****

April 17, 2019

The Honorable Andrew Wheeler

Acting Administrator

Environmental Protection Agency

1200 Pennsylvania Avenue, N.W.

Washington, DC 20460

ATTN: Docket ID No. **EPA–HQ–OAR–2018–0794; FRL–9988–93–OAR**

**Submitted via** [**www.regulations.gov**](http://www.regulations.gov)

Re: **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**

Dear Acting Administrator Wheeler:

Thank you for the opportunity to comment on the Environmental Protection Agency’s (EPA) 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,[[1]](#footnote-1) Docket No. EPA–HQ–OAR–2018–0794; FRL–9988–93–OAR. The National Wildlife Federation (NWF) and its below listed affiliates submit these comments for consideration, expressing our **strong opposition** to the EPA’s proposal to dramatically alter the conclusions underlying the rationale for the extremely successful and necessary national emission standards for hazardous air pollutants, including mercury, known as the Mercury and Air Toxics Standards rule (or MATS). The reconsideration’s purported claim that it “corrects the flaws in the Agency’s 2016 Supplemental Finding” are at best misleading. While the proposal claims to maintain the MATS, it artificially discounts the benefits of the rule to undermine the rationale of the MATS – setting the stage for its repeal. It also has troubling implications for how costs and benefits are considered in decision making regarding other important measures to protect public health, natural resources, and wildlife.

Mercury is a dangerous neurotoxic metal that particularly puts children, developing fetuses, and women of childbearing age at risk. Through atmospheric deposition (precipitation), it gets into the food chain in aquatic environments, bioaccumulating in fish and other organisms, making them toxic to eat for both people and wildlife. While the rule does not itself overturn the HAPs rule, it is clearly a step intended to lay the foundation to overturn that rule.

The MATS is largely being implemented and has proven effective and affordable. Indeed, industry even called on EPA to “leave the MATS rule in place and effective,” [CITE] and the risks from mercury exposure are well known. Since 2011, the HAPs rule has largely been implemented by power plants and resulted in the removal of over 80% of mercury emissions from electric generating units (EGUs).

NWF and its network of affiliates share a unique perspective as the nation’s oldest and largest conservation federation dedicated to protecting wildlife and the places we hunt, fish and recreate. NWF and its 51 state and territorial affiliates have six million members and supporters across the nation. When the HAPs rule was originally proposed in 2011, over **XXXXXX** NWF members and supporters registered their formal support for EPA’s proposal to reduce emissions of mercury and other toxics from power plants. These comments were part of the **XXXXXXXX** people around the country who supported this needed step to protect public health and wildlife.

The cost and benefit analysis in this reconsideration is unprecedented in how it aggressively and unjustifiably minimizes the benefits of this rule, discounting tens of billions of dollars’ worth of very real public health and wildlife benefits that are currently being realized as we remove this toxic substance out of the environment. One can only conclude that the impetus behind this rule stems from a desire to discount known and meaningful public health benefits to skew this and future cost/benefit analyses against protecting people and wildlife. This is troubling indeed.

We are very concerned that such an intentional and troubling tilting of the scales will have reverbations for EPA’s many other charges to protect our environment, health, wildlife, and natural resources. EPA balances costs and benefits in much of its decision-making. If it can get away with so narrowly construing benefits here so as to ignore almost all the benefits, while fully weighing the costs to industry, the results will be predictable when it applies a similar analysis to other measures: dirtier air, dirtier water, sicker people, less wildlife, and a polluted landscape.

As affirmed by the **XXX** court, the 2016 Supplemental Finding[[2]](#footnote-2) properly assessed the costs and benefits of the MATS rule. It also appropriately concluded that the MATS rule was appropriate and necessary. This reconsideration illegally turns the 2016 Supplement Finding on its head with the apparent intent to undermine and repeal one of the EPA’s most effective recent actions to safeguard people, wildlife, and our outdoor heritage.

**Background**

In 2012, the EPA finalized rules that required power plants to install technology that would reduce harmful mercury and air toxic pollution from power plants. 77 FR 9304 (Feb. 16, 2012). Mercury is highly toxic to both people and wildlife, and causes neurological, cardiological, and other damage. When mercury is released into the atmosphere, it ends up in water through rainfall where it bio-accumulates in fish and other wildlife as it moves up the food chain. At the request of the Supreme Court,[[3]](#footnote-3) in 2016 EPA made a Supplemental Finding regarding the costs and benefits of the rule, concluding that the rule was justified because the benefits would greatly outweigh the costs. In 2016, EPA estimated that the benefits (monetized and nonmonetized) would be between $37 and 90 billion compared to 9.6 billion in costs.[[4]](#footnote-4) These reductions would prevent 11,000 premature deaths and 4,700 heart attacks.[[5]](#footnote-5)

