



Rolling Back the Mercury and Air Toxics Standards: Proposed Withdrawal of “Appropriate and Necessary”

Three Deregulatory Rules: One Legal Strategy

In recent months, the EPA has issued three proposals using similar strategies: the proposal to replace the [Clean Power Plan](#) with the Affordable Clean Energy (ACE) rule¹, the proposal to define the “[waters of the United States](#)” (WOTUS) under the Clean Water Act² and the proposal to withdraw the supplemental “appropriate and necessary finding” for the [Mercury and Air Toxics Standards](#) (MATS)³. Underpinning all three proposals is an extremely narrow interpretation of statutory text that excludes any of the usual rulemaking considerations under the Clean Air Act and Clean Water Act.

At the core of both statutes are provisions that require the agency to set standards and take actions that account for technological progress, economic growth, and new science. Congress counted on inevitable technological and scientific progress and required the EPA to update both health-based air quality standards and pollution control technology standards on a set schedule to factor in that progress. These advances are the engines that drive environmental statutes like the Clean Air Act and Clean Water Act to provide continual improvement in public health and the environment.

In addition, the Clean Air Act sets requirements for a wide variety of air pollutants from nearly every sector of the economy. Congress constructed a mosaic of statutory schemes in the Clean Air Act, creating national standards for entire sectors, individual permits for sources within each sector and, in some cases, multiple sets of requirements for the same sources when they emit numerous pollutants that have different environmental effects.

In the three proposals, however, the Trump EPA interprets these statutes narrowly to enable the agency to ignore advances in science and technology. These interpretations halt the

¹ Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48035, 48039 (Oct. 16, 2017). Available at: <https://www.govinfo.gov/content/pkg/FR-2017-10-16/pdf/2017-22349.pdf>.

Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, 83 Fed. Reg. 44746 (Aug. 31, 2018). Available at: <https://www.govinfo.gov/content/pkg/FR-2018-08-31/pdf/2018-18755.pdf>.

² Revised Definition of “Waters of the United States”, 84 Fed. Reg. 4154 (Feb. 14, 2019). Available at: <https://www.govinfo.gov/content/pkg/FR-2019-02-14/pdf/2019-00791.pdf>.

³ 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 84 Fed. Reg. 2670 (Feb. 7, 2019). Available at: <https://www.govinfo.gov/content/pkg/FR-2019-02-07/pdf/2019-00936.pdf>.



statutes' built-in progress by fraying the link between the agency's obligations to public health and the environment and the evolution of science and technology. In each case, the proposal arrives at the conclusion that the EPA should do less, rather than more, to advance environmental protection.

- In proposing to repeal the Clean Power Plan and replace it with the Affordable Clean Energy rule, the EPA must acknowledge how the power sector operates - by shifting generation among plants in a networked grid in order to reduce costs, guarantee reliability, and meet pollution control requirements. Yet, the agency concludes this is not relevant when determining the "best system of emission reduction".⁴
- In proposing to rescind the supplemental finding that it's "appropriate and necessary" to set standards for power plant mercury and air toxics emissions, the agency has disregarded the Congressional intent behind the Clean Air Act Amendments of 1990, which was to guarantee substantial reductions in mercury and air toxics emitted by power plants.⁵
- In defining "waters of the United States" under the Clean Water Act, the agency has discarded basic principles of hydrology.⁶

In each case, the EPA's new interpretation was crafted to justify deregulation, using an argument that constrained the agency's authority.

At least two recent court decisions have relied on narrow interpretative strategies that ignored new science and technology or the statutory scheme of the Clean Air Act in ways that foreshadowed the EPA's current approach. In *Michigan v. EPA*, Justice Scalia, writing in 2015 for the 5-4 majority, focused narrowly on a single statutory phrase – "appropriate" – in rejecting the EPA's 2012 determination that it was "appropriate and necessary" to regulate hazardous air pollutants via MATS.⁷ The Court's analysis largely ignored the statutory scheme, so much so that the decision came dangerously close to overturning entirely the Clean Air Act's scheme for addressing mercury and toxic air emissions from power plants. In 2017, the D.C. Circuit in *Mexichem Fluor v. EPA* showed no such restraint. The court ruled 2-1 that EPA's authority under Title VI of the Clean Air Act to determine the availability and use of substitutes for stratospheric ozone depleting chemicals, chlorofluorocarbons, ended at the end of the first cycle of technical

⁴ Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48035, 48039 (Oct. 16, 2017). Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, 83 Fed. Reg. 44746 (Aug. 31, 2018).

⁵ 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 84 Fed. Reg. 2670 (Feb. 7, 2019).

⁶ Revised Definition of "Waters of the United States", 84 Fed. Reg. 4154 (Feb. 14, 2019).

⁷ *Michigan v. EPA*, 135 S. Ct. 2699 (2015).



innovation.⁸ The court’s opinion focused on the interpretation of a single word –“replace” – as defined by Webster’s Third International Dictionary, while ignoring both the relevant statutory provision as a whole and the innovation-fostering statutory scheme.

Each of these developments, especially the EPA proposals, is worth closer examination. The Trump EPA has been unremitting in [rolling back existing regulations](#), bringing to a standstill the expansion of public health protections and dismantling key capacities that have been the foundation of the regulatory process. To carry out its deregulatory campaign, the agency has had to operate under its only authorities – statutes like the Clean Air Act and Clean Water Act. These statutes are designed to deliver continual improvements in public health and environmental quality, and have been applied in that way for decades. Now, the Trump EPA has had to figure out how to interpret their provisions differently, to support the agency’s new agenda of deregulation and regulatory stasis. The Clean Power Plan repeal/ACE, waters of the U.S., and MATS appropriate and necessary withdrawal proposals all reflect this reversal in mission, and all rely on drastically narrow statutory interpretation as instrumental to accomplishing the EPA’s new reverse agenda.

The rest of this paper will focus on the proposal to rescind the supplemental appropriate and necessary finding for the Mercury and Air Toxics Standards. We plan to examine the two other proposals in the near future.

Proposal to Rescind the Mercury and Air Toxics Standard Supplemental Appropriate and Necessary Finding

I. Introduction

On February 7, 2019 the EPA proposed to rescind the 2016 “supplemental finding” that it is “appropriate and necessary” to regulate mercury and other hazardous air pollutants emitted by power plants, after considering the cost of regulation, under section 112 of the Clean Air Act⁹.

[See here for a timeline of major MATS milestones.](#)

By rescinding the finding, the agency would remove the legal foundation for the Mercury and Air Toxics Standards (MATS), which the agency issued in 2012.¹⁰ Yet the EPA also proposes to

⁸ *Mexichem Fluor, Inc. v. EPA*, 866 F.3d 451 (D.C. Cir. 2017), *cert. denied sub nom. Honeywell Int’l Inc. v. Mexichem Fluor Inc. and Nat. Res. Def. Council v. Mexichem Fluor, Inc.*, 139 S. Ct. 322 (2018).

⁹ 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 84 Fed. Reg. 2670 (Feb. 7, 2019).

¹⁰ National Emission Standards for Hazardous Air Pollutants From Coal-and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304 (Feb. 16, 2012). Available at: <https://www.govinfo.gov/content/pkg/FR-2012-02-16/pdf/2012-806.pdf>.



leave in place the MATS pollution control requirements. EPA's justification for leaving the standards in place is in deep tension with its legal rationale for rescinding the finding.

Although it proposes to leave the standards in place, the proposal also invites comment on whether the agency has the authority to rescind the standards. If the withdrawal of the appropriate and necessary finding is finalized, then the standards themselves, if left in place, will be vulnerable to legal challenge. Coal companies and a group representing the utility industry brought a lawsuit, which is currently pending in the D.C. Circuit Court of Appeals, against the 2016 supplemental appropriate and necessary finding.¹¹ At least some of these parties would be sure to challenge the standards if the finding that it is appropriate and necessary to regulate power plants is withdrawn.

EPA's rationale for rescinding the finding also counsels categorically excluding co-benefits in any comparison of the costs and benefits of regulation. However, the proposal does not exclude co-benefit considerations. Instead, the agency asserts without explanation that co-benefits should be included in the cost-benefit comparison but be given less weight than that given to the benefits of reducing the pollutants "targeted" by the regulations.

Ultimately, the proposal comes to rest on an interpretation of section 112 that is at odds with the statutory scheme Congress designed when it enacted its provisions as part of the Clean Air Act Amendments of 1990. Specifically, the logic of the EPA's proposal is that section 112(n)(1)(A) includes the option of not regulating hazardous air pollutants even if the EPA finds that they continue to pose a hazard to public health.

Finally, the purpose of the proposal itself is mysterious. The utility sector has been in full compliance with the MATS pollution control requirements for almost three years, achieving almost all of the mandated reductions at a far lower cost than projected.¹² Last summer, the utility industry formally voiced its opposition to the EPA's moving forward with the proposal.¹³ Meanwhile, scientific understanding of mercury's harmful effects on public health and the environment has increased significantly since 2012, showing that the benefit of reducing mercury emissions is demonstrably greater than was understood in 2012.¹⁴

¹¹ *Murray Energy v. EPA*, No.16-1127 (D.C. Cir. filed April 25, 2016).

