

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**Rescinding the Rule on Increasing
Consistency and Transparency in
Considering Benefits
and Costs in the Clean Air Act
Rulemaking Process, 86 Fed. Reg. 26,406
(May 14, 2021)**

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COMMENTS OF PUBLIC HEALTH AND ENVIRONMENTAL ORGANIZATIONS

Environmental and public health organizations Clean Air Task Force, Environmental Defense Fund, Environmental Law & Policy Center, Environmental Protection Network, Natural Resources Defense Council, and Union of Concerned Scientists hereby submit the following comments on the U.S. Environmental Protection Agency’s interim final rule “Rescinding the Rule on Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process,” 86 Fed. Reg. 26,406 (May 14, 2021), which rescinded a rule that distorted the process for assessing costs and benefits of all significant rulemakings under the Clean Air Act.

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I. INTRODUCTION

The undersigned organizations strongly support the interim final rule by the U.S. Environmental Protection Agency (“EPA” or the “agency”) rescinding the previous administration’s Benefit-Cost Rule, which distorted the process for assessing costs and benefits of all significant rulemakings under the Clean Air Act (“CAA” or the “Act”).¹ The Benefit-Cost Rule posed a direct threat to the critical role of EPA in improving our nation’s air quality. Under the Act, the benefits of pollution reduction have included hundreds of thousands of avoided premature deaths, improved respiratory and cardiovascular health, reduced incidence of cancer, more opportunities for children to play safely outdoors, restoration of visibility in national parks, and preservation of natural ecosystems. Multiple studies have demonstrated that the monetized benefits of the Act exceed the costs of pollution control many times over, even without considering the significant unmonetized benefits. Economically, these benefits have had a profound impact: cleaner air has led to fewer missed school and work days, reduced medical expenses, and more tourism and recreational activities. The U.S. economy has experienced phenomenal growth since Congress passed the Act, and clean-air technologies developed in America have opened up business opportunities around the world.

Yet the Benefit-Cost Rule appeared completely oblivious to the monumental benefits that the Clean Air Act has delivered for our nation—and utterly indifferent to the harm that the Act is intended to alleviate. In fact, the rule failed to illustrate or discuss the public health and environmental consequences of its requirements, which would likely have impeded EPA from protecting communities from dangerous air pollution as the CAA mandates.

Most strikingly, the Benefit-Cost Rule appeared oblivious to its impacts on environmental justice communities. Communities of color and low-income communities continue to suffer disproportionately from poor air quality and have not shared equitably in the overall national decline in air pollution over the last several decades. EPA has an urgent obligation to address these disparities. But the Benefit-Cost Rule did not so much as acknowledge this obligation, much less assess how the rule—which would have affected *every* significant Clean Air Act rulemaking—would have impacted EPA’s ability to fulfill it. As just one example, the rule would have required EPA to exclude many public health benefits from certain characterizations of costs and benefits, suggesting that these benefits do not merit full consideration.

In comments submitted on the proposed Benefit-Cost Rule² and hereby incorporated, we explained that EPA lacked the authority to issue the rule, which was based on an unsupported and inaccurate premise that the agency historically overestimated the benefits of Clean Air Act protections. The Benefit-Cost Rule’s sole claimed basis for authority, Section 301 of the CAA, authorizes only rules that are “necessary” for the Administrator to implement the statute. Yet

¹ In these comments, “Benefit-Cost Rule” refers to the rule published December 23, 2020, and “Interim Rescission Rule” refers to the rule published May 14, 2021.

² Our comments on the proposed Benefit-Cost Rule (Docket ID No. EPA-HQ-OAR-2020-0044-0472) are attached for easy access. All documents cited herein are incorporated by reference in full as part of these comments and the administrative record for this proceeding, and many such documents were previously submitted to this docket as attachments to our comments on the Benefit-Cost Rule. *See* Docket ID Nos. EPA-HQ-OAR-2020-0044-0473, -0476, -0477, -0478, and -0479.

many aspects of the Benefit-Cost Rule directly conflicted with the Administrator’s ability to implement the Act, and even those aspects that did not create a direct conflict were far from “necessary.” The rule’s blanket requirement to conduct and consider benefit-cost analyses (“BCAs”) for all significant CAA rulemakings disregarded the varied ways that the Act directs EPA to consider costs, including provisions that outright preclude such consideration. The rule would have twisted EPA’s role in dutifully implementing one of our nation’s most important public health statutes by imposing rigid and distorted BCA requirements.

In addition to exceeding the agency’s CAA authority, the Benefit-Cost Rule lacked any rational basis, in violation of cardinal principles of administrative law. Nowhere did the rule even attempt to substantiate claims that previous benefit-cost assessments were deficient. The rule failed to provide even a single example of the problem that it supposedly addressed. Without that foundation, the rule did not—and could not—demonstrate that it would achieve any beneficial outcome.

By limiting EPA’s ability to protect the public from dangerous air pollution, the Benefit-Cost Rule was a threat to public health for as long as it was in effect. Due to the agency’s complete lack of authority to issue the rule, not to mention the rule’s many problematic requirements, EPA’s decision to rescind the Benefit-Cost Rule in its entirety was fully justified and was the only rational course of action. With the Interim Rescission Rule, EPA took a crucial step toward restoring its ability to implement the CAA and protect the public from dangerous air pollution as the Act requires. We urge EPA to swiftly issue a final rule confirming the rescission.

II. THE BENEFIT-COST RULE FAILED TO ACKNOWLEDGE THAT CLEAN AIR ACT PROTECTIONS HAVE CONSISTENTLY BEEN FOUND TO HAVE OVERWHELMING NET BENEFITS.

Since 1970, EPA safeguards promulgated under the Clean Air Act have saved lives, improved health, and elevated quality of life nationwide by reducing harmful pollution that contaminates the air we breathe and the places where we live, work, and recreate. Thanks to these safeguards, our air quality has markedly improved over the past five decades—while our population, gross domestic product, and other indicators of economic activity have dramatically increased. Moreover, the United States has become an international leader in pollution control industries, spurring innovation and job creation.

As discussed below, the various provisions and programs in the Clean Air Act in some cases carefully delineate whether or how EPA may consider costs and benefits when undertaking rulemakings. Even so, for decades EPA has rigorously analyzed the benefits and costs of Clean Air Act protections through Regulatory Impact Analyses (“RIAs”) prepared under Executive Order 12,866 and related executive orders, as well as through comprehensive assessments required under Section 812 of the Act. These analyses are prepared according to longstanding EPA and Office of Management and Budget (“OMB”) guidelines, are developed in a transparent manner with opportunities for public comment, and are subject to interagency review or peer

review to ensure a high standard of rigor.³ Meaningfully, in the Interim Rescission Rule, EPA acknowledged the “unbroken, bipartisan, decades-long commitment from Presidential administrations to conducting benefit-cost analyses for economically significant regulations” that are “rigorous, publicly available, subject to interagency review, and are conducted according to extensive peer-reviewed guidelines from OMB and the EPA.”⁴

These analyses, as well as independent analyses, have consistently found that clean air protections yield benefits far in excess of costs. For example:

- OMB regularly submits reports to Congress assessing the costs and benefits of federal regulations, including Clean Air Act rules issued by EPA. The most recent report prepared by OMB, which was finalized in December 2019, reported that major rules issued by the Office of Air and Radiation between October 1, 2006 and September 30, 2016 yielded a cumulative total of \$180.5 billion to \$665.4 billion in *annual* benefits; when joint fuel economy and vehicle greenhouse gas standards issued by the Department of Transportation and EPA are included, the total benefits increase to \$225.1 billion to \$743.2 billion each year. These benefits are between 4.3 and 10.6 times higher than the annual compliance costs associated with these rules.⁵
- EPA’s most recent analysis of the costs and benefits of the Clean Air Act projected that the benefits of the 1990 Clean Air Act Amendments would exceed the costs of compliance by a factor of 30 to 1 over the period of 1990 to 2020.⁶ The study identified benefits valued at \$2 trillion in 2020 alone, including 230,000 avoided deaths, 200,000 avoided heart attacks, over 250,000 avoided hospitalizations and emergency room visits, 2.4 million avoided asthma attacks, and 22.4 million lost work and school days avoided.⁷ Required by Section 812 of the Clean Air Act, this comprehensive analysis rests on a vast body of peer-reviewed literature and numerous technical reports and was reviewed by an Advisory Council of the agency’s Science Advisory Board (“SAB”) and three separate technical subcommittees.
- A more recent independent analysis of the costs and benefits of the Clean Air Act, prepared by Industrial Economics, Inc. for the Natural Resources Defense Council, used a methodology similar to that of EPA’s own study but with updated health and valuation assumptions drawn from recent RIAs. This study concluded that the

³ EPA’s most recent Section 812 analysis was subject to external expert review led by the Science Advisory Board’s Advisory Council on Clean Air Compliance Analysis, as well as three technical subcommittees of the Advisory Council. EPA, *Benefits and Costs of the Clean Air Act from 1990 to 2020: Summary Report 1* (2011). Moreover, intermediate analyses leading up to the final report were made available to the public for review and comment. EPA, *Benefits and Costs of the Clean Air Act 1990-2020: Revised Analytical Plan for EPA’s Second Prospective Analysis 10-1* (2003). Likewise, EPA’s Regulatory Impact Analyses for individual rulemakings are made available for public comment and are sometimes subject to review by the Science Advisory Board.

⁴ 86 Fed. Reg. at 26,408.

⁵ OMB, *2017 Report to Congress on the Benefits and Costs of Federal Regulations and Agency Compliance with the Unfunded Mandates Reform Act* 9 tbl. 1-2 (2019), https://www.whitehouse.gov/wp-content/uploads/2019/12/2019-CATS-5885-REV_DOC-2017Cost_BenefitReport11_18_2019.docx.pdf.

⁶ EPA, *The Benefits and Costs of the Clean Air Act from 1990-2020* 7-1 (Apr. 2011), https://www.epa.gov/sites/production/files/2015-07/documents/fullreport_rev_a.pdf. (“EPA 2011 Study”).

⁷ *Id.* at 5-25 tbl. 5-6.

projected benefits of Clean Air Act protections range from nearly \$2.5 trillion to \$5.0 trillion in 2030.⁸ The 2030 benefits identified in the study include between 229,000 and 457,000 avoided deaths, nearly 55,000 avoided heart attacks, over 250,000 avoided cardiac and respiratory hospital admissions, over 67 million avoided asthma attacks, and over 36 million lost school and work days avoided.⁹

These analyses reflect EPA's extensive track record of implementing the Clean Air Act to achieve dramatic reductions in air pollution in a cost-effective way. For example, EPA estimates that power plant mercury emissions have decreased by 86% from 2006 to 2016, due in no small part to EPA's Mercury and Air Toxics Standards ("MATS").¹⁰ Power plant emissions of pollutants that cause acid rain, haze, and smog have fallen dramatically as well—94% for sulfur dioxide and 86% for oxides of nitrogen, from 1990 to 2019.¹¹ Since the early 1990s, average visibility in Class I protected areas like Great Smoky Mountains National Park has improved by 20 miles with significant reductions in sulfur dioxide from Clean Air Act requirements.¹²

These reductions in pollution have not only resulted in massive improvements in public health, but as the studies above have found, they have also resulted in a variety of other improvements in economic well-being and quality of life. Improved air quality in our nation's protected areas, for example, has resulted in increased tourism at national parks,¹³ as visitors place a high value on clean air. That in turn generates significant revenue for local economies.¹⁴ Protections adopted under the Clean Air Act over the last few decades have also led to a dramatic decrease in acid rain¹⁵ and sharply reduced levels of neurotoxic lead pollution in the air.¹⁶

These benefits have occurred as America has achieved robust economic growth. By 2019, the combined emissions of the six most common pollutants fell 77%, compared to 1970.¹⁷ During

⁸ Industrial Economics, Inc., *The Benefits and Costs of U.S. Air Pollution Regulations* 25 (May 2020), <https://www.nrdc.org/sites/default/files/iec-benefits-costs-us-air-pollution-regulations-report.pdf> ("IEc/NRDC 2020 Study").

⁹ *Id.* at 32 tbl. 11.

¹⁰ EPA, *Comparing Industry Sectors, in 2016 TRI National Analysis* 31 (Jan. 2018), https://www.epa.gov/sites/production/files/2018-01/documents/comparing_industry_sectors.pdf.

¹¹ EPA, *Clean Air Markets: Power Plant Emission Trends Data*, <https://www.epa.gov/airmarkets/power-plant-emission-trends#:~:text=From%201990%2D2019%2C%20annual%20emissions,94%20percent%2C%20from%201990%20levels>.

¹² National Parks Conservation Association, *Polluted Parks: How Dirty Air Is Harming America's National Parks* (Sept. 2015), <https://www.npca.org/resources/3137-polluted-parks-how-dirty-air-is-harming-america-s-national-parks>.

¹³ David Keiser et al., *Air Pollution and Visitation at U.S. National Parks*, *Science Advances* (July 18, 2018), <https://advances.sciencemag.org/content/4/7/eaat1613>.

¹⁴ See National Parks Service, *2019 National Park Visitor Spending Effects Economic Contributions to Local Communities, States, and the Nation* (2020), <https://www.nps.gov/subjects/socialscience/vse.htm>.

¹⁵ National Acid Precipitation Assessment Program, Report to Congress 2011 at ES-2, ES-3 (Dec. 8, 2011) (noting that the health benefits in 2010 alone resulting from the Acid Rain Program are estimated at \$170 billion to \$430 billion, and that wet sulfate has decreased 42-44% since the program was enacted).

¹⁶ See EPA, *Lead Trends*, <https://www.epa.gov/air-trends/lead-trends> (showing mean concentration of lead in the air has declined 98%).

¹⁷ EPA, *Our Nation's Air 2020*, <https://gispub.epa.gov/air/trendsreport/2020/#growth>.

this time, gross domestic product grew 246%, and population grew by more than 50%.¹⁸ EPA protections themselves can drive innovation and progress, establishing the United States as a leader. For example, the Clean Air Act's Significant New Alternatives Policy has helped drive American innovations in alternative products that are less harmful to the ozone layer, while providing new markets to American manufacturers.¹⁹

The Benefit-Cost Rule presented absolutely no evidence indicating that these assessments of Clean Air Act benefits are in error. And the sheer scale of the benefits associated with clean air protections means that Clean Air Act programs would still yield benefits far in excess of costs *even assuming* significant uncertainty as to both benefits and costs. EPA's most recent Section 812 study, for example, carefully evaluated the uncertainty associated with each element of its assessment and concluded that:

[T]he very wide margin between estimated benefits and costs, and the results of the uncertainty analysis, suggest that it is extremely unlikely that the monetized benefits of the CAA [Amendments] over the 1990 to 2020 period reasonably could be less than its costs, under any alternative set of assumptions we can conceive.²⁰

If anything, the benefits of Clean Air Act protections have historically been underestimated, and the costs have been overestimated. EPA's 2011 analysis of the benefits of the Clean Air Act evaluated both the uncertainty associated with the quantification and monetization of different air pollution benefits as well as categories of benefits that are excluded from benefit-cost analyses. Among other things, the analysis observed that:

- EPA's assessment of the impacts of particulate matter on health are subject to "potentially major" underestimates; given that: (i) actual human exposure to particulate matter may be much greater than ambient air data would indicate, and (ii) short-term exposures to particulate matter may be more adverse than assumed in the study.²¹
- EPA does not quantify many health effects of hazardous air pollutants such as mercury²²—a potentially major omission in light of recent research concluding that reductions in power plant emissions of mercury alone could yield cumulative health

¹⁸ *Id.*; See *U.S. Population by Year*, <https://www.multpl.com/united-states-population/table/by-year>.

¹⁹ See, e.g., Honeywell, *Performance Materials and Technologies: Reducing the Impact on Climate Change*, https://www.honeywell-refrigerants.com/europe/wp-content/uploads/2013/03/honeywell-lgwp_hfo-environmental_brochure.pdf (“[T]he Company has been at the forefront of the industry’s drive to develop these safer, non-ozone depleting alternatives to the older technology (CFC and HCFC refrigerants), in compliance with global legislation for their phase-out.”).

²⁰ EPA 2011 Study at 7-8.

²¹ *Id.* at 5-41 to -42; Daniel M. Sullivan & Alan Krupnick, *Using Satellite Data to Fill the Gaps in the US Air Pollution Monitoring Network*, at 1, Resources for the Future Working Paper (Sept. 2018), https://media.rff.org/documents/RFF20WP-18-21_0.pdf (finding that over 24 million Americans live in areas misclassified as in attainment for fine particulate matter).

²² EPA 2011 Study at 5-48.

benefits (primarily cardiovascular) valued at between \$43 billion and \$147 billion by 2050.²³

- EPA does not quantify a range of potential ecological effects associated with air pollution, including eutrophication of estuaries, acidification of soils, and bioaccumulation of mercury and dioxins in the food chain—effects that EPA characterized as “widespread and significant,” resulting in “potentially major” underestimates of the ecological benefits of Clean Air Act programs.²⁴

Overall, EPA determined that its assessment of the costs and benefits of Clean Air Act programs is “more likely to understate net benefits than overstate them” in light of the relatively large number of major sources of uncertainty that would result in an underestimate of benefits (and the much smaller number of uncertainties that could lead to an overestimate of benefits).²⁵ Importantly, EPA’s 2011 conclusion that benefits of Clean Air Act programs are likely underestimated has been echoed in other studies.²⁶

The fact that some benefits may be difficult to quantify and monetize does not “make them any less real” or diminish their value and relevance in policymaking.²⁷ OMB’s longstanding guidance for regulatory assessment, entitled Circular A-4, has recognized since 2003 that “[i]t will not always be possible to express in monetary units all the important benefits and costs.”²⁸ Circular A-4 also instructs agencies to present unquantifiable or unmonetized benefits alongside quantified estimates of other benefits²⁹ and advises that where there are significant unquantified benefits “the most efficient alternative will not necessarily be the one with the largest quantified and monetized net-benefit estimate.”³⁰ This guidance, which has been in place for nearly eighteen years and followed by administrations of both parties, affirms the importance of considering unquantified benefits on an equal footing with quantified and monetized benefits when conducting regulatory assessments. EPA recognized this in its Interim Rescission Rule, emphasizing the longstanding, bipartisan tradition of conducting meaningful benefit-cost analyses under the “extensive peer-reviewed guidelines from OMB and the EPA.”³¹

While the benefits of clean air protections are routinely underestimated, the costs of clean air protections are often grossly exaggerated by industry—and actual costs have often been

²³ A. Giang & N.E. Selin, Benefits of Mercury Controls for the United States, 112 Proc. Nat’l Acad. Sci. 286, at S11-S12 (2016).

²⁴ EPA 2011 Study at 6-43.

²⁵ *Id.* at 7-11.

²⁶ For example, the Industrial Economics study noted that its assessment of the benefits of Clean Air Act protections—even though it was substantially higher than EPA’s estimate—*excluded* multiple categories of criteria air pollutant benefits, including “improved productivity for agricultural crops and commercial timber, visibility improvements in recreational and residential areas, and reduced acid deposition.” IEC/NRDC 2020 Study at 38.

²⁷ *Id.* at 39 (citing Ridley, D.A., Heald, C.L., Ridley, K.J., and Kroll, J.H. 2018. Causes and consequences of decreasing atmospheric organic aerosol in the United States. PNAS. 115(2)).

²⁸ OMB, Circular A-4; Regulatory Analysis 2 (Sept. 17, 2003), <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf>.

²⁹ *Id.* at 27.

³⁰ *Id.* at 2.

³¹ 85 Fed. Reg. at 26,408.

markedly lower than initially estimated by EPA.³² Assessments of regulatory analyses conducted by EPA and other agencies have confirmed that such overestimates of cost are frequent. A 2014 study by EPA’s own National Center for Environmental Economics (“NCEE”) contained an extensive literature review of studies conducted by independent researchers, OMB, the National Research Council, and the former Office of Technology Assessment. The vast majority of studies reviewed by the NCEE found that official estimates of the costs of environmental regulations were overestimated far more frequently than they were underestimated.³³ One frequently cited study by researchers at Resources for the Future, for example, examined 28 environmental regulations and found that 14 of the rules overestimated costs and that only 3 of the rules underestimated costs.³⁴ The researchers concluded that “EPA and other regulatory agencies tend to overestimate the total costs of regulations” because they fail to account for future technological innovations that reduce the cost of compliance or rely on industry estimates of costs that (as noted above) are themselves exaggerated.³⁵

III. EPA HAS EASILY MET THE REQUIREMENTS FOR JUSTIFYING A CHANGE IN AGENCY POSITION.

An agency may reverse a prior position so long as “it display[s] awareness that it *is* changing position” and “show[s] that there are good reasons for the new policy.”³⁶ In addition, as with any rulemaking, “the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”³⁷ When changing position, that includes “a reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy.”³⁸ The agency “need not demonstrate to a court’s satisfaction that the reasons for the new policy are *better* than the reasons for the old one.”³⁹

In the Interim Rescission Rule, EPA has more than met its burden, especially given that the rationale underlying the Benefit-Cost Rule was so poorly supported as to render that rule arbitrary and capricious. EPA has meticulously evaluated the proffered bases for the Benefit-Cost Rule and supported its reversal with multiple lines of reasoning and evidence. The support for the Interim Rescission Rule is in sharp contrast to the Benefit-Cost Rule’s sweeping and

³² See, e.g., Michael Kranish, A Clean Air Revival, Boston Globe (Oct. 17, 2010), http://archive.boston.com/news/science/articles/2010/10/17/washing_away_of_acid_rain_offers_lesson/. The report shows power companies predicted that reducing sulfur dioxide pollution would cost between \$1,000 and \$1,500 per ton and electricity prices would increase up to 10% in many states. In reality, the actual pollution reduction cost has been between \$100 and \$200 per ton and electricity prices fell in most states.

³³ National Center for Environmental Economics, *Retrospective Study of the Costs of EPA Regulation: A Report of Four Case Studies*, 4-5 tbl. 1.1 (2014).

³⁴ Winston Harrington, Richard Morgenstern, & Peter Nelson, *How Accurate Are Regulatory Cost Estimates?*, at 1 (Resources for the Future, 2010) (describing research reflected in Winston Harrington, Richard D. Morgenstern, & Peter Nelson, *On the Accuracy of Regulatory Cost Estimates*, 19 *Journal of Policy Analysis and Management*, 297-322 (2000)).

³⁵ *Id.*

³⁶ *Fed. Comm’n v. Fox TV Stations*, 556 U.S. 502, 515 (2009) (emphasis in original).

³⁷ *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

³⁸ *Fox TV*, 556 U.S. at 516.

³⁹ *Id.* at 515.

unsupported invocations of consistency and transparency, which took the place of any significant supporting facts or analysis.⁴⁰ Among other arbitrary elements, the Benefit-Cost Rule “offered an explanation for its decision that [ran] counter to the evidence before the agency” and was “so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”⁴¹ For example:

- The Benefit-Cost Rule listed various critiques that commenters raised of the proposal, including that it created “excessively burdensome” procedures that would be difficult and costly to implement, it undermined flexibility and accuracy necessary for regulatory decision-making, and it could harm public health and the environment. Rather than address and weigh these concerns, the rule ignored them and declared irrelevantly that it would “provide[] additional certainty and increase[] the consistency and transparency of its analysis....”⁴²
- The Benefit-Cost Rule noted that some commenters argued that the rule was necessary due to prior inconsistencies in EPA’s benefit-cost assessments, while other commenters objected that the rule was unnecessary and that the proposal did not identify the alleged inconsistencies. Despite acknowledging those comments, the rule “failed to point to a single example of a rule promulgated under the CAA where problems emerged that would have been avoided had the mandate imposed by the rule been in place.”⁴³ Instead, the rule speculated that, without it, “*future regulations may be promulgated without consideration of, and public accountability concerning, their costs and benefits.*”⁴⁴ But without clearly identifying or describing a single instance of the problem it was trying to solve, the rule could not explain how it would prevent that problem from occurring in the future.