The current proposed reconsideration takes an unprecedented, unjustified, and illegally stunted view of “benefits.” It concludes that the rule – which it intends to keep in place for now – is not appropriate and necessary because the benefits of the rule would only be 4 to 6 *million* dollars compared with costs that have not materially changed since the 2016 Supplemental Finding. This radical change is due to the fact that EPA has concluded that co-benefits of the MATS, in particular health benefits from the associated reduction of particulate matter or soot, will no longer be included as benefits even though EPA concedes these benefits are “significant” and “substantial.”[[6]](#footnote-6)  This tilting of the scales is a dereliction of duty and will result in poisoned people and wildlife.

**The Impacts of Mercury Pollution**

Coal-fired power plants emit at least 84 separate hazardous air pollutants, including the known neurotoxic metal, mercury.[[7]](#footnote-7) Mercury occurs naturally in coal and is emitted into the air when it is combusted. Once in the air, it enters waters through atmospheric deposition – or when it falls onto the land and waters through precipitation. As such, coal fired power plants are the largest industrial emitters of mercury in the U.S, emitting almost three quarters of all mercury air emissions in the U.S.[[8]](#footnote-8) Unfortunately, 20 of the 25 top mercury-emitting coal-fired plants are located within 50-100 miles of large population centers.[[9]](#footnote-9) Many of these coal-fired power plants are located near communities of color and low-income communities that are facing other severe pollution problems threatening community health and well-being.[[10]](#footnote-10) However, while proximity does impact exposure, much of the mercury pollution travels far from the source. A study shows that up to 10% of the mercury released by coal plants deposits within 62 miles of a power plant. Meanwhile, 50% is deposited within 621 miles and the rest is transported regionally and even globally.[[11]](#footnote-11)

When airborne mercury from coal fired power plants deposits in water bodies, it is converted to methylmercury. It then collects in the tissues of organisms, starting with often small plants or algae and moving from small fish to bigger fish, accumulating as it goes up the food chain. As such, larger, predatory fish tend to have the highest concentrations of mercury. Many of these fish are favorites of anglers and preferred fish for human consumption or consumption by other wildlife, like loons and otters, which eat fish. Unfortunately, because these fish are contaminated at unsafe mercury levels, as of 2011, 1.3 million miles of American rivers and 17 million acres of American lakes were under mercury-related fish contamination advisories – including the entire Great Lakes region.[[12]](#footnote-12)

***Health Impacts in General***

Mercury pollution is a public health problem for anyone who has children, plans to have children, or eats fish. It is of enormous concern for hunters, anglers, and outdoor enthusiasts. When people eat fish or other food containing mercury, they are at risk for brain and neurological damage. For people of any age, mercury can cause loss of peripheral vision, coordination problems, muscle weakness, and impaired hearing, speaking, and walking. The developing brains of fetuses, infants, and children are at even greater risk. Early exposure – including in the womb – can be life-changing, leading to a lifetime of problems with cognitive thinking, memory, attention, language, fine motor skills, and visual spatial skills. All 50 states and one U.S. territory have consumption advisories warning people about the mercury-related health risks from eating certain locally-caught fish.[[13]](#footnote-13)

Data has showed alarming levels of exposure to mercury among women of child bearing age. For instance, 1 in 10 American women of childbearing age have potentially dangerous levels of mercury in their bodies. This means that, conservatively speaking, 410,000 U.S. fetuses are exposed to dangerous levels of mercury in the womb each year.[[14]](#footnote-14)

***Environmental Justice Impacts***

Mercury pollution has disproportionate impact on communities of color. For example, one-third of Latinos fish in freshwater lakes often near urban areas where mercury pollution levels are generally higher than in other waters. As such, Latinos who fish in contaminated urban areas consume on average twice EPA’s safe limit of mercury per day, often times due to fish they catch, eat, and feed to their families.[[15]](#footnote-15) Likewise, African-Americans are at higher health risk than whites in large part because they are far more likely to live near power plants and power plant waste sites.  68% of African-Americans live within 30 miles of a coal-fired power plant — the distance within which the maximum effects of the smokestack plume are expected to occur. In 2002, 71% of African-Americans lived in counties that violated federal air pollution standards, compared to 58% of the white population.[[16]](#footnote-16) Additionally, one-third of African-Americans are avid anglers, and they generally eat fish more often and in larger portions than whites. As such, African -Americans have higher exposure to mercury.[[17]](#footnote-17) Native Americans are also at elevated risk from mercury pollution due to their heavy fish consumption. Members of Native American tribes may eat up to ten times as much fish as the average American.[[18]](#footnote-18)