¹² Letter from The Edison Electric Institute, The American Public Power Association, The National Rural Electric Cooperative Association, The Clean Energy Group, The Class of '85 Regulatory Response Group, The International Brotherhood of Electrical Workers, The International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers to William L. Wehrum, Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency (July 10, 2018). Available at: https://www.eenews.net/assets/2018/07/11/document_gw_04.pdf.

¹³ *Id.*

¹⁴ *Mercury Matters 2018: A Science Brief for Journalists and Policymakers*, HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH CENTER FOR CLIMATE, HEALTH, AND THE GLOBAL ENVIRONMENT (Dec. 17, 2018) <https://www.hsph.harvard.edu/change/news/mercury-matters-2018-a-science-brief-for-journalists-and-policymakers/>.



However, this proposal is in line with EPA's unprecedented deregulatory agenda, and its resistance, if not refusal, to recognize the benefits of reducing air pollution. Previous actions in this campaign include analyses in the proposal to repeal the Clean Power Plan, proposals to exclude from consideration certain epidemiological studies that have proven particularly useful to demonstrating the benefits of reducing pollution and an advanced notice of proposed rulemaking seeking comment on overhauling the methodologies EPA uses when assessing costs and benefits.¹⁵

Suppressing the value of pollution reduction benefits is instrumental to EPA's overt deregulatory mission implied by the Trump Executive Order of March 28, 2017¹⁶ and affirmed in the agency's 2018 end-of-year report.¹⁷

The Clean Air Act was deliberately crafted by Congress – and applied by the EPA over decades – to deliver continual improvement in air quality – improvement guided by advances in science and technology. Now, the EPA's agenda is to arrest that progress via regulatory rollbacks, and it must do so while operating under the same provisions of the Clean Air Act that are fundamentally at odds with the current agenda because they were specifically designed to foster or mandate progress, not stasis or retrenchment. That fundamental tension is reflected in the EPA's reliance here on a blinkered and torturous legal interpretation of section 112 of the Clean Air Act.

II. Background

Section 112 of the Clean Air Act mandates that the EPA set emissions control standards for 189 hazardous air pollutants listed in the CAA itself. Section 112(c) directs the EPA to list source categories that emit significant levels of the listed hazardous air pollutants. Section 112(d) mandates that the EPA set pollution control standards for hazardous air pollutants emitted by source categories on the 112(c) list. The EPA has included power plants on the 112(c) list.

Section 112(n)(1)(A), a separate provision unique to power plants, requires an additional step between listing a source sector under section 112(c) and issuing standards for the sector under section 112(d). Section 112(n)(1)(A) provides that the EPA “...shall perform a study of the *hazards to public health reasonably anticipated to occur as a result of emissions* by electric utility steam generating units of pollutants listed under subsection (b) after imposition of the

¹⁵ See *Denying the Health Benefits of Pollution Reduction*, HARVARD LAW SCHOOL ENVIRONMENTAL & ENERGY LAW PROGRAM (June 26, 2018) <https://eelp.law.harvard.edu/2018/06/denying-the-health-benefits-pollution-reduction/>. *Changing What Science the EPA Will Consider – Part 1*, HARVARD LAW SCHOOL ENVIRONMENTAL & ENERGY LAW PROGRAM (April 4, 2018) <https://eelp.law.harvard.edu/2018/04/changing-what-science-the-epa-will-consider-part-1/>. *Changing What Science the EPA Will Consider – Part 2*, HARVARD LAW SCHOOL ENVIRONMENTAL & ENERGY LAW PROGRAM (May 1, 2018) <https://eelp.law.harvard.edu/2018/05/changing-what-science-the-epa-will-consider-part-2/>.

¹⁶ Exec. Order No. 13783, 3 C.F.R. § 314. Available at: <https://www.govinfo.gov/content/pkg/CFR-2018-title3-vol1/pdf/CFR-2018-title3-vol1-eo13783.pdf>.

¹⁷ U.S. ENVTL. PROT. AGENCY, YEAR IN REVIEW (2018), https://www.epa.gov/sites/production/files/2019-01/documents/epa_2018_yearinreview_0128-4.pdf.



requirements of this chapter.”¹⁸ Section 112(n)(1)(A) requires the EPA to issue hazardous air pollutant standards for power plants if “...after considering the results of the study required by this subparagraph” the agency determines that it is “appropriate and necessary” to regulate hazardous air pollutants from power plants.¹⁹ Based on studies showing harms to public health created by hazardous air pollutant emissions from power plants, EPA made the appropriate and necessary determination under section 112(n)(1)(A) and issued MATS under section 112(d).

The U.S. Court of Appeals for the D.C. Circuit upheld MATS in its entirety, including the “appropriate and necessary” finding.²⁰ In 2015, the Supreme Court, in *Michigan v. EPA*, ruled that EPA had erred in failing to consider cost in making the “appropriate and necessary” finding.²¹ The D.C. Circuit declined to stay the MATS pollution control standards and remanded the appropriate and necessary finding to the EPA so that the agency could reconsider it while taking account of costs.²² In 2016 the EPA issued the supplemental finding that it remained appropriate and necessary to regulate hazardous air pollutants emitted by power plants after applying two different approaches in considering costs.²³

In the 2016 supplemental finding, the EPA briefly laid out its view of the statutory scheme in the Clean Air Act Amendments of 1990:

The EPA explained that it preferred this approach to a formal benefit-cost analysis *given the statutory objectives of CAA section 112, in particular Congress’ determination that HAP emissions are inherently harmful, and the instruction from Congress to protect the most sensitive populations from those harms.*

The EPA found that *CAA section 112(n)(1)(A)’s emphasis on the required studies supported its interpretation that while cost is an important factor that it must consider in making the appropriate and necessary finding, it is one of several factors that must be considered and the statutory text does not support a conclusion that cost should be the predominant or overriding factor.*

The EPA’s preferred approach to considering cost allows the Administrator to weigh the full range of factors relevant to making a determination under CAA section 112(n)(1)(A) of whether it is appropriate and necessary to regulate HAP emissions from EGUs [electric generating units]. Moreover, *because the Supreme Court’s holding did not disturb the scientific assessments and conclusions made in the original appropriate and*

¹⁸ Clean Air Act § 112(n)(1)(A), 42 U.S.C. § 7412(n)(1)(A) (emphasis added).

¹⁹ *Id.*

²⁰ *White Stallion Energy Ctr., LLC v. EPA*, 748 F.3d 1222 (D.C. Cir. 2014), *rev’d sub nom.* *Michigan v. EPA*, 135 S. Ct. 2699 (2015).

²¹ *Michigan v. EPA*, 135 S. Ct. 2699 (2015).

²² *White Stallion Energy Ctr., LLC v. Env’tl. Prot. Agency*, No. 12-1100, 2015 WL 11051103 (D.C. Cir. Dec. 15, 2015).

²³ Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24420 (April 25, 2016).



necessary finding, many of which were challenged and upheld by the D.C. Circuit in *White Stallion*, the Administrator concluded that the task on remand was to determine whether a consideration of cost caused her to alter her prior conclusion that it was appropriate to regulate HAP emissions from EGUs under CAA section 112.²⁴

Justice Kagan was more explicit in describing the Clean Air Act's statutory scheme in her dissent in *Michigan*:

Congress modified ... [the section 112] regulatory scheme for power plants. It did so because *the 1990 amendments established a separate program to control power plant emissions contributing to acid rain, and many thought that just by complying with those requirements, plants might reduce their emissions of hazardous air pollutants to acceptable levels.*

That prospect counseled a “wait and see” approach, under *which EPA would give the Act's acid rain provisions a chance to achieve that side benefit before imposing any further regulation.*

Accordingly, Congress instructed EPA to “perform a study of the hazards to public health reasonably anticipated” to result from power plants' emissions after the 1990 amendments had taken effect. §7412(n)(1)(A). And Congress provided that EPA “shall regulate” those emissions only if the Agency “finds such regulation is appropriate and necessary after considering the results of the [public health] study.”

Upon making such a finding, however, EPA is to regulate power plants as it does every other stationary source: first, by categorizing plants and setting floor standards for the different groups; then by deciding whether to regulate beyond the floors; and finally, by conducting the cost-benefit analysis required by Executive Order.²⁵

The EPA had long since performed the required studies and concluded:

Based on our consideration of the peer reviews, public comments, and our updated analyses, we confirm the findings that Hg [mercury] and non-Hg HAP emissions from U.S. EGUs pose hazards to public health and that it remains appropriate to regulate U.S. EGUs under CAA section 112.

We also conclude that it remains appropriate to regulate U.S. EGUs under CAA section 112 because of the magnitude of Hg and non-Hg emissions, environmental effects of Hg and certain non-Hg emissions, and the availability of controls to reduce HAP emissions from EGUs.

²⁴ Id. at 24424 (emphasis added; internal citations omitted).

²⁵ *Michigan v. EPA*, 135 S. Ct. 2699, 2715–16 (2015) (Kagan, J., dissenting) (emphasis added and internal citations omitted).



In addition, we conclude that the hazards to public health from Hg and non-Hg emissions from U.S. EGUs are reasonably anticipated to remain after imposition of the requirements of the CAA. The same is true for hazards to the environment. Thus, we confirm that it is necessary to regulate U.S. EGUs under CAA section 112.²⁶

What the EPA understood, as Justice Kagan explained, is that Congress had determined that one way or another mercury and other hazardous air pollutants emitted by power plants would be reduced by the Clean Air Act Amendments of 1990. If the reductions did not occur as a collateral effect of compliance with the Acid Rain Program or other Clean Air Act requirements, then the EPA would implement section 112 if it determined that power plant mercury emissions continued to pose a hazard to public health and the environment.