In the Interim Rescission Rule, EPA fully grappled with the meager “facts and circumstances that underlay” the Benefit-Cost Rule, explaining their lack of merit and the agency’s reasons for the reversal. For instance, EPA explained that the Benefit-Cost Rule:

- did not respond to any demonstrated problem or show how—if a problem did exist—the rule would alleviate it;⁴⁵

⁴⁰ As the Interim Rescission Rule states, “[T]he mere assertion of ‘consistency’ or ‘transparency’ in the Rule did not adequately explain what the Agency was trying to accomplish.” 86 Fed. Reg. 26,408.

⁴¹ *State Farm*, 463 U.S. at 43.

⁴² 85 Fed. Reg. at 84,137. In the Benefit-Cost Rule Response to Comments, EPA similarly disregards concerns about burdens posed by the rule, but at one point states, “[W]e do not consider the requirements in the BCA to be overly burdensome as the same procedures are in guidance documents that EPA follows for rulemakings.” EPA-HQ-OAR-2020-0044-0687 at 37. This statement is clearly untrue and would, if true, further undercut any purported need to issue the rule.

⁴³ 86 Fed. Reg. at 26,408. The Benefit-Cost Rule stated, To the extent that commenters assert that EPA’s past practice has been consistent and transparent, it is not due to an enforceable standardized approach that would ensure such a result.” 85 Fed. Reg. 84,137. The rule touted that as evidence that it was needed, when in fact it shows the opposite.

⁴⁴ 85 Fed. Reg. at 84,137 (emphasis added). The Interim Rescission Rule explains why this “hypothetical threat... is highly implausible.” 86 Fed. Reg. at 26,408.

⁴⁵ 86 Fed. Reg. at 26,408.

- was not necessary to carry out the Clean Air Act but in fact created tension with the agency’s statutory duties;⁴⁶
- did not improve the quality of the agency’s assessments but rather limited the agency’s ability to rely on the best available science;⁴⁷ and
- did not further transparency but rather would have led to misleading assessments that conflicted with economic best practices.⁴⁸

In subsequent sections of these comments, we support EPA’s conclusions in the Interim Rescission Rule on the merits. Here, we simply note that EPA assiduously explained the reversal from its prior position. EPA extensively detailed the lack of authority for the Benefit-Cost Rule and the unlawful or harmful nature of many of the rule’s provisions. That analysis fully supports rescission of the rule in its entirety; EPA correctly observed that fixing the rule through targeted amendments is not viable.⁴⁹ Any future effort by EPA to improve benefit-cost assessments should not start from the deeply defective foundation of the Benefit-Cost Rule.

Moreover, the Benefit-Cost Rule did not “engender[] serious reliance interests that must be taken into account.”⁵⁰ While there is no definitive test for measuring reliance interests,⁵¹ the brief existence of the Benefit-Cost Rule counsels against a finding of reliance. The Supreme Court has suggested that reliance interests are more likely to arise under “*longstanding* policies,” such as where there may be “*decades* of industry reliance.”⁵² In contrast, the Benefit-Cost Rule was effective for fewer than five months before EPA published the Interim Rescission Rule. The D.C. Circuit has accepted an agency’s assessment that there were not significant reliance interests after a rule had been in effect for two years—calling it “a limited period to engender reliance”—or even up to five years in certain contexts.⁵³

The turbulent litigation and political developments during the Benefit-Cost Rule’s effective period further counsel against a finding of reasonable reliance interests. The Benefit-Cost Rule has been in litigation since 22 days after publication, and President Biden directed EPA to review the Benefit-Cost Rule one day after litigation began.⁵⁴ Even in much less extreme circumstances, the D.C. Circuit has recognized “persistent legal challenges” and “shifting regulatory treatment”

⁴⁶ 86 Fed. Reg. at 26,413; *see also id.* at 26,408 (“[T]here was no discussion of how the requirements of the Rule improved the Agency’s ability to accomplish the CAA’s goals to protect and enhance air quality.”).

⁴⁷ 86 Fed. Reg. at 26,412-13.

⁴⁸ *Id.* at 26,413.

⁴⁹ *See, e.g., id.* at 26,412 (“While the EPA is not asserting that every requirement in the Benefit-Cost Rule conflicted with sound scientific or economic best practices, the problematic elements were significant and difficult to address in piecemeal fashion. These substantive problems provide further support that the Rule as a whole should be rescinded.”).

⁵⁰ *Fox TV*, 556 U.S. at 515.

⁵¹ *Mozilla Corp. v. FCC*, 940 F.3d 1, 63 (2019).

⁵² *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (emphasis added).

⁵³ *Mozilla Corp.*, 940 F.3d at 64; *U.S. Telecom Ass’n v. FCC*, 825 F.3d 674, 710 (D.C. Cir. 2016) (accepting a finding of no reliance after a rule had been in effect “[o]nly five years” (emphasis added)).

⁵⁴ *New York v. EPA*, D.C. Cir. No. 21-1026 (filed Jan. 19, 2021); Exec. Order No. 13,990, “Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis” § 2(a)(iv) (signed Jan. 20, 2021).

as reasons that reliance upon a rule may not be reasonable.⁵⁵ And it would have been patently unreasonable for anyone to rely on a rule that lacked any basis in the statute or any rational justification, as demonstrated in comments on the proposal.

Perhaps most importantly, it appears that the Benefit-Cost Rule was never actually applied to any rulemakings. Since the rule's impact would have manifested via application to subsequent rulemakings, there would have been an exceptionally "loose link" between the rule and any actions or decisions that may allegedly have relied upon it.⁵⁶ Its rescission does not upset any reasonable reliance interests.

IV. EPA'S REASONS FOR RESCINDING THE BENEFIT-COST RULE ARE RATIONAL, WELL-DEMONSTRATED, AND INDEPENDENTLY SUFFICIENT.

In the Interim Rescission Rule, EPA provided multiple rationales for rescinding the Benefit-Cost Rule. Below we address why each of those rationales is well-reasoned and rigorously supported. Many of the rationales provided by EPA would be an independently sufficient basis for rescinding such an unlawful and harmful rule. Collectively, the rationales powerfully demonstrate the urgent need for EPA action confirming the rule's permanent rescission.

A. The Benefit-Cost Rule Was Not Necessary to Carry Out the Clean Air Act and Not Authorized by Any Part of the Clean Air Act.

We agree with EPA's conclusion in the Interim Rescission Rule that the Benefit-Cost Rule was not necessary to carry out the CAA because EPA already prepares a BCA for CAA rules that warrant such analysis. The Benefit-Cost Rule expanded BCA requirements to all "significant" CAA rulemakings, even those that are not economically significant under E.O. 12,866, but provided no basis for why such expansion would be appropriate or necessary. We support EPA's conclusion in the Interim Rescission Rule that "existing directives under E.O. 12,866 and guidance to conduct BCAs for economically significant rules, while retaining flexibility in analyzing costs, benefits, and other factors for non-economically significant rules, strike the better balance between agency resources and the information provided by additional economic analysis for such rules."⁵⁷ Given the lack of need for the Benefit-Cost Rule, a rule that as we explain in other parts of this comment would undermine the statutory purpose of the CAA, EPA cannot rely on the sole authority it cited to issue the rule, Clean Air Act Section 301(a)(1), because that provision authorizes only rules necessary to carry out the Act. As we show here and in other sections of these comments, the rule—far from being necessary—often conflicted or created tension with substantive requirements of the Act.

⁵⁵ *Mozilla Corp.*, 940 F.3d at 64; *U.S. Telecom Ass'n*, 825 F.3d at 710.

⁵⁶ *Mozilla Corp.*, 940 F.3d at 64.

⁵⁷ 86 Fed. Reg. at 26,409.

1. EPA identified no legitimate source of legal authority under the Clean Air Act for the Benefit-Cost Rule.

EPA cited no legitimate source of legal authority under the CAA for the Benefit-Cost Rule. The Benefit-Cost Rule inappropriately relied on only 42 U.S.C. § 7601(a)(1) (also referred to as Section 301(a)(1) of the CAA), which grants the Administrator authority “to prescribe such regulations as are necessary to carry out his functions” under the CAA. Yet courts have “consistently held that EPA’s authority to issue ancillary regulations is not open-ended,” and its “gap-filling authority” is designed only “to supplement the CAA’s provisions.”⁵⁸ Section 7601(a)(1) “does not give EPA carte blanche authority to promulgate any rules, on any matter relating to the CAA, in any manner that the Administrator wishes.”⁵⁹ When the agency wishes to invoke the Administrator’s “gap-filling” authority, it must identify a gap that requires filling, which the agency failed to do in the case of the Benefit-Cost Rule.

Here, there is no gap to identify. Neither does the Benefit-Cost Rule identify any inconsistencies in the statute or regulations, or any obstacles to the agency’s ability to implement the statute, that it must resolve. As discussed later in Sections IV.A.2 and IV.D of this comment, the Benefit-Cost Rule is entirely unnecessary, duplicating and confusing the role of guidance that has no need to be made binding and fulfilling no obligation under the Clean Air Act. This puts the Benefit-Cost Rule beyond the proper scope of Section 7601(a)(1), which only authorizes the Administrator to issue regulations “necessary to carry out his functions” under the statute. As the D.C. Circuit pointed out the same month that the proposal for the Benefit-Cost Rule was published, “a ‘necessary or appropriate’ provision in an agency’s authorizing statute does not necessarily empower the agency to pursue rulemaking that is not otherwise authorized.”⁶⁰ As such, the Benefit-Cost Rule is unlawful, arbitrary, capricious, and an abuse of the agency’s discretion.

Reflecting its limited authority under 42 U.S.C. § 7601(a)(1), EPA has typically issued regulations under this provision in tandem with another statutory grant of authority. As recently as 2018, when issuing proposed regulations setting the requirements for non-attainment state implementation plans for the 2015 National Ambient Air Quality Standards (“NAAQS”) for ozone, the agency relied on its statutory authority under 42 U.S.C. § 7601(a)(1) *and* 42 U.S.C. §§ 7409-7410, 7502, 7511(a)-7511(d), and 7661(2)(B).⁶¹ Similarly, in its proposed rule regarding good neighbor obligations for the 2008 Ozone NAAQS, the agency cited its authority under both 42 U.S.C. § 7601(a)(1) *and* § 7410.⁶² As the Seventh Circuit has observed, where “the U.S. EPA

⁵⁸ *NRDC v. EPA*, 749 F.3d 1055, 1063, 1064 (D.C. Cir. 2014).

⁵⁹ *Citizens to Save Spencer Cnty. v. U.S. E.P.A.*, 600 2d. 844, 873 (D.C. Cir. 1979) (“*Spencer County*”). *See also Am. Petroleum Inst. v. U.S. E.P.A.*, 52 F.3d 1113, 1117 (D.C. Cir. 1995); *Merck & Co. v. U. S. H.H.S.*, 962 F.3d 531 (D.C. Cir. 2020) (“Although the Secretary’s regulatory authority is broad, it does not allow him to move the goalposts to wherever he kicks the ball.”).

⁶⁰ *N.Y. Stock Exch. LLC v. SEC*, slip op. at 25. *See also, Michigan v. EPA*, 135 S. Ct. 2699, 2706-07 (2015) (“*Michigan v. EPA*”).

⁶¹ Implementation of the 2015 National Air Quality Standards for Ozone: Nonattainment Area State Implementation Plan Requirements, 83 Fed. Reg. 62,998, 63,031 (proposed Dec. 6, 2018).