***Wildlife Impacts***

Mercury poses substantial threats to wildlife as well. Because mercury is most toxic and most easily consumed after it enters water, scientists have focused on fish species and the predators that consume fish, such as birds like loons and herons. But scientists have found dangerous levels of mercury in amphibians, reptiles, and song birds that are not closely linked with aquatic systems. Mercury can severely damage the neurological and hormonal systems of vertebrate species, and can impact their development. Even doses that are too low to kill an animal outright can have other impacts that reduce its ability to survive or produce viable offspring. One study found that very low levels of mercury in the Florida Everglades could reduce the number of ibis fledglings by half, which is enough to have population-level impacts.[[19]](#footnote-19) Another study of ospreys in Montana found that only half the eggs laid by birds with high levels of mercury hatched.[[20]](#footnote-20)

**The Benefits of the Mercury Rule**

The standards have been fully implemented now by electric utilities and it is believed most electric generating units (EGUs), are in compliance. The control technologies required are able to reduce about 90% of mercury emissions and also reduce many other harmful emissions as well, like particular matter.[[21]](#footnote-21) The result, according to a Center for American Progress study, is an 81% reduction in mercury emissions from emitting EGUs,[[22]](#footnote-22) potentially saving as many as 17,000 lives by EPA’s own account.[[23]](#footnote-23) Additionally, between 2011 and 2017, seven of the highest mercury emitting states – Texas, Alabama, Pennsylvania, Michigan, Indiana, Ohio, and Missouri – have reduced mercury emissions by more than 2,000 pounds.[[24]](#footnote-24) To give a sense of how meaningful these reductions are, a fraction of an ounce can poison a small lake.[[25]](#footnote-25) With these reductions in emissions, there have been associated drops in mercury levels in our air and water, as well as in freshwater and Atlantic Ocean fisheries.[[26]](#footnote-26)

Pursuant to instructions from the Supreme Court in *Michigan v. EPA*,[[27]](#footnote-27) EPA took a thorough look at the costs and benefits of the 2011 MATS rule. Appropriately considering the reduction of other harmful pollutants like particulate matter or soot, the full impacts of mercury on human health, the health impacts of exposure to other hazardous pollutants such as cancer and chronic diseases of the lungs and kidneys, and the effects on wildlife and ecosystems, EPA found that the rule would provide between $37 and 90 billion of benefits compared to $9.6 billion in costs – or approximately $3 to $9 in benefits to every dollar is costs.[[28]](#footnote-28) These estimates of benefits were considered to be low by some experts.[[29]](#footnote-29)

The reconsideration seeks to ignore over 99% of these benefits, while counting all of the costs. With a stroke of a pen, and while acknowledging that these benefits may be significant and substantial, EPA is seeking to dismiss them from consideration. The effect is devastating. EPA has taken such a cramped view of benefits that it proposes to only count $4 to 6 *million* dollars worth of them. Here’s what EPA is expressly saying it won’t consider: the impacts of mercury on human health including neurological, cardiovascular, genotoxic, and immunotoxic effects; the health impacts of exposure to other hazardous pollutants such as cancer and chronic diseases of the lungs and kidneys; and the effects on wildlife and ecosystems. EPA justifies this reduction based on claims that the 2016 analysis should not have considered co-benefits from reductions of other regulated pollutants like particulate matter. But not only is EPA incorrect in excluding the benefits, a recent analysis showed that mercury pollution alone cost the nation $4.8 billion in societal costs just in 2017.[[30]](#footnote-30)

EPA readily admits it is ignoring these substantial benefits, saying that “the vast majority of benefits resulting from MATS are associated with reductions in PM2.5, precursor emissions, principally NOx and SO2,”[[31]](#footnote-31) as well as “benefits associated with regulation of HAP from EGUs that not be quantified” such as “impacts of Hg on human health (including neurologic, cardiovascular, genotoxic, and immunotoxic effects), a variety of adverse health effects associated with exposure to certain non-Hg HAP (including cancer, and chronic and acute health disorders that implicate multiple organ systems such as the lungs and kidneys), and effects on wildlife and ecosystems.”[[32]](#footnote-32) However, EPA seeks to incredulously conclude that “acknowledging that reductions in HAP can have the collateral benefit of reducing non-HAP emissions and vice versa, provides no support for the proposition that any such co-benefits should be the Agency’s primary consideration when making a finding under Clean Air Act (CAA) section 112(n)(1)(A). Indeed, it would be highly illogical for the Agency to make a determination that regulation under CAA section 112, which is expressly designed to deal with HAP, is justified principally on the basis of the [other] pollutant impacts of these regulations.”[[33]](#footnote-33) This position is not supported by the Clean Air Act, and is indeed contrary to the agency’s practice of appropriately considering the full benefits of such regulation, including co-benefits.