The Clean Air Act did not grant EPA the discretion to re-visit the threshold decision that Congress made in 1990 requiring reductions in hazardous air pollutants emitted by power plants. Nor did the *Michigan* majority introduce or create such discretion. The Court framed EPA's task carefully in ruling that the EPA erred in failing to compare the costs and benefits of regulating power plants under section 112 when concluding that regulation was "appropriate and necessary". Writing for the majority, Justice Scalia stated that the Court was not requiring a formal cost-benefit analysis. Instead, the majority expressly left it to the EPA to determine how to take account of costs and make the comparison to benefits. Asserting that the phrase "appropriate and necessary" inherently included consideration of costs, the Court stated that the phrase "encompasses *multiple* relevant factors...."²⁷ While it admonished the EPA for not comparing costs and benefits, the majority stopped emphatically short of directing or authorizing the EPA to base the appropriate and necessary finding exclusively on the results of its cost-benefit comparison. The majority's restraint on that point leaves EPA with little justification for ignoring the statutory scheme reflected in section 112(n)(1)(A) while making the appropriate and necessary determination, regardless of the agency's views of the comparison between the costs and benefits of regulation.

III. The Proposal

On February 7, 2019, the agency proposed to withdraw the supplemental appropriate and necessary finding in a way that fails at the threshold. The EPA relies on a logic that reads latitude into section 112(n)(1)(A) and *Michigan* that the agency does not have – a latitude to reject regulating power plants. Then, the proposal advances an alternative logic to avoid eliminating the standards while also withdrawing the appropriate and necessary finding. This, in turn, undercuts the rationale for issuing the proposal in the first place.

²⁶ National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units; Final Rule, 77 Fed. Reg. 9304, 9311 (Feb. 16, 2012) (emphasis added).

²⁷ *Michigan v. EPA*, 135 S. Ct. 2699, 2709 (2015) (emphasis in original).



A. The Unauthorized Option Not to Regulate

The proposal describes section 112(n)(1)(A) as “set[ting] a unique process by which the Administrator is to determine *whether to establish CAA section 112(d) standards for EGUs.*”²⁸ EPA goes on to describe its task as solely to compare costs and benefits. It proposes to conclude that since the costs outweigh the benefits, the appropriate and necessary finding issued in 2012 and re-confirmed in 2016 must be withdrawn.

EPA thus effectively posits the cost-benefit comparison as the sole step in determining “*whether to establish CAA section 112(d) standards for EGUs.*”²⁹ The agency seems to read section 112(n)(1)(A) as giving it the option – depending on the outcome of the benefit-cost comparison – not to regulate power plants even if the 112(n)(1)(A) shows, as EPA’s study did, that “hazards to public health [] are reasonably anticipated to occur as a result of [power plant] emissions ... after imposition of other CAA provisions”.³⁰

This logic runs counter to the statutory scheme as laid out in Justice Kagan’s explanation of section 112(n)(1)(A). It also misreads the *Michigan* majority which declined to set the comparison of costs and benefits as yielding, by itself, the answer to the question of whether it is appropriate and necessary to regulate power plants under section 112(d). Moreover, the majority identified the cost-benefit comparison as only one of several factors that must inform the EPA’s consideration. It also ignores the results of the 112(n)(1)(A) study which compel the appropriate and necessary finding and, in turn, mandate regulation under section 112(d) according to the statutory scheme.

Finally, the proposal acknowledges its approach opens the EPA up to the argument that the regulations must be withdrawn in the absence of a necessary and appropriate finding. It then explicitly invites comment on that issue, offering two theories (discussed below) under which the agency might retain the authority to withdraw the regulations.

The proposal thus draws a path that could lead to the one outcome not contemplated by either the Clean Air Act or *Michigan*: the eventual withdrawal of both the finding and the regulations. Meanwhile, the EPA’s conclusion, which this proposal does not challenge, remains: “...that the hazards to public health from Hg and non-Hg emissions from U.S. EGUs are reasonably anticipated to remain after imposition of the requirements of the CAA.”³¹

²⁸ 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 84 Fed. Reg. 2670, 2673 (Feb. 7, 2019) (emphasis added).

²⁹ *Id.* (emphasis added).

³⁰ *Id.*

³¹ National Emission Standards for Hazardous Air Pollutants From Coal-and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, 77 Fed. Reg. 9304, 9311 (Feb. 16, 2012).



B. Twin Puzzles

The EPA's proposal describes the appropriate and necessary finding as determining whether or not to regulate. Yet, it claims that it can leave the regulations in place while simultaneously withdrawing the finding.