⁶² Determination Regarding Good Neighbor Obligations for the 2008 Ozone National Ambient Air Quality Standard, 83 Fed. Reg. 65,878, 65,882 (proposed Dec. 21, 2018).

relie[s] solely upon the provisions of § 301,” as it does here, “its authority to promulgate . . . regulations might be questionable.”⁶³

Since the Benefit-Cost Rule serves no purpose under the CAA, EPA was not authorized to issue the rule under 42 U.S.C. § 7601(a)(1). In the Interim Rescission Rule, EPA correctly determined that it could not rely on this sole authority cited to issue the Benefit-Cost Rule, and that there was no legal basis to issue the Benefit-Cost Rule.

2. The Benefit-Cost Rule was not necessary to carry out the CAA because EPA already prepares a BCA in accordance with preexisting guidance for CAA rules that warrant such analysis.

For decades, EPA has followed existing protocols to conduct rigorous benefit-cost assessments for all *economically* significant rules. The Benefit-Cost Rule’s requirements to conduct a benefit-cost analysis for all significant rulemakings were not only unnecessary in light of these existing protocols, but would have negatively impacted the rulemaking process by obligating EPA to conduct benefit-cost assessments when it would not be the most useful approach for the matter at hand or optimal prioritization of agency resources. Nor did EPA identify any gap that the Benefit-Cost Rule would fill among the requirements for economically significant rulemakings.

Existing protocols already ensure EPA implements a peer-reviewed approach, as consistent with the best available science and statutory obligations, to assess costs and benefits of significant Clean Air Act rulemakings. Under E.O. 12,866, agencies must provide an assessment of the potential costs and benefits for all significant regulatory actions “including an explanation of the manner in which the regulatory action is consistent with a statutory mandate . . .”⁶⁴ While E.O. 12,866 and the implementing guidance contained in Circular A-4 require agencies to perform a BCA for “economically significant”⁶⁵ regulatory actions, for other “significant” regulatory actions, they provide additional options to assess costs and benefits in a manner that is transparent and consistent with the best available science. For many years, EPA has additionally adhered to its *Guidelines for Performing Economic Analyses*,⁶⁶ which complement OMB’s directions in Circular A-4 to provide the agency with “more detailed peer-reviewed guidance on how to conduct BCA and other types of economic analyses” to enhance compliance with existing law.⁶⁷ As EPA lays out in the Interim Rescission Rule, these directives and guidelines subject EPA’s analyses of the costs and benefits of significant rules to internal review and interagency review processes under E.O. 12,866 and ensure the scientific information and models underlying the actions are subject to EPA’s and OMB’s peer review guidance.⁶⁸

⁶³ *Illinois E.P.A. v. U.S. E.P.A.*, 947 F.2d 283, 291 (7th Cir. 1991).

⁶⁴ E.O. 12,866, Regulatory Planning and Review, 58 Fed. Reg. 51,735, (Oct. 4, 1993).

⁶⁵ E.O. 12,866 defines “economically significant” actions as those that are “likely to result in a rule that may . . . have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.” E.O. 12,866 § 3(f)(1).

⁶⁶ 85 Fed. Reg. at 35,615 n.13.

⁶⁷ *Id.* at 35,615.

⁶⁸ 86 Fed. Reg. at 26,409.

Distinguishing the requirements for economically significant rules and other significant rules is a prudent use of resources that provides the flexibility necessary to best accommodate a range of regulations. For example, rules that are deemed significant for their novel legal or policy dimensions may require analysis of these issues but have limited impact on the economy, and analyses that are less resource-intensive and time-consuming than BCA may yield sufficient information on costs and benefits to support the rulemaking. As EPA explains in the Interim Rescission Rule, “[r]equiring a BCA even when the primary issues of importance are not economic unnecessarily complicates the rulemaking process, potentially diverts the Agency’s resources from those aspects of the rule that warrant additional consideration (*i.e.*, the reasons why the rule was designated significant), and could delay rules needed for protection of public health and the environment. In addition, requiring a BCA for all significant CAA rules could delay BCAs for economically significant rules if staff time and resources are diverted.”⁶⁹

The Benefit-Cost Rule is clearly unnecessary in light of the existing *Guidelines* and Circular A-4. EPA identified no gap in these documents for the Benefit-Cost Rule to fill. In fact, Circular A-4 and EPA’s longstanding *Guidelines* lay out a better-tailored approach to BCA than the Benefit-Cost Rule that provides the agency more flexibility across diverse statutory and regulatory contexts, including the critical capacity to comply with its obligations to not consider costs when developing certain protections under the CAA.⁷⁰ The Benefit-Cost Rule’s requirement that “future significant proposed and final regulations promulgated under the Clean Air Act be accompanied by a BCA” would arbitrarily restrict EPA from fully utilizing the range of cost metrics necessary to complete robust public health and safety rulemakings. Such restrictions would hobble EPA from pursuing rulemakings ill-suited to BCA, diminishing the quality of regulatory analyses and health-based standards, and ultimately compromising the CAA’s statutory purpose to protect public health and welfare. The Benefit-Cost Rule cannot logically be necessary under the Clean Air Act because it would conflict with other EPA responsibilities under the Clean Air Act and make it more difficult for EPA to rely on the best available science.⁷¹ The *Guidelines* are additionally better suited to reflect evolving developments in methodology and practice.⁷²

B. The Benefit-Cost Rule Failed to Establish a Rational Basis for Its Requirements Based on the Rule’s Record.

In its Interim Rescission Rule, EPA correctly determined that the Benefit-Cost Rule was not “necessary” and “lacked a rational basis”⁷³ because it failed to provide evidence that a problem existed to justify the rulemaking: “The Agency failed to articulate a rational basis for the Rule, and did not explain how the existing CAA rulemaking process had created or was likely to create inconsistent or non-transparent outcomes, *i.e.*, that an actual or theoretical problem existed.”⁷⁴

⁶⁹ *Id.* at 26,410.

⁷⁰ See Section IV.D.1 of these comments for a fuller discussion of how the *Guidelines*, and Circular A-4 more broadly, provide a much more flexible framework that can guide EPA in conducting robust analyses through a toolbox of cost metrics that can be tailored to meet a variety of circumstances; see Section IV.F for a discussion of how the Benefit Cost Rule would conflict with EPA’s other statutory obligations.

⁷¹ See Sections IV.D.2 and IV.D.3 for a fuller discussion.

⁷² See Section IV.D.2 for a fuller discussion.

⁷³ 85 Fed. Reg. at 26,407.

⁷⁴ *Id.* at 26,408.

The Benefit-Cost Rule’s failures to show a problem existed violated a basic principle of administrative law. An agency action is arbitrary and capricious where it fails to identify a problem that it must address.⁷⁵ The Benefit-Cost Rule stated that the supposed achievement of greater consistency and transparency in economic analyses would “better allow the Agency to fulfill the purpose described in Section 101(1) of the Clean Air Act.”⁷⁶ However, as the Interim Rescission Rule makes clear, the mere assertion of the keywords “transparency” and “consistency” did not adequately explain the agency’s intent, purpose, or rationale in promulgating the rule. Additionally, the Benefit-Cost Rule failed to provide any evidence that a problem existed and failed to show how the existing benefit-cost assessment process was inconsistent or nontransparent. As EPA now acknowledges, “[T]he Rule failed to point to a single example of a rule promulgated under the CAA where problems emerged that would have been avoided had the mandate imposed by the rule been in place.”⁷⁷ In fact, the rule did not provide record evidence of a single instance substantiating any problem at all. Without a demonstrated problem to solve, the promulgation of the Benefit-Cost Rule lacked a rational basis and was arbitrary.

In addition to failing to substantiate a problem, the Benefit-Cost Rule did not explain why the guidance and administrative processes already in place failed to adequately provide for transparency and consistency. In issuing the Benefit-Cost Rule, EPA did not explain why its previous practices, including its utilization of the *Guidelines*, were inadequate. Nor did the rule explain, much less provide any evidence demonstrating, how its requirements would improve the agency’s ability to accomplish the statutory goals of protecting the environment and public health as required by the Clean Air Act. The Benefit-Cost Rule fell short of providing a rational basis, providing only a vague rationale, without any record evidence, stating that “[w]ithout enforceable procedural regulations for BCA, future regulations may be promulgated without consideration of, and public accountability concerning, their costs and benefits.”⁷⁸ As EPA states in the Interim Rescission Rule, a hypothetical threat of promulgation of future significant rules under the Clean Air Act without appropriate cost and benefit consideration or public notice and comment is “highly implausible,” given EPA’s longstanding reliance on its own *Guidelines* and other guidance such as Circular A-4.⁷⁹ The Benefit-Cost Rule offered no explanation for why it was required after decades of the agency successfully conducting economic analysis under its own *Guidelines* and other guidance documents, which are substantially better suited to the array of Clean Air Act rulemakings that the agency analyzes. The agency requires a flexible framework to apply its analyses across the Act, which is more readily implemented through the *Guidelines* and other existing guidance.⁸⁰ As further discussed in Section IV.C of these comments, EPA did not offer any compelling rationale for why the agency needed to promulgate a regulation given its proven record of rigorous benefit-cost assessments. In the Interim Rescission Rule, EPA correctly determined that, rather than increasing transparency and consistency, the Benefit-Cost Rule “imposed disparate requirements on the consideration of costs

⁷⁵ See, e.g., *Nat’l Ass’n of Fed. Employees v. Vilsack*, 681 F.3d 483, 485-86 (D.C. Cir. 2012) (concluding that identifying a legitimate governmental interest without foundation that the problem exists is “a solution in search of a problem” and arbitrary).

⁷⁶ 85 Fed. Reg. 84,138.

⁷⁷ *Id.* at 26,408.

⁷⁸ *Id.* 84,137.

⁷⁹ 86 Fed. Reg. at 26,408.

⁸⁰ See *infra* Section IV.D.

and benefits that would have led to arbitrary and distorted BCAs” and that parts of the Benefit-Cost Rule would have promoted “arbitrary rather than informed decision-making.”⁸¹ Without an adequate explanation as to how the rulemaking would provide a solution that existing procedures do not, the Benefit-Cost Rule is arbitrary.

With respect to the issues the Benefit-Cost Rule ostensibly addressed, the public already has protections against arbitrary economic analysis used in rulemaking. As EPA acknowledged in the Interim Rescission Rule, rulemakings are already subject to public notice and comment processes and arbitrary and capricious review.⁸² The arbitrary and capricious standard applies to economic analyses EPA relies on in its rulemakings,⁸³ so the public already had a recourse if a rule relied on arbitrary economic analysis. In light of the judicially enforceable guardrails on EPA’s decision making, the Benefit-Cost Rule’s arbitrary and one-sided constraints were not necessary to protect the public from any violations of the Clean Air Act or arbitrary decisionmaking. Again, the procedures required by the Benefit-Cost Rule fail to solve any actual problem.

The Benefit-Cost Rule is arbitrary not only because it failed to provide adequate evidence of a problem and explanation of a solution, but also because it failed to consider important aspects of the issue. A rulemaking is arbitrary and capricious when it “‘entirely fail[ls] to consider an important aspect of the problem’ when deciding whether regulation is appropriate.”⁸⁴ The Benefit-Cost Rule did not consider the possibility, discussed above, that the agency has historically underestimated benefits or overestimated costs. The rule created an unexplained, one-sided focus on reducing estimated benefits of clean air protections relative to costs, failing to take into account the ways in which EPA has historically underestimated benefits and overestimated costs. To the extent that EPA attempts to manufacture a problem to solve, it has reviewed that “problem” unlawfully by failing to assess ways EPA has historically underestimated benefits and overestimated costs associated with the Clean Air Act. EPA also failed to consider whether systemic changes were needed in order to fully account for benefits and for additional costs the Benefit-Cost Rule would impose, like increased litigation. In light of the absence of any rational basis for the Benefit-Cost Rule, EPA should issue a final rule confirming the rescission.

C. The Pre-Existing Administrative Process Provides Ample Consistency and Transparency.

We additionally agree with EPA’s reasoning that the Benefit-Cost Rule was not needed to establish further administrative process requirements. As EPA notes in the Interim Rescission Rule, pre-existing procedures under the Administrative Procedure Act and, where applicable, the Clean Air Act already provide adequate process to address the Benefit-Cost Rule’s stated goals of consistency and transparency. EPA is already statutorily required to provide notice of a proposed rulemaking in the Federal Register that includes information on the substance of the

⁸¹ 86 Fed. Reg. at 26,413.