Shockingly, the agency is hoping to use this skewed analysis to justify that it is no longer “appropriate and necessary” to regulate hazardous air pollution from power plants at all under Section 112 of the Clean Air Act, thereby weakening the foundation of mercury regulation, opening the door to lawsuits and repeal. NWF and its undersigned affiliates urge the EPA to abandon this reconsideration and affirm its 2016 Supplemental Finding, which appropriately found that the benefits of this rule supported a finding that the MATS rule is appropriate and necessary.

Sincerely,

James Murphy

Director, Legal Advocacy

National Wildlife Federation

1. 84 FR 2,670 (Feb. 7, 2019). [↑](#footnote-ref-1)
2. 81 FR 24420 (Apr. 25, 2016) [↑](#footnote-ref-2)
3. Michigan v. EPA, 135 S. Ct. 2699 (2015). [↑](#footnote-ref-3)
4. 81 FR 24420, 24424-25 (Apr. 25, 2016). [↑](#footnote-ref-4)
5. CITE. [↑](#footnote-ref-5)
6. [CITE] [↑](#footnote-ref-6)
7. Moms Clean Air Task Force [↑](#footnote-ref-7)
8. Id. [↑](#footnote-ref-8)
9. Id. [↑](#footnote-ref-9)
10. CITE. [↑](#footnote-ref-10)
11. Moms Clean Air Task Force; Electric Power Research Institute [↑](#footnote-ref-11)
12. Moms Clean Air Task Force [↑](#footnote-ref-12)
13. CAP at 2 citing Harvard’s Center for Climate, Health, and the Global Environment [↑](#footnote-ref-13)
14. Id. [↑](#footnote-ref-14)
15. Id. [GET ORIGINAL CITE] [↑](#footnote-ref-15)
16. Id. [↑](#footnote-ref-16)
17. Id. [↑](#footnote-ref-17)
18. Id. [↑](#footnote-ref-18)
19. CITE. [↑](#footnote-ref-19)
20. CITE. [↑](#footnote-ref-20)
21. CITE – Moms Clean Air Force [↑](#footnote-ref-21)
22. Sally Hardin and Angelica Lujan, Center for American Progress, Trump’s EPA Poised to Undo Progress on Mercury Pollution Reduction (Dec. 18, 2018), available at, <https://cdn.americanprogress.org/content/uploads/2018/12/17114552/Mercury-Standards-_brief.pdf>. [↑](#footnote-ref-22)
23. CITE. [↑](#footnote-ref-23)
24. CAP Report citing Harvard University Center for Climate, Health, and the Global Environment, “Mercury Matters 2018: A Science Brief for Journalists and Policymakers” (2018), available at https://www.hsph.harvard.edu/c-change/mercurymatters/. [↑](#footnote-ref-24)
25. CAP citing Travis Madsen and Lauren Randall, “America’s Biggest Mercury Polluters: How Cleaning Up the Dirtiest Power Plants Will Protect Public Health” (Denver: Environment American Research and Policy Center, 2011), available at https:// environmentamerica.org/sites/environment/files/reports/ AME-Biggest-Mercury-Polluters---WEB.pdf. [↑](#footnote-ref-25)
26. CAP Report citing Phillippe Grandjean and Martine Bellanger, “Calculation of disease burden associated with environmental chemical exposures: application of toxicological information in health economic estimation,” Environmental Health Perspectives 16 (123) (2017), available at https://www.ncbi. nlm.nih.gov/pmc/articles/PMC5715994/pdf/12940\_2017\_ Article\_340.pdf. [↑](#footnote-ref-26)
27. Michigan v. EPA, 135 S. Ct. 2699 (2015). [↑](#footnote-ref-27)
28. 81 FR 24420, 24424-25 (Apr. 25, 2016). [↑](#footnote-ref-28)
29. See CAP citing Harvard report. [↑](#footnote-ref-29)
30. CAP citing Harvard report [↑](#footnote-ref-30)
31. 84 FR at 2,677. [↑](#footnote-ref-31)
32. Id. [↑](#footnote-ref-32)
33. Id. at 2,676. [↑](#footnote-ref-33)