

Institute for
Policy Integrity

NEW YORK UNIVERSITY SCHOOL OF LAW

April 15, 2020

Dr. Shaunta Hill-Hammond, Designated Federal Officer, EPA Science Advisory Board
hill-hammond.shaunta@epa.gov

Subject: Initial Comments to the Science Advisory Board Economic Guidelines Review Panel

The Institute for Policy Integrity (“Policy Integrity”) at New York University School of Law¹ submits the following comments to the Science Advisory Board’s Economic Guidelines Review Panel. Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

Request for Additional Materials and Time for Future Comment Opportunities

Both the Panel’s charge questions and EPA’s new draft *Guidelines for Preparing Economic Analyses* (totaling 343 pages) were made available to the public about a week ago. Given the breadth and depth of the issues covered in those documents—as well as given current circumstances due to the ongoing pandemic—it was not possible to fully comment on all important topics by today’s deadline for written comments. Policy Integrity expects that, as part of the panel’s “next steps” alluded to on the agenda for the panel’s April 23 meeting, there will be additional opportunities for public comment. Policy Integrity recommends that the panel consider scheduling multiple additional meetings, organized by subject matter, to allow the public to more fully engage on each important topic.

Additional materials would also assist the public in meaningfully participating through future comments. A redline document comparing the existing version of the *Guidelines* (as issued in 2010 and partially updated in 2014) with the new 2020 draft would be exceedingly useful. Also, some documents relied upon in the draft may not yet be available to the public: for example, internet searches did not readily turn up EPA’s 2020 *Valuing Time Use Changes Induced by Regulatory Requirements*, nor was a website provided in the reference section.² Such documents should be provided to the public in advance of the next opportunity for comments.

Reaffirm Best Practices Throughout the Guidelines in Light of Pending Regulations

Though Policy Integrity does have critiques and recommendations for further improvement of the revised *Guidelines*,³ overall the revised *Guidelines* remain the product of thoughtful work grounded in the economic literature. Its discussion of the benefits from non-target pollutants, for example, can use some refinements (see below), but on the whole is balanced and appropriately reminds analysts of the importance of including such benefits in calculating net social benefits.⁴ Such balanced treatments in the *Guidelines* should be reaffirmed in the face of EPA’s pending rulemaking on “Increasing Consistency and

¹ This document does not purport to present New York University School of Law’s views, if any.

² EPA, *Review Copy of Guidelines for Preparing Economic Analyses* at 8-37 (2020) [hereinafter *2020 Draft Guidelines*].

³ When these comments reference the “*Guidelines*,” they are referring to the April 2020 revisions, rather than the existing 2010/2014 document, unless otherwise noted.

⁴ *Id.* at 5-3.

Transparency in Considering Costs and Benefits in the Rulemaking Process,” and on “Strengthening Transparency in Regulatory Science,” because those rulemakings proposals strike a very different tone in casting doubt on the benefits from non-target pollutants.⁵

While the draft *Guidelines* assert that specific statutes may “mandate specific economic analyses” that are “not discussed here,”⁶ the *Guidelines* also emphasize, at least with respect to the consideration of alternatives, that good economic analyses aim to inform the public, Congress, and decisionmakers of all the effects of policy options and so “should identify those options that are more efficient or cost-effective *even if the regulatory approaches may be prohibited by statutory or judicial requirements (OMB 2003).*”⁷ The SAB should encourage EPA to make similar statements with respect to the entire economic analysis, such that analysts include full estimates of all important costs and benefits, consistent with best economic practices, even if some decisionmakers may feel that they are not permitted by statute to fully consider those effects in selecting between regulatory alternatives.

Externalities versus Other Market Failures and Social Purposes

The new discussion of market failures and alternatives added to Chapter 3 of the *Guidelines* seems promising and helpful, though it requires more review. Initially, there are a few issues to flag.

Though the *Guidelines* generally discuss additional social purposes for regulation, the draft also includes this sentence: “For pollution problems, the social purpose is to correct a ‘market failure.’”⁸ While classic externalities and other market failures are surely the most common and often driving reasons for federal environmental regulation, it is not true that the only social purpose for addressing pollution problems “is” correcting market failures. Distributional equity, for instance, could also be the supplemental or even primary goal in addressing pollution. This sentence should be revised.

Along the same lines, classic externalities and informational asymmetries are not the only market failures that justify environmental regulation. The draft *Guidelines* add a very helpful discussion of market failures in the form of behavioral anomalies, such as loss aversion and information processing limitations; unfortunately, the *Guidelines* only connect such behavioral-economics-style market failures to the concept of regulatory “nudges.”⁹ In fact, such additional market failures have historically played a key role in helping justify not just nudges, but also the direct regulation of energy efficiency and emissions.¹⁰ The Science Advisory Board should encourage EPA to consider these additional types of market failures (sometimes called “internalities”) in Chapter 3 of the *Guidelines* as well.

⁵ See Policy Integrity, Comments on Advance Notice of Proposed Rulemaking for “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process,” (Aug. 13, 2018), https://policyintegrity.org/documents/EPA_CBA_ANPR_Comments.pdf; Policy Integrity, Comments to the Chartered Science Advisory Board on Consideration of the Scientific and Technical Basis of EPA’s Proposed Rule “Strengthening Transparency in Regulatory Science” (Jan. 10, 2020), https://policyintegrity.org/documents/Policy_Integrity_Comments_on_SAB_Draft_Report_on_Science_Transparency_Rule_%28Signed%29.pdf.

⁶ 2020 Draft *Guidelines* at 2-1.

⁷ *Id.* at 3-4 (emphasis added).

⁸ *Id.* at 3-2.

⁹ *Id.* at 4-16.

¹⁰ See, e.g., Policy Integrity, Supplemental Comments on the Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks at 3-5, 6-14 (Dec. 21, 2018), https://policyintegrity.org/documents/Policy_Integrity_Supplemental_Comments_NHTSA_2018.12.21.pdf (detailing the role of such market failure in justify regulations across multiple agencies and multiple decades, up until the most recent vehicle efficiency and greenhouse gas rules).

While the *Guidelines* clearly acknowledge that the existence of market failures or irrational behaviors (like the externalities discussed above) can result in regulations generating otherwise-unrealized private cost savings, the *Guidelines* set a very high bar for justifying such private cost savings: “empirical evidence specific to the affected market.”¹¹ That is a needlessly high bar. For example, EPA has (until recently) long cited theoretical and empirical evidence for why consumers of passenger cars and light-duty trucks will fail to achieve valuable energy savings in the marketplace without regulations on vehicle efficiency and emissions. If EPA believes it is justified to also regulate motorcycle emissions and efficiency for similar reasons, would the agency really need motorcycle-specific empirical evidence on top of the broader economic literature? The Science Advisory Board should encourage EPA to be less skeptical of the potential for regulations to help achieve private cost savings, and EPA should be able to base cost-saving regulations on a reasonable theory of market failures informed by relevant literature and evidence, even if no quantitative evidence specific to an individual market yet exists.

Finally, on the subject of Chapter 3 and market failures, when the *Guidelines* reference the fact that, under conditions of perfect markets with full information, workers may rationally accept a job with greater risk in exchange for higher wages, it is worth dropping a footnote to remind readers that, in fact, labor markets are rarely perfectly competitive and the workers who seek high-risk jobs may not have perfect information or equal bargaining power—and, further, that such imperfections may cause an underestimation of the value of statistical life when based on labor market studies.

The Question of “Standing” Should Directly Discuss Climate Change

Nowhere is the question of counting domestic-only versus global effects more important than in the context of climate change. And yet, the new section on “standing” in the draft *Guidelines* does not mention climate change. This omission is particularly noticeable when the *Guidelines* insist that “for domestic policy making standing is typically limited to the national level *in order to maximize the welfare of residents.*”¹² However, in the context of climate regulations, ignoring climate effects that occur outside the geographic borders of the United States will *fail to maximize U.S. welfare*. As Policy Integrