011), Tribal concerns and interests must be considered whenever EPA’s actions and/or decisions may affect Tribes. Therefore, the agency must engage in formal government-to-government consultation on this and future actions related to mercury emissions and air pollution, especially considering the unique and disproportionate vulnerabilities to EGU mercury and related toxic air emissions experienced by Tribes. Because this rulemaking process may increase pollution in or on Tribal lands, it is incumbent on the EPA to provide analyses of these potential impacts, confer with Tribes on environmental justice issues, and pursue environmental justice through EPA’s Office of Environmental Justice. NTAA requests EPA incorporate distributional effects in vulnerable populations into the cost-benefit considerations and a Regulatory Impact Analysis to fulfill EPA responsibilities to Tribal communities.

\textsuperscript{10} U.S. Energy Information Administration. https://www.eia.gov/electricity/data.php

\textsuperscript{11} Annual Energy Outlook 2019 Table of Electricity Supply, Disposition, Prices and Emissions (Table 8). U.S. Energy Information Administration, January 24, 2019, available at https://www.eia.gov/outlooks/aeo/.


\textsuperscript{13} \texttt{http://www7.nau.edu/itep/main/ntaa/Resources/EDTmap}

\textsuperscript{14} See \texttt{http://nadp.slh.wisc.edu/lib/brochures/mdn.pdf}

\textsuperscript{15} See \texttt{http://www8.nationalacademies.org/opinions/newsitem.aspx?RecordID=9899}

\textsuperscript{16} See \texttt{https://www.health.state.mn.us/communities/environment/fish/techinfo/newbornhglsp.html}

\textsuperscript{17} See \texttt{https://www.epa.gov/sites/production/files/2015-09/documents/volume7.pdf}
Conclusions
The NTAA appreciates this opportunity to comment on the proposed revision to the Supplemental Cost Finding. We reject the notion of making major changes to EPA’s approach to cost-benefit analysis as presented in the proposed revision and urge the agencies to uphold the 2016 Supplemental Cost finding. It is far more accurate and effective in addressing the full health impacts of emissions. Lastly, the NTAA reminds the EPA of its Policy on Consultation and Coordination with Indian Tribes. If you have any questions or require clarification from the NTAA, please do not hesitate to contact the NTAA’s Project Director, Andy Bessler, at 928-523-0526 or andy.bessler@nau.edu.

On Behalf of the NTAA Executive Committee,

Wilfred J. Nabahe
Chairman
National Tribal Air Association

Cc: Pat Childers, OAR