To justify this, the proposal cites *New Jersey v. EPA*, which held that the withdrawal of the appropriate and necessary finding does not by itself remove power plants from the section 112(c) list of source sectors emitting hazardous air pollutants. Since power plants remain on the list, the proposal simply states that section 112(d) requires that the regulations remain in place – again, even in the absence of an appropriate and necessary finding.³²

The proposal thus creates two puzzles.

i. Puzzle 1

First, the proposal states that section 112(n)(1)(A) “sets a unique process by which the Administrator is to determine whether to establish CAA section 112(d) standards for EGUs.”³³ If that is so, then the mere fact that power plants are listed under section 112(c) is not sufficient by itself, in the absence of an appropriate and necessary finding, to justify regulation under section 112(d).

If, however, EPA now believes that section 112(n)(1)(A) provides the process by which the agency determines whether or not to regulate power plants' hazardous air pollutants, and if the EPA is now proposing to leave the regulations in place, then the only way it can explain doing so is by relying on the study mandated under section 112(n)(1)(A) which shows that without regulations under section 112 power plants' emissions continue to pose a threat to public health. If that is the inference EPA intends to create, then it is right to do so.

Not only does section 112(n)(1)(A) put at the fulcrum of the appropriate and necessary determination the results of the study of the hazards posed by power plant emissions, but section 112(f)(2) requires EPA to set additional standards if it determines that additional standards are needed to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect. Retaining the regulations is the proposal's assent to the unqualified priority that Congress, via sections 112(d) and (f), placed on minimizing the threat to public health posed by hazardous air pollutants from sources listed under section 112(c), including power plants.

³² 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 84 Fed. Reg. 2670, 2673 (Feb. 7, 2019).

³³ *Id.*



By this logic the EPA has no basis for withdrawing the finding regardless of its view of the comparison of costs and benefits. To the extent the proposal leaves the regulations in place, it implicitly ratifies the statutory scheme laid out clearly in Justice Kagan's dissent and left unchallenged by the *Michigan* majority: that it is intended to ensure the achievement of hazardous air pollutant reductions if they are not already achieved by dint of compliance by power plants with other provisions of the Clean Air Act.

ii. Puzzle 2

Under this analysis the proposal creates a second puzzle: what purpose does the proposal serve since the EPA proposes to leave the regulations in place even as it proposes to withdraw the finding? The logic implied in the proposal to leave the regulations in place negates the logic of withdrawing the appropriate and necessary finding. The risks to the survival of the regulations created by a final action withdrawing the appropriate and necessary finding, meanwhile, should be risks a public health agency would want to avoid at all costs.

Commenters with a deregulatory agenda, explicitly invited in the proposal to address the issue of whether the absence of the appropriate and necessary finding authorizes or compels the EPA to rescind the pollution control standards, could create a record that compels the EPA to assert authority to withdraw the regulations when it withdraws the finding itself. The same parties could petition the EPA to do just that, or they could bring the same arguments to the D.C. Circuit to persuade the court to vacate the regulations in the absence of an appropriate and necessary finding.

C. The Co-Benefits Puzzle

Unless EPA wants to put in motion a process that leads ultimately to eliminating the regulations, the proposal's sole purpose seems to be to offer a critique of the use of co-benefits in the comparison of costs and benefits under section 112(n)(1)(A). Yet, even here, the proposal contradicts itself. The agency claims the appropriate and necessary finding and the 2016 supplemental finding are flawed because, when the EPA calculated the benefits of regulating hazardous air pollutants, it included the value of reducing sulfur dioxide and ambient fine particles, which are reduced along with hazardous air pollutants when plants comply with the section 112 hazardous air pollutant control requirements.

The EPA argues that since neither sulfur dioxide nor ambient fine particles are listed as hazardous air pollutants for purposes of section 112, then the benefits of reducing them should not have been included in the comparison of costs and benefits for the 2016 supplemental finding. Section 112(n)(1)(A) reflects Congress' recognition that other provisions of the Clean Air Act would require pollution reductions from power plants. Thus, the appropriate and necessary determination must focus exclusively on the cost and value of reducing hazardous air pollutants listed in section 112, because many of those other provisions targeted or resulted in reductions in sulfur dioxide and other pollutants that create ambient fine particles.



However, if the agency's analysis of section 112(n)(1)(A)'s exclusive focus on the benefits of reducing hazardous air pollutants is correct, then reductions in non-section 112 pollutants should be assigned no value in the agency's comparison of costs and benefits for the appropriate and necessary finding.

Yet instead of excluding the value of sulfur dioxide and fine particle reductions entirely, the proposal gives the value of the collateral reductions positive weight in assessing the benefits of regulation, albeit less weight than the value of reductions in hazardous air pollutants. Nowhere in the preamble does the EPA explain why it is deviating from the logic of its own analysis of the statutory role of section 112(n)(1)(A), which would assign no value to reductions in pollutants other than hazardous air pollutants. Nor does the agency provide an explanation of how much weight it is giving to other pollutant reductions relative to hazardous air pollutant reductions, or describe the methodology it used to reach these conclusions.

The Administrative Procedure Act and the parallel provisions of the Clean Air Act section 307(d) require that the proposal describe and explain precisely how the EPA weighted the value of co-benefits relative to the weight it gave to the benefits of reducing hazardous air pollutants. The absence of this explanation undercuts the proposal's conclusions regarding the costs and benefits of regulation. It also highlights the disconnect between the proposal's legal argument against including co-benefits in the cost-benefit comparison at all and the proposal's then asserting that they can be considered, albeit with less weight.

Finally, the proposal's attempt to distinguish between the treatment of targeted benefits and co-benefits in its cost-benefit comparison is also completely undercut by the fact that the EPA has relied on the ambient fine particle reductions achieved as a result of compliance with MATS in its own analysis of the 2012 National Ambient Air Quality Standards for fine particles (PM 2.5).³⁴ The 2012 PM 2.5 NAAQS Regulatory Impact Analysis included in the baseline used to assess the incremental costs of meeting the NAAQS the full suite of pollutants reduced as a result of MATS compliance.³⁵ The agency concluded that MATS was among a set of federal policies expected to result in virtually all nonattainment areas meeting the PM 2.5 standards without significant additional action by states or localities.³⁶

In identifying MATS and its reductions in sulfur dioxide and ambient fine particles as an effective compliance strategy for meeting the PM 2.5 NAAQS, the EPA preempted the proposal's argument that section 112(n)(1)(A) mandates a distinction between how benefits should be treated based on whether they result from reducing other pollutants or reducing hazardous air pollutants, including mercury. By incorporating MATS into its compliance analysis for the PM 2.5 NAAQS, the EPA demonstrated the beneficial impact on public health of the full

³⁴ U.S. ENVTL. PROT. AGENCY, REGULATORY IMPACT ANALYSIS FOR THE FINAL REVISIONS TO THE NATIONAL AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER (Dec. 2012) <https://www3.epa.gov/ttnecas1/regdata/RIAs/finalria.pdf>.

³⁵ Id. at ES-18.

³⁶ Id. at ES-9.



suite of reductions achieved by power plant regulations and also reflected the fundamental Clean Air Act logic that the cost-benefit comparison of section 112 treat reductions in hazardous air pollutants and other pollutants as of equal value.

As Harvard's Kathy Fallon Lambert said in a recent interview on [our CleanLaw podcast](#):

If the goal is to be protective of human health and ecosystem health, you must consider the fact that we breathe air that integrates all of these pollutants. We don't get to breathe air that just responds to one policy at a time or reflects one pollutant at a time. Air integrates all of these. That's what we breathe, and that's what the environment receives. When we consider how to analyze a particular policy path or trajectory or outcome, it's logical ... to consider the full range of pollutants as best we're able. When I think about it from a policy perspective, what seems important to me about that is, that speaks to the importance of considering the full range of benefits, so that if you don't look at the full range of pollutants... you are missing out on estimates of co-benefits.

Lambert's apt portrayal of how public health experts see overall pollution impacts and the EPA's own common sense linking of MATS compliance to achieving the PM 2.5 NAAQS may explain EPA's motivation for proposing a legal argument for completely disregarding co-benefits in making the appropriate and necessary determination while still asserting that they have to be afforded some value. At the same time, they highlight the proposal's failure to present a genuinely rational explanation for distinguishing between "targeted" pollutant reductions and collateral reductions in equally harmful pollutants.

D. New Science on Mercury, New Information on Costs

The proposal asserts, without offering arguments in support, that it must rely on the information contained in the Regulatory Impact Analysis (RIA) when the Mercury and Air Toxics Standards were issued in 2012. The proposal defenselessly courts a comment record that is all but certain to paint a vivid picture of the absurdity of EPA's position.

i. The Benefits of Reducing Mercury Emissions

According to its proposal, the EPA must give the greatest weight to the benefits of reducing mercury and other hazardous air pollutant emissions and less weight to reducing emissions of pollutants not covered by regulations under section 112. By relying solely on the 2012 RIA in its comparison of the costs and benefits of regulation, the EPA underestimates mercury reduction benefits by orders of magnitude. For example, [a full accounting of the costs of IQ loss](#) linked to mercury exposure has been estimated by scientists at \$4.8 billion.³⁷ This and other supporting research clearly suggests that the benefits of curbing mercury emissions from power plants are

³⁷ *Mercury Matters 2018: A Science Brief for Journalists and Policymakers*, HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH CENTER FOR CLIMATE, HEALTH, AND THE GLOBAL ENVIRONMENT (Dec. 17, 2018) <https://www.hsph.harvard.edu/change/news/mercury-matters-2018-a-science-brief-for-journalists-and-policymakers/>.



in the billions of dollars, not in the \$4-6 million range, as EPA’s proposal suggests.³⁸ This figure doesn’t even include the harm to ecosystems and wildlife from mercury exposure, or the cardiovascular risk to people.

These numbers are based on [robust research about mercury harms](#) since 2012, which Fallon Lambert described [on our CleanLaw podcast](#). Scientists have identified new mercury exposure pathways and have also discovered important differences between the emission and fate and transport of elemental and oxidized mercury. As a result, far more Americans are now known to be at risk of mercury exposure from power plants. According to Fallon Lambert: “That alone is a very, very substantial gap in the 2011 RIA”, which is still being used in this current proposal, despite the new findings.

ii. The Cost of Regulation

In 2012, the EPA could only make projections as to the cost of regulating hazardous air pollutants emitted by power plants. At the time, the RIA projected that the single-year cost of compliance in 2015 would be \$9.4B (2015 was the first year in which the vast majority of utilities were required to make reductions).³⁹ However, last summer the industry reported that the total cumulative cost of compliance covering the 6 years since the rule was promulgated was \$18B, implying a far lower actual cost than that projected in 2012.⁴⁰

IV. Conclusion

Centered around a narrow interpretation that’s blind to the statutory scheme of the Clean Air Act, EPA’s MATS proposal crumbles under the weight of its many internal contradictions. With the utility industry in full compliance with the standards, the costs of compliance much lower than projected, and the benefits of reducing mercury understood to be much greater than previously thought, the EPA can offer no plausible explanation for its having initiated this rulemaking. Administrator Wheeler’s claim that the Supreme Court directed the EPA to undertake the current rulemaking is a misreading of the *Michigan* majority opinion.⁴¹

³⁸ 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 84 Fed. Reg. 2670, 2677 (Feb. 7, 2019).

³⁹ U.S. ENVTL. PROT. AGENCY, REGULATORY IMPACT ANALYSIS FOR THE FINAL MERCURY AND AIR TOXICS STANDARDS, 3-14 (Dec. 2011) <https://www.epa.gov/sites/production/files/2015-11/documents/matsriafinal.pdf>

⁴⁰ Letter from The Edison Electric Institute, The American Public Power Association, The National Rural Electric Cooperative Association, The Clean Energy Group, The Class of ‘85 Regulatory Response Group, The International Brotherhood of Electrical Workers, The International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers to William L. Wehrum, Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency (July 10, 2018). Available at: https://www.eenews.net/assets/2018/07/11/document_gw_04.pdf.

⁴¹ *Hearing on the Nomination of Andrew Wheeler to be Administrator of the Environmental Protection Agency Before the S. Comm. on Env’t and Pub. Works*, 116th Cong. (2019). Transcript available at:



More likely, the proposal is just another in a series of reflexive assaults on the benefits of reducing air pollution that have marked the last 18 months of EPA rulemaking. The proposal comes to a conclusion that dampens the calculus of the full range of benefits from regulating power plant emissions. It claims to discover statutory language in section 112(n)(1)(A) of the Clean Air Act that, following a roundabout and incomplete logic, mandates that the agency give less weight to reductions in certain pollutants than others when comparing the benefits and costs of regulation to determine whether regulation is “appropriate and necessary”. It also reveals the difficulty the EPA faces in bending the progressive logic of the Clean Air Act to the Trump administration’s regressive, deregulatory will.

If suppressing the value of benefits is instrumental to EPA’s deregulatory agenda, then developing convoluted or blinkered interpretations of the Clean Air Act is just as instrumental to that agenda. The proposal’s enigmatic interpretive strategy reflects the broader dilemma the EPA faces. The Clean Air Act was carefully crafted by Congress – and applied by the EPA over decades – to deliver continual improvement in air quality, improvement both driven and guided by advances in science, technology and economic change. Now, the EPA’s agenda is to arrest that progress via regulatory rollbacks, and it must do so while operating under the same provisions of the Clean Air Act that were specifically designed to foster or mandate progress, not stasis or retrenchment. As in the case of the proposal to withdraw the appropriate and necessary finding the EPA must struggle to fashion statutory interpretations to support its reverse mission.

<https://www.epw.senate.gov/public/index.cfm/2019/1/hearing-on-the-nomination-of-andrew-wheeler-to-be-administrator-of-the-environmental-protection-agency>.