⁸² *Id.* at 26,416-17.

⁸³ *Nat’l Ass’n of Home Builders v. EPA*, 682 F.3d 1032, 1040 (D.C. Cir. 2012).

⁸⁴ *Michigan v. EPA*, 576 U.S. 743, 752 (2015) (quoting *State Farm*, 463 U.S. at 43).

rule and legal authority cited for the rule⁸⁵ as well as “the factual data on which the proposed rule is based,”⁸⁶ “the methodology used in obtaining the data and in analyzing the data,”⁸⁷ and “the major interpretations and policy considerations underlying the proposed rule.”⁸⁸ EPA must also provide opportunity for comment on proposed rulemakings⁸⁹ and respond to all significant comments.⁹⁰ EPA is subject to judicial review for failure to adequately respond to significant comments.

The Benefit-Cost Rule did not explain why these pre-existing procedures were inadequate to achieve the rule’s stated goals. Under these procedures, EPA is already required to transparently share its data, relevant statutory interpretations, and methodology underlying its rulemaking. Concerned parties are also able to supplement that data, raise arguments that BCA should be integrated into a rulemaking, make other recommendations for consideration of costs, or share any concerns that the agency has been insufficiently transparent. Furthermore, for reasons discussed elsewhere in this comment and our 2020 comments, the Benefit-Cost Rule could have actually confused and distorted understanding of pollution effects and the benefits of pollution reduction for public health. See section IV.D of these comments for a discussion of how the rule could have prevented the agency from relying on the best available science and Section IV.E for a discussion of how the rule’s requirements invited net benefit calculations that were misleading and inconsistent with economic best practices.

D. The Codification of Specific Practices in the Benefit-Cost Rule Limited EPA’s Ability to Rely on the Best Available Science.

The Benefit-Cost Rule’s effect of codifying and constraining aspects of EPA’s benefit-cost analysis process would have prevented EPA from flexibly applying its analysis to meet unique statutory and regulatory contexts, stifled the agency’s ability to adapt to future changes in BCA methodology, and reduced the rigor with which BCA is conducted. These impacts strongly support EPA’s decision to rescind the rule.

1. The Benefit-Cost Rule demonstrated the difficulty in codifying specific practices into implementable and reviewable requirements for BCA.

We agree with the agency that EPA’s longstanding practice before the Benefit-Cost Rule reflected OMB’s Circular A-4, which provides guidance to agencies on the development of regulatory analysis under Executive Order 12,866 and requires case-by-case adjustments of regulatory analysis according to the agency’s professional judgment.⁹¹ Specifically, OMB’s Circular A-4 instructs agencies not to use only one formula for BCA and sets out a broader objective for agencies to achieve analytical consistency in estimating benefits and costs across regulations.⁹² Similarly, the *Guidelines* caution against rigid application of their principles

⁸⁵ 5 U.S.C. 553(b); CAA § 307(d)(3).

⁸⁶ CAA § 307(d)(2)(A).

⁸⁷ *Id.* § 307(d)(2)(B).

⁸⁸ *Id.* § 307(d)(2)(C).

⁸⁹ 5 U.S.C. § 553(c); CAA § 307(d)(5).

⁹⁰ CAA § 307(d)(6)(B).

⁹¹ 86 Fed. Reg. at 26,410.

⁹² *Id.*

to all regulatory contexts.⁹³ Achieving the goal of analytical consistency requires the steadfast application of professional judgment by the agency’s economists and other experts across rulemakings. Certainly, taking a one-size-fits-all approach with CAA rulemakings while analyzing rules under other statutes more contextually (per Circular A-4 and the *Guidelines*) would disserve the overarching purpose of agency-wide analytical consistency.

As an example of the need for flexibility, EPA notes in the Interim Rescission Rule that formal quantitative uncertainty analysis may not be appropriate for rules with economic impacts estimated to be below \$1 billion.⁹⁴ While we agree that uncertainty analysis is one aspect of BCA that needs to be conducted judiciously, we underscore that BCA itself may be inappropriate given the nature of some rulemakings (apart from whether the rules qualify as economically significant under Executive Order 12,866). As we previously noted in our 2020 comments, BCA is only one of a number of cost metrics available to fulfill requirements for robust regulatory analysis. Both OMB and EPA have recognized other metrics as potentially more effective and appropriate under certain circumstances. For example, in issuing the Mercury and Air Toxics Standards 2016 “Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units,” EPA utilized several different cost metrics to evaluate whether compliance with MATS is reasonable for the power sector.⁹⁵ There, EPA considered annual compliance costs as a percent of power sector sales, annual compliance capital expenditures compared to the power sector’s annual capital expenditures, impacts on the retail price of electricity, and impacts on power sector resource capacity.

OMB also provides guidance in Circular A-4 on different viable tools to evaluate costs and benefits as part of rigorous regulatory analyses. Circular A-4 acknowledges that there are important costs and benefits that cannot be monetized. In this guidance, OMB recognizes cost-effectiveness as an acceptable alternative for BCA in regulatory analyses—and recognizes that it may be the only possible method under certain circumstances. In particular, OMB notes the importance of the cost-effectiveness metric for public health and safety rulemakings. By the nature of its statutory purpose to protect the public health and welfare, many CAA rulemakings fall under this category. The *Guidelines* and Circular A-4 provide a much more flexible framework that can guide EPA in conducting robust analyses through a toolbox of cost metrics that can be tailored to meet a variety of circumstances.

Thus, the Benefit-Cost Rule’s requirement that “all future significant proposed and final regulations promulgated under the CAA be accompanied by a BCA”⁹⁶ that adheres to the rule’s formalistic requirements arbitrarily restricted EPA from fully utilizing the range of cost metrics necessary to complete robust public health and safety rulemakings. Such restrictions would have hindered EPA from pursuing rulemakings ill-suited to BCA, or to BCA conducted within the strictures of the Benefit-Cost Rule, diminishing the quality of regulatory analyses and health-

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ EPA, *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. 24,420, 24,438 (Apr. 25, 2016).

⁹⁶ 85 Fed. Reg. at 84,141.

based standards, and ultimately compromising the CAA’s statutory purpose to protect public health and welfare.

Relatedly, we support the agency’s position that it must prioritize certain regulatory analyses, consistent with congressional direction in CAA Section 317 that EPA account for time, resources, and other duties and authorities that the agency must carry out when determining the extent of an economic impact assessment.⁹⁷ In addition to economic impact assessments, we reiterate the unworkability of applying rigid requirements to the agency’s risk assessments. The Benefit-Cost Rule unreasonably applied its rigid requirements “to all risk assessments used in CAA significant rulemakings.”⁹⁸ The rule concluded that “best practices for the conduct of BCA inherently require that the inputs to the analysis reflect the best available information” and noted that “risk assessments often provide key inputs to the development of the EPA’s health benefit estimates in a BCA.”⁹⁹ As we noted in our comments on the 2020 proposed rule, the rule’s so-called “best practices” ran contrary to the CAA’s requirements to use the best available science,¹⁰⁰ such as by applying changes advanced under the cover of BCAs to risk assessments. Requiring multiple departures from science and actual best practice, placing significant analytical burdens on a resource-constrained agency, and repeatedly attempting to bias risk assessment results by minimizing the impacts of pollutants should never have been expanded to apply to risk assessments, or CAA significant rulemakings more broadly. These requirements would have had disastrous consequences for the agency’s ability to fully engage with its mission to protect human health and the environment.

Moreover, EPA’s concern that “[t]he codification of . . . unclear requirements in regulation would undoubtedly have generated unnecessary and wasteful litigation by creating opportunities to question whether the EPA had strictly followed the letter of the Benefit-Cost Rule”¹⁰¹ is well justified. The new methods imposed an additional layer of analytical tasks unrelated to the statutory mandate under which the agency is acting—tasks that could nonetheless give rise to separate claims if performed inadequately.¹⁰² Courts would ordinarily review a BCA deferentially,¹⁰³ upholding a rule even where the agency “did not intend to conduct a rigorous societal cost-benefit analysis” but instead compared costs and benefits “in broad strokes.”¹⁰⁴ Under the Benefit-Cost Rule, however, EPA stripped itself of discretion to compare costs and benefits as it sees fit for particular regulatory scenarios. Rather, noncompliance with the Rule’s convoluted requirements could have rendered a rule arbitrary or otherwise not in accordance with law under CAA Section 307(d)(9)¹⁰⁵ or Administrative Procedure Act Section 706(2)(A)¹⁰⁶ and therefore subject to judicial reversal, compromising future rulemaking efforts.

⁹⁷ 86 Fed. Reg. at 26,410-11 & n.28 (citing 42 U.S.C. § 7617(d)).

⁹⁸ 85 Fed. Reg. at 35,623.

⁹⁹ *Id.* at 84,142.

¹⁰⁰ *See, e.g.*, 42 U.S.C. § 7408(a)(2) (“Air quality criteria for an air pollutant shall accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of such pollutant in the ambient air, in varying quantities.”).

¹⁰¹ 86 Fed. Reg. at 26,411.

¹⁰² *Nat’l Ass’n of Home Builders*, 682 F.3d at 1040 (“[W]hen an agency decides to rely on a cost-benefit analysis as part of its rulemaking, a serious flaw undermining that analysis can render the rule unreasonable.”).

¹⁰³ *Id.*

¹⁰⁴ *Idaho Conservation League v. Wheeler*, 930 F.3d 494, 507-08 (D.C. Cir. 2019).

¹⁰⁵ 42 U.S.C. § 7607(d)(9)(A).

¹⁰⁶ 5 U.S.C. § 706(2)(A).

2. The Benefit-Cost rule would have made it harder for EPA to incorporate new best practices into its assessments.

The proposed Benefit-Cost Rule explained that “risk assessments often provide key inputs to the development of EPA’s health benefit estimates in a BCA,” meaning benefit-cost analysis could be frequently influenced by the “highly evolving” nature of risk assessment.¹⁰⁷ EPA now correctly acknowledges that, under the Benefit-Cost Rule, as best-practice methodology for BCA evolves to reflect scientific progress, the agency would have been less able to adapt under the constraints of this binding and fixed rule.¹⁰⁸ Past and planned updates demonstrate that such evolution of frameworks for conducting BCA is a standard matter of course that will continue. In just the last ten years, EPA’s *Guidelines* have been updated three different times, and the agency is reviewing the *Guidelines* even now.¹⁰⁹ If the Benefit-Cost Rule had conflicted with future changes to the *Guidelines*’ process, the agency would have had to undergo a lengthy notice-and-comment process to make updates to its rule, as opposed to just updating the *Guidelines* already in existence. This could have seriously delayed its ability to adapt to changes in best practices and could have hindered the promulgation of public health and environmental protections.

EPA correctly rescinded the Benefit-Cost Rule because it would have severely limited the agency’s ability to flexibly adapt to scientific changes in the methodology and best practices surrounding risk assessment and economic analysis, which may evolve quickly and may need to be tailored to the regulatory problem at hand. As we noted in our 2020 comments, a 2017 study on federal agency guidance found that senior officials across federal agencies prefer to use guidance as opposed to legislative rules in “matters that involve uncertainty, either because the general matter being regulated . . . is likely to change rapidly, or because it is difficult to anticipate particulars that might arise in individual proceedings that would justify an ad hoc adjustment.”¹¹⁰ In the past, EPA has declined to promulgate regulations defining how certain analyses must be conducted where best practices are likely to change rapidly or a fact-dependent analysis is required. For example, under the Hazardous Waste Permit Program, EPA authorizes a site-specific risk assessment as part of the permitting process, and the agency has explicitly declined to promulgate regulations defining how those assessments must be conducted.¹¹¹ The agency explained that “risk assessment—especially multi-pathway, indirect exposure assessment—is a highly evolving field” and that “any regulatory approach it might codify in this area is likely to become outdated, or at least artificially constraining, shortly after promulgation in ways that it cannot anticipate now.”¹¹²

¹⁰⁷ 85 Fed. Reg. at 35,618.

¹⁰⁸ See 86 Fed. Reg. at 26,411-12.

¹⁰⁹ See *Guidelines* website, <https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses#howproduced> (last visited May 30, 2021). Indeed, EPA was reviewing the *Guidelines* when it finalized the Benefit-Cost Rule, a month before the SAB transmitted its peer review on EPA’s draft revision of the *Guidelines* to the agency. 86 Fed. Reg. at 26,411-12 n.34.

¹¹⁰ Nicholas Parrillo, *Federal Agency Guidance: An Institutional Perspective*, Administrative Conference of the United States, at 30 (Oct. 12, 2017).

¹¹¹ See *Cement Kiln Recycling Coal. v. EPA*, 493 F.3d 207, 211 (D.C. Cir. 2007).

¹¹² *Id.* at 214 (citing 70 Fed. Reg. at 59,512).

We also agree with the agency that codifying BCA practices in a legislative rule would have led to divergence from the agency's methodologies for regulatory analyses under other statutes, defeating the purpose of consistency that supposedly underlay the Benefit-Cost Rule.¹¹³ Not only would EPA have been unable to apply the same case-by-case approach, as noted above, but it would have been "unable to conduct BCA by using the latest state-of-the-art methods, without waiting for updates to the Benefit-Cost Rule."¹¹⁴ Whatever value may exist in consistency across regulatory analyses, the Benefit-Cost Rule would not have provided it.

3. The Benefit-Cost Rule codified certain practices that conflict with best science.

We broadly agree with EPA that certain practices required by the Benefit-Cost Rule conflicted with best science, and that it would have been difficult for the agency to address each of these problematic requirements individually.¹¹⁵ Here, we emphasize the problems in some of the examples that EPA notes in the rescission and reiterate other unscientific aspects of the Benefit-Cost Rule.

EPA correctly observes that a requirement that studies quantifying concentration-response relationships provide "measurements at the level of the individual" and "actual measurements of exposure" would introduce bias against certain high-quality studies.¹¹⁶ The lack of individualized data on exposure does not remove the risks of exposure or EPA's duty to reduce such risk. Where reliable measurements of exposure at an individual level are unavailable, EPA should attempt to convert ambient concentrations to population-level exposure. Further, we agree that the Benefit-Cost Rule codified an irrational preference for studies that rely solely on measured concentrations, even though studies that combine concentrations that are both directly measured (e.g., through monitoring) and not directly measured (e.g., through remote-sensing techniques or models) "can reduce statistical bias and generate higher-resolution exposure estimates than data from a single monitor."¹¹⁷ EPA has previously noted that estimates of health effects based on modeled concentrations may be higher and more precise than estimates based on monitored concentrations;¹¹⁸ that satellite detection may provide superior exposure estimates at greater distances from a monitor;¹¹⁹ and that "[m]ethods that merge data from several sources, such as hybrid methods drawing from a combination of land use variables, satellite observations, [chemical transport model] outputs, and surface measurements, create more spatially variable PM concentration surfaces."¹²⁰ Given these findings, studies that rely on ground-level monitoring data to estimate exposure should not necessarily receive more weight than studies that use measurements by remote-sensing devices, modeled levels of exposure, or a combination of direct and remote measurements and modeled levels. Instead, EPA should give more weight to

¹¹³ See 86 Fed. Reg. at 26,412.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ EPA, Integrated Science Assessment for Particulate Matter 3-43 (Dec. 2019).

¹¹⁹ *Id.* at 3-44.

¹²⁰ *Id.*

studies that rely on techniques for estimating exposure that are suited to the health effects being examined¹²¹ and that reduce bias.¹²²

We also concur in EPA’s assessment that the additional requirement for inclusion of benefit endpoints based only on evidence of a “clear causal” or “likely causal” relationship between pollutant exposure and effect¹²³ disregarded the SAB’s advice on this topic.¹²⁴ We reiterate, additionally, that the requirement is inconsistent with the agency’s own past practice. The agency has a long history of applying a weight of evidence approach to causality determinations, rightly recognizing and valuing the strength of the approach’s incorporation of multiple disciplines and lines of evidence.¹²⁵ In its 2008 *Integrated Science Assessment for Oxides of Nitrogen and Sulfur – Ecological Criteria*, EPA lays out a causality framework to support assessing causality.¹²⁶ In Table 1-2 of that report, the agency provides a five-step weight of evidence framework for assessing causal determination, which includes causal relationship, likely to be a causal relationship, suggestive of a causal relationship, inadequate to infer a causal relationship, and suggestive of no causal relationship.¹²⁷ Thus, the Benefit-Cost Rule contradicted the agency’s own established methods for assessing causality, which have been endorsed by the scientific community and EPA science advisors.¹²⁸ The Rule excluded consideration of endpoints “suggestive of a causal relationship,” which inappropriately undermined the judgment of scientists and other contributing experts in applying a full weight of evidence approach.

The Benefit-Cost Rule also imposed no requirements specific to costs, while holding benefits quantification to a higher standard.¹²⁹ Specifically, the rule suggested that the “strength of scientific evidence should be strongest when the benefits are estimated.”¹³⁰ As we noted previously, the Rule discussed this requirement only in the context of benefits, not costs. This suggested that the benefits of a public health or environmental protection would be subject to greater scrutiny and a heightened standard of evidence. But apparently, information about high costs—which might have led the agency to reduce the stringency of a regulation—would have faced no heightened standard. The Rule therefore adopted a deeply flawed method of benefit-cost analysis, and EPA is correct in rescinding it for this reason.

Beyond the examples EPA highlights in the Interim Rescission Rule, the numerous requirements that the Benefit-Cost Rule applied to the selection of studies quantifying dose-response

¹²¹ See *id.* (“Methods with high spatial resolution are preferable for long-term exposure studies where spatial contrasts are important.”).

¹²² See *id.* at 3-52 tbl. 3-5 (noting that satellite-based methods’ strengths “include bias correction, which improves model results, particularly where biases are large”).

¹²³ 85 Fed. Reg. at 84,155 (former 40 C.F.R. § 83.3(a)(9)(i)(A)).

¹²⁴ 86 Fed. Reg. at 26,412.

¹²⁵ EPA, Preamble to the Integrated Science Assessments; Gretchen T. Goldman & Francesca Dominici, *Don’t Abandon Evidence and Process on Air Pollution Policy*, 363(6434) *Science* 1398-1400 (Mar. 2019), <http://science.sciencemag.org/cgi/content/full/science.aaw9460>.

¹²⁶ EPA, *Integrated Science Assessment for Oxides of Nitrogen and Sulfur – Ecological Criteria*, EPA/600/R-08/082F (2008).

¹²⁷ *Id.* at 1-8.

¹²⁸ Goldman and Dominici, *Don’t Abandon Evidence and Process on Air Pollution Policy*.

¹²⁹ See 86 Fed. Reg. at 26,412-13.

¹³⁰ 85 Fed. Reg. at 84,146.

relationships required the agency to depart from best scientific practices. We summarize our previous comments on this topic below.

Selection of scientifically valid concentration-response functions should depend on the strength of the available scientific evidence informing the relationship between the pollutant and response. However, the Benefit-Cost Rule indicated that a BCA should “demonstrate the sensitivity of the choice of the concentration-response function on the magnitude and the uncertainty associated with air pollution-attributable effects.”¹³¹ This statement is ambiguous and appears to directly contradict other language guiding the agency’s choice of concentration-response models. To the extent EPA intended for this to mean sensitivity of net benefits should influence choice of model, this approach ran counter to the scientific method and incentivized choice of models that provide a more politically desirable answer in the benefit-cost analysis, raising scientific integrity questions. In addition to contradicting broader scientific norms, this language also ignored longstanding accepted principles in the field of risk assessment and environmental health, which have well-established methods for assessing the strength and breadth of scientific evidence in assessing risk from environmental contaminants.¹³² As EPA’s *Framework for Human Health Risk Assessment to Inform Decision Making* explicitly notes, “the Framework does not allow for the manipulation of the risk assessment to support predetermined policy or management choices. As articulated by the [National Research Council] in the *Silver Book*, ‘[T]he conduct of risk assessments used to evaluate the risk-management options [is] in no way to be influenced by the preferences of risk managers.’”¹³³ EPA correctly rescinded the Benefit-Cost Rule for this reason as well.

E. The Benefit-Cost Rule’s Presentational Requirements Invited Net Benefit Calculations in Regulatory Preambles That Are Misleading and Inconsistent with Economic Best Practices.

We agree that the Benefit-Cost Rule’s presentational requirements regarding co-benefits and non-domestic effects were problematic, misleading, and inconsistent with economic best practices.¹³⁴ As the Interim Rescission Rule notes, EPA already disaggregates categories of benefits in its BCAs, so the “presentational requirements do not provide additional transparency.”¹³⁵ By requiring an additional presentation of benefits that excluded co-benefits and requiring non-domestic effects to be reported separately in regulatory preambles, EPA would have created the impression that separating those benefits should be required regardless of the context, and that they can or should be ignored or are less relevant to BCA. This would also lead

¹³¹ *Id.* at 84,148; *see also id.* at 84,156 (former 40 C.F.R. § 83.3(a)(9)(v)).

¹³² National Academies, *Science and Decisions: Advancing Risk Assessment* (2009), <https://www.nap.edu/catalog/12209/science-and-decisions-advancing-risk-assessment>; EPA, Preamble to the Integrated Science Assessments (ISA), EPA/600/R-15/067, 2015; Richard E. Peltier and Gretchen T. Goldman, *It’s Not About Transparency: Politics Is Intruding into USEPA Science and It Could Cost the Public’s Health*, 30(4) *Journal of Exposure Science & Environmental Epidemiology* 594-95 (May 2020); Gretchen T. Goldman & Francesca Dominici, *Don’t Abandon Evidence and Process on Air Pollution Policy*, 363(6434) *Science* 1398-1400 (Mar. 2019), <http://science.sciencemag.org/cgi/content/full/science.aaw9460>.

¹³³ EPA, *Framework for Human Health Risk Assessment to Inform Decision Making*, EPA/100/R-14/001 (2014) (citing National Academies (2009) at 244).

¹³⁴ 86 Fed. Reg. at 26,413.

¹³⁵ *Id.*

to the implication that they are less valuable or worthy of consideration in the rulemaking process.

Rather than being subject to these overly prescriptive presentational requirements, EPA should retain discretion to present information about costs and benefits as appropriate depending on the context of a given rulemaking. Rescinding the Benefit-Cost Rule appropriately permits EPA to exercise its discretion to present information in regulatory preambles about costs and benefits in a manner that is transparent and consistent with mainstream economics.

1. Separating and treating direct and indirect effects differently when presenting costs and benefits of regulation is inconsistent with the CAA and economic best practices.

EPA's longstanding practice has been to calculate and evaluate co-benefits in BCA and treat them similarly to direct benefits in the rulemaking process. This practice is consistent with the Clean Air Act, EPA guidelines, and OMB Circular A-4. Treating these effects differently when presenting the results of BCA in regulatory preambles would be inconsistent with the purpose of using BCA to assess the economic efficiency of a regulatory action.

- a. Statutory language and precedent support an inclusive approach to co-benefits in economic analyses of rules under the CAA.*

The statutory language and precedent interpreting the CAA strongly support EPA's reliance on co-benefits and their inclusion in economic analyses. For example, under Section 111 of the Clean Air Act, EPA sets standards of performance which reflect "the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated."¹³⁶ EPA is required to "exercise its discretion to choose an achievable emission level which represents the best balance of economic, environmental, and energy considerations."¹³⁷ The statutory language and precedent clearly suggest, if not require, that a range of effects, including co-benefits, should be considered.

Furthermore, in *Michigan v. EPA*, the Supreme Court held that, for the purpose of determining whether regulation under Section 112 of the CAA was appropriate and necessary, "[c]onsideration of cost reflects the understanding that reasonable regulation ordinarily requires paying attention to the advantages and the disadvantages of agency decisions."¹³⁸ The Court also discussed a hypothetical involving regulation that controls hazardous air pollutant emissions but has the indirect effect of causing new health harms, noting that EPA would necessarily have to consider this factor in deciding whether regulation is "appropriate."¹³⁹ In light of statutory language and precedent favoring an inclusive approach to the effects of rulemaking, it would be

¹³⁶ 42 U.S.C. § 7411(a)(1).

¹³⁷ *Sierra Club v. Costle*, 657 F.2d 298, 330 (D.C. Cir. 1981).

¹³⁸ *Michigan v. EPA*, 576 U.S. at 753.

¹³⁹ *Id.* at 752.

arbitrary and unreasonable for EPA to put in place presentational requirements for regulatory preambles that exclude co-benefits and imply that they lack value or should be ignored.

b. Accounting for indirect effects, including co-benefits, is consistent with established best practices for economic analysis.

A comprehensive economic analysis must take into account indirect effects, including ancillary benefits or co-benefits and indirect costs. As EPA recognizes in the Interim Rescission Rule based on Circular A-4 and the Economic Guidelines, “net benefits are calculated by subtracting total costs from total benefits, regardless of whether the benefits and costs arise from intended or unintended consequences of the regulation.”¹⁴⁰ It is inappropriate and inconsistent with best practices for the agency to insert value judgments about the relative merit, significance, or relevance of certain benefits into the presentation of BCA results, and doing so subverts the purpose of the economic analysis. As the Interim Rescission Rule notes, “[R]equiring a separate presentation that excluded certain categories of benefits that Circular A-4 and the Economic Guidelines indicate should be considered could call into question, without justification, the significance of those benefits.”¹⁴¹

Furthermore, as EPA points out in the Interim Rescission Rule, a separate presentational requirement that excluded co-benefits was problematic because it seemingly invited misleading net benefit calculations based on a subset of impacts, as was provided for the Affordable Clean Energy Rule.¹⁴² For the ACE rule, in addition to providing a comprehensive net benefits calculation, EPA also provided an incomplete calculation with a subset of benefits, which it referred to as “Net benefits associated with the targeted pollutant,”¹⁴³ which is misleading, as it does not represent the net benefits of the regulation.

EPA’s own Science Advisory Board has also previously warned the agency that “excluding co-benefits is a departure from the Board’s recommended practice.”¹⁴⁴ In its review of EPA’s Economic Guidelines, the SAB recommended “explicit, consistent text throughout the report on the importance of accounting for all benefits associated with a regulation or policy, regardless of whether any given benefit was the intended target of the regulation.”¹⁴⁵ The SAB also noted that “given the confused commentary about this topic among non-economists in the public sphere, it is all the more important to explicitly state the importance of accounting for the economic effects

¹⁴⁰ 86 Fed. Reg. at 26,413.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520, 32,572 tbl. 10-12 (July 8, 2019).

¹⁴⁴ EPA Science Advisory Board, Science Advisory Board (SAB) Consideration of the Scientific and Technical Basis of EPA’s Proposed Mercury and Air Toxics Standards for Power Plants Residual Risk and Technology Review and Cost Review (Apr. 9, 2020), [https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebReportsLastMonthBOARD/4908A62FD4C0DE2285258549005B8797/\\$File/EPA-SAB-20-004+.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebReportsLastMonthBOARD/4908A62FD4C0DE2285258549005B8797/$File/EPA-SAB-20-004+.pdf) (citations omitted).

¹⁴⁵ EPA Science Advisory Board, SAB Peer Review of the EPA’s Revised Guidelines for Preparing Economic Analysis, at 45 (Jan. 6, 2021), [https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentBOARD/61C74C0E14BD5956852586550071E058/\\$File/EPA-SAB-21-002.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentBOARD/61C74C0E14BD5956852586550071E058/$File/EPA-SAB-21-002.pdf).

of all changes that result from an EPA rule in comparison with its baseline.”¹⁴⁶ The Benefit-Cost Rule’s presentational requirement was problematic because it implied the opposite, that some effects did not need to be accounted for or were not as important.

2. Required separate reporting of domestic and non-domestic effects would invite misleading presentations of the benefits of regulations that are inconsistent with economic best practices.

The Benefit-Cost Rule would have required any benefits and costs that accrue to non-U.S. populations to be reported separately, to the extent possible. In the Interim Rescission Rule, EPA correctly identifies that this requirement would invite misleading presentations of regulatory effects.¹⁴⁷ As EPA notes, Circular A-4 and the *Guidelines* indicate non-domestic costs and benefits should be considered, and requiring a separate presentation of such benefits in all circumstances where it is “possible” could call into question the significance of those effects.

The requirement is especially misguided for certain classes of effects that cannot be meaningfully disaggregated into their domestic and non-domestic components. The costs of regulatory action may be difficult to disentangle, for example, when those costs are borne by companies that operate in the United States, but which also have foreign shareholders, employees, or other non-U.S. interests. Additionally, to the extent these analytical difficulties arise predominantly with respect to disaggregating the benefits, rather than costs, associated with additional regulation, the proposed requirement would have inappropriately biased results of BCAs away from such regulation.

For example, a federal district court recently rejected the use of domestic-only social costs of greenhouse gases, finding that such estimates are “soundly rejected by economists as improper and unsupported by science.”¹⁴⁸ In 2015, the Interagency Working Group on the Social Cost of Carbon concluded that “good methodologies for estimating domestic damages do not currently exist.”¹⁴⁹ Likewise, in 2017, the National Academies found that the calculation of a domestic social cost of methane cannot be credibly done using current models, as they ignore important spillover effects given the global nature of climate change.¹⁵⁰ Other leading experts agree.¹⁵¹ The Interagency Working Group continues to find domestic-only estimates unreliable, finding that current methodologies for estimating a domestic-only cost “are both incomplete and underestimate the share of damages that accrue to citizens and residents of the United States.”¹⁵²

¹⁴⁶ *Id.* at 46.

¹⁴⁷ 86 Fed. Reg. at 26,413.

¹⁴⁸ *California v. Bernhardt*, No. 18-5712 (N.D. Cal. July 15, 2020).

¹⁴⁹ Interagency Working Group on the Social Cost of Carbon, *Response to Comments: Social Cost of Carbon for Regulatory Impact Analysis under Executive Order 12,866*, at 36 (July 2015).

¹⁵⁰ National Academies of Sciences, Engineering, and Medicine, *Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide* 53 (2017).

¹⁵¹ See, e.g., William D. Nordhaus, *Revisiting the Social Cost of Carbon*, 114 Proc. Nat’l Acad. Sci. 1518 (2017) (concluding that “regional damage estimates are both incomplete and poorly understood” and that “there is little agreement on the distribution of the SCC by region”).

¹⁵² Interagency Working Group on Social Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990 (Feb. 2021).

For these reasons, a blanket requirement to require separate reporting of domestic and non-domestic benefits and costs would have been arbitrary and capricious.

F. The Benefit-Cost Rule Did Not Reconcile Its Consideration Requirement with the Substantive Mandates of the CAA.

As EPA explains in the Interim Rescission Rule, the Benefit-Cost Rule failed to grapple with the CAA’s numerous directives on whether and how to consider costs, and thus the Rule was both unauthorized (as not “necessary” under CAA Section 301(a)) and self-defeating in its quest for artificial consistency across CAA regulatory analyses. We support EPA’s decision to rescind the rule on these grounds and underscore that the Benefit-Cost Rule arbitrarily flouted CAA mandates by requiring the agency to consider BCA across all significant CAA rules.

1. The Benefit-Cost Rule was plainly unnecessary with respect to CAA provisions that prohibit EPA from considering cost.

We agree with EPA that the Benefit-Cost Rule’s rationale for including BCA in the records and preambles of rulemakings in which the agency is prohibited from considering cost is not “necessary” to carry out the statute within the meaning of CAA section 301(a).¹⁵³ On the contrary, the litigation that the Rule invited could have led to absurd outcomes that blatantly contradict the requirements of the Act. For instance, challengers to a NAAQS could have alleged that EPA’s BCA does not fully comply with this rule—even though the CAA prohibits consideration of costs when setting the NAAQS. Thus, parties could have attempted to block or delay a vital public health protection based on violations of a rule that is not required by the Act and that pertains to analysis the agency could not legally consider. The Interim Rescission Rule properly removes this hindrance to carrying out the statute.

2. For provisions that permit consideration of cost or economic factors, the requirement to consider BCA is unwarranted because implementation of those provisions should begin with analysis of statutory text and context.

Plainly, the Benefit-Cost Rule’s requirement to consider BCA was not “necessary” to carry out the CAA when, in many regulatory contexts, the consideration would have been ineffectual and could not have altered EPA’s statutory directives.¹⁵⁴ The Act’s protections encompass a wide range of pollutants, program structures, and requirements for compliance that include a variety of different approaches to cost consideration. To protect the public health and welfare through the CAA, Congress directed the EPA Administrator to, among other things, set national ambient air quality standards; set emission standards for both stationary and mobile sources of air pollution; reduce emissions of 187 hazardous air pollutants that Congress itself listed in the statute; protect air quality in relatively pristine areas from significant deterioration; regulate fuels and fuel additives, both to protect public health and welfare and to prevent the impairment of emission control devices; require the use of renewable transportation fuels; control acid deposition; protect the stratospheric ozone layer by requiring the phase-out of ozone-depleting substances; issue permits and enforce the Act’s emission limits; and develop and enforce Federal Implementation

¹⁵³ 86 Fed. Reg. at 26,415.

¹⁵⁴ *See id.* at 26,416.

Plans in states that fail to implement the Act’s requirements.¹⁵⁵ The Administrator’s authority to carry out these tasks spans dozens of different sections and subsections of the CAA and varies from broad authority to protect public health with an adequate margin of safety to detailed requirements that specify numerical emission limits.

How the Administrator should, or should not, consider cost in accomplishing the myriad tasks and responsibilities of the Clean Air Act varies significantly across the programs.¹⁵⁶ While many provisions of the Act specifically mention cost or economic considerations, others only imply it (e.g., where it requires a standard that is “practicable” or “reasonably achievable”).¹⁵⁷ Many more do not mention or imply cost,¹⁵⁸ including NAAQS, which must be designed to protect public health with an adequate margin of safety and which the Supreme Court has read to prohibit cost considerations.¹⁵⁹ As EPA correctly observes, in these situations the requirement to consider BCA was not only unnecessary, but also could have been misleading.¹⁶⁰ The agency therefore had ample justification in rescinding the unauthorized, unsupported, and arbitrary Benefit-Cost Rule.

V. ADDITIONAL RATIONALES FURTHER SUPPORT RESCINDING THE BENEFIT-COST RULE.

While EPA’s rationales for rescinding the Benefit-Cost Rule are more than sufficient to justify the rescission, there are also other critical flaws in the rule that provide additional justification for rescission. The rule contravened the Clean Air Act because it hindered EPA’s efforts to “promote the public health”¹⁶¹ by addressing distributional impacts and impacts to environmental justice communities of air pollution. Additionally, to the extent that the rule was premised on an assumption that prior benefit-cost analyses for CAA rulemakings tended to overestimate benefits and underestimate costs, the rule is arbitrary and capricious. That assumption is false, and EPA failed to meaningfully grapple with and respond to comments citing studies that found that prospective analyses for CAA rulemakings have tended, instead, to overestimate costs and underestimate benefits.

A. The Benefit-Cost Rule Interfered with EPA’s Efforts to Address Distributional and Environmental Justice Impacts.

The Biden-Harris administration has repeatedly stated its commitment to advancing environmental justice, both broadly and through specific agency actions.¹⁶² Administrator Regan has echoed this commitment, reiterating environmental justice as “a major part of the agency’s

¹⁵⁵ Congressional Research Service, *Cost and Benefit Considerations in Clean Air Act Regulations* at 2-9 (May 5, 2017), <https://crsreports.congress.gov/product/pdf/R/R44840/4>.

¹⁵⁶ *Id.* at 2-9.

¹⁵⁷ *Id.* at 3-5 & tbl. 1.

¹⁵⁸ *Id.* at 5-8 & tbl. 2.

¹⁵⁹ See *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 486 (2001).

¹⁶⁰ 86 Fed. Reg. at 26,416.

¹⁶¹ 42 U.S.C. § 7401(b)(1).

¹⁶² See, e.g., Exec. Order No. 14,008, “Tackling the Climate Crisis at Home and Abroad” § 219, 86 Fed. Reg. 7619 (signed Jan. 27, 2021).

core mission of protecting human life and the environment” and directing all EPA offices to integrate environmental justice throughout their work.¹⁶³ The agency’s rescission of the Benefit-Cost Rule is fully in line with this directive, removing a deeply damaging rule that threatened to cause disproportionate harm to environmental justice communities.

The Clean Air Act has resulted in significant improvements to public health and the environment, advancing standards that have resulted in hundreds of thousands of avoided premature deaths, broadly improved health outcomes, and cleaner and clearer air. Still, critical progress remains to be made, with 135 million people living in counties with unhealthy air¹⁶⁴ and suffering the consequences yearly. Beyond being harmful, that pollution burden is borne unevenly. People of color are more than three times as likely as white people to breathe unhealthy air.¹⁶⁵ Across domestic anthropogenic sources, exposure to fine particulate matter is systemically higher than average for people of color, with above-average exposure holding across source types responsible for three-quarters of overall exposure.¹⁶⁶ And while absolute pollution exposure has declined over time, the relative disparity in pollution exposure has stubbornly persisted.¹⁶⁷

Yet instead of working to strengthen public health protections and counter inequitable pollution burdens, the Benefit-Cost Rule undermined the agency’s ability to act, and thus worked to perpetuate ongoing inequities in pollution exposure. Despite the very real and disproportionate harms threatened, in promulgating the rule the agency heedlessly and unlawfully continued to erect barriers to fulfilling the statutory purpose of promoting public health in carrying out the Act’s mandates.

The Benefit-Cost Rule further threatened specific harm by manipulating and undermining transparency around benefit accounting and limiting the use of data and methods that could best assess health impacts. As the Interim Rescission Rule notes, the Benefit-Cost Rule would have constrained the agency’s ability to practice the best science in assessing health impacts, from limits on the use of certain studies, to methodologies, to human health benefit endpoints.¹⁶⁸ This would have the effect of inappropriately and inaccurately constraining a full accounting of the benefits of public health protections. The Benefit-Cost Rule would further improperly tip the scales against the case for public health protections by obscuring how benefits would be displayed and which benefits would be considered; this, as EPA now rightly notes, would be misleading and contravene economic best practices.¹⁶⁹ The end result was a rule that repeatedly worked to erode the case for action and make it easier for polluters to continue to cause ongoing

¹⁶³ EPA News Release, *EPA Administrator Announces Agency Actions to Advance Environmental Justice* (Apr. 7, 2021), <https://www.epa.gov/newsreleases/epa-administrator-announces-agency-actions-advance-environmental-justice/>.

¹⁶⁴ American Lung Association, *State of the Air 2021*, Key Findings, <https://www.lung.org/research/sota/key-findings>.

¹⁶⁵ *Id.*

¹⁶⁶ Christopher W. Tessum et al., *PM_{2.5} Polluters Disproportionately and Systemically Affect People of Color in the United States*, *Science Advances* (Apr. 28, 2021), <https://advances.sciencemag.org/content/7/18/eabf4491>.

¹⁶⁷ Jonathan Colmer et al., *Disparities in PM_{2.5} Air Pollution in the United States*, *Science* (July 31, 2020), <https://science.sciencemag.org/content/369/6503/575>.

¹⁶⁸ 86 Fed. Reg. at 26,412.

¹⁶⁹ *Id.* at 26,413.

and disproportionate public health harms. That the agency did not engage with this evident outcome was reckless and directly counter to its mission.

Rescinding the Benefit-Cost Rule removes an unnecessary and inappropriate impediment to the agency's rigorous pursuit of its mission, including its ability to advance environmental justice aims. This action is a required step to clear the course for a full accounting of the costs of pollution and the benefits of action, as well as the specific consideration of the distributional impacts of pollution burdens and pollution standards. The Benefit-Cost Rule threatened to result in profound harms for those still facing the consequences of disproportionate pollution burdens today; its rescission is a necessary, albeit insufficient, step to address persistent inequities in exposure.

B. Contrary to the Presumption of the Benefit-Cost Rule, Assessments of CAA Rules Often Underestimate Benefits and Overestimate Costs.

An additional basis for rescission of the Benefit-Cost Rule is the fact that the rule was premised on an inaccurate assumption that benefit-cost analyses often overestimate the benefits of CAA rules and underestimate the costs. In fact, as pointed out above and in our comments on the proposed Benefit-Cost Rule, the opposite is true.

As discussed above, studies, including EPA's own retrospective reviews of CAA rulemakings, show that benefits are often underestimated in such rulemakings. In its 2011 analysis of the benefits of the Clean Air Act, EPA determined that its assessment of the costs and benefits of Clean Air Act programs is "more likely to understate net benefits than overstate them" in light of the relatively large number of major sources of uncertainty that would result in an underestimate of benefits (and the much smaller number of uncertainties that could lead to an overestimate of benefits).¹⁷⁰ One of the reasons for this conclusion was that the health benefits of particulate matter reductions are "potentially major" underestimates because human exposure to particulate matter is likely much greater than indicated by ambient air quality monitor data.¹⁷¹ EPA also does not even quantify many benefits of regulation, including many health effects of hazardous air pollutants¹⁷² and many ecological effects associated with air pollution.¹⁷³

Likewise, costs of CAA rules are often overestimated. The NCEE study discussed in Section II of these comments found that the costs of environmental regulations were overestimated far

¹⁷⁰ EPA 2011 Study 7-11.

¹⁷¹ *Id.* at 5-41; Daniel M. Sullivan & Alan Krupnick, *Using Satellite Data to Fill the Gaps in the US Air Pollution Monitoring Network* at 1, Resources for the Future Working Paper (Sept. 2018), https://www.rff.org/documents/1823/RFF20WP-18-21_0.pdf (finding that over 24 million Americans live in areas misclassified as in attainment for fine particulate matter).

¹⁷² EPA 2011 Study at 5-48. This is a potentially major omission in light of recent research concluding that reductions in power plant emissions of mercury alone could yield cumulative health benefits (primarily cardiovascular) valued at \$43 billion to \$147 billion by 2050. A. Giang & N.E. Selin, *Benefits of Mercury Controls for the United States*, 113 Proc. Nat'l Acad. Sci. 286, at S11-S12 (2016).

¹⁷³ EPA characterized these effects, including eutrophication of estuaries, acidification of soils, and bioaccumulation of mercury and dioxins in the food chain, as "widespread and significant," resulting in "potentially major" underestimates of the net benefits of Clean Air Act programs. EPA 2011 Study at 6-43.

more frequently than they were underestimated.¹⁷⁴ There are also numerous examples of individual rules for which this is true. Acid rain has been dramatically reduced and the limits on sulfur dioxide pollution were met faster, and at a strikingly lower price, than anyone expected in 1990.¹⁷⁵ Similarly, despite initial industry protestations about the costs of compliance with MATS, actual implementation costs have been lower than EPA's projections by hundreds of millions—even billions—of dollars.¹⁷⁶

While the Benefit-Cost Rule did not purport to make any specific findings that prior prospective benefit-cost analyses of CAA rulemakings had *actually* overestimated benefits and underestimated costs, the supposed need for the Benefit-Cost Rule seems to be premised on an assumption that that is the case. The preamble to the Benefit-Cost Rule noted that the Rule's origins traced back to a docket opened in response to Executive Order 13,777, which directed agencies to identify regulations that “impose costs that exceed benefits.”¹⁷⁷ The Benefit-Cost Rule preamble also noted that EPA had received comments from industry stakeholders asserting that “the agency either underestimated costs, overestimated benefits, or evaluated benefits and costs inconsistently in its rulemakings. Per E.O. 13777 and based on these public comments, the EPA decided to take further action to evaluate opportunities for reform.”¹⁷⁸ EPA then published an advance notice of proposed rulemaking on potential approaches to changing EPA's benefit-cost analyses, which then led to an EPA Administrator memorandum announcing the intention to propose statute-specific rules outlining benefit-cost analysis procedures for future rulemakings. The Benefit-Cost Rule was the first such statute-specific rule.

While EPA's Response to Comments on the Benefit-Cost Rule acknowledged receiving comments stating that the agency's prior benefit-cost analyses for CAA rulemakings had in fact routinely overestimated costs and underestimated benefits,¹⁷⁹ the responses failed to actually engage with that assertion or with the numerous studies supporting it.¹⁸⁰ EPA also repeatedly responded that “[n]one of the public comments received have led the EPA to materially change its views from the proposal.”¹⁸¹ The Benefit-Cost Rule's preamble did not even acknowledge the comments and studies detailing its historic overestimation of costs and underestimation of

¹⁷⁴ National Center for Environmental Economics, *Retrospective Study of the Costs of EPA Regulations: A Report of Four Case Studies* 4-5 tbl. 1.1 (2014).

¹⁷⁵ EDF, *There They Go Again: AEP Seeks Delay in Health Protections for Children and Elderly*, <http://www.edf.org/sites/default/files/AEP%20-%20There%20They%20Go%20Again.pdf>; see also Sam Napolitano et al., *The U.S. Acid Rain Program: Key Insights from the Design, Operation, and Assessment of a Cap-and-Trade Program*, 20 *Elsevier* 47 (Aug./Sept. 2007), https://www.epa.gov/sites/production/files/2016-03/documents/us_acid_rain_program_elec_journal_aug_2007.pdf (“Since its inception in 1995, the U.S. Acid Rain Program (ARP) has earned widespread acclaim due to dramatic sulfur dioxide (SO₂) and nitrogen oxides (NO_x) emission reductions, far-ranging environmental and human health benefits, and far lower-than expected compliance costs.”).

¹⁷⁶ EDF, *Power Companies' Declining Estimates of the Compliance Costs of Mercury & Air Toxics Standards (MATS)*, http://blogs.edf.org/climate411/files/2014/05/Declining-costs-of-MATS-compliance.pdf?_ga=1.64911789.383468789.1454952534.

¹⁷⁷ 85 Fed. Reg. at 84,135.

¹⁷⁸ *Id.*

¹⁷⁹ EPA-HQ-OAR-2020-0044-0687, at 31, 75, 77, 84.

¹⁸⁰ *Id.* at 32, 77, 85.

¹⁸¹ See, e.g., *id.* at 85.

benefits, despite, as noted above, acknowledging earlier comments that the agency had supposedly done the reverse.

Any objectively reasonable effort to improve EPA’s benefit-cost assessments would have considered the evidence that costs have historically been overestimated and benefits underestimated and the risk that this estimation issue would persist into the future—and recommended proposed solutions. Instead, the Benefit-Cost Rule failed to acknowledge and respond to comments citing studies that disproved one of the assumptions on which the need for the rule was premised. These comments showed that the agency had “offered an explanation for its decision that r[an] counter to the evidence before the agency.”¹⁸² EPA also failed to grapple with the known tendencies, also documented in comments, to overestimate costs and underestimate benefits. To the extent the Benefit-Cost Rule was intended to increase accuracy in agency benefit-cost analyses, failing to consider—and propose solutions to correct—the agency’s demonstrated tendencies to underestimate benefits and overestimate costs constitutes a failure to consider an important aspect of the problem the Rule was ostensibly intended to solve. These failings render the rule arbitrary and capricious.¹⁸³ Therefore, EPA has a rational basis to rescind the rule at this time.

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¹⁸² *State Farm*, 463 U.S. at 43.

¹⁸³ *Id.*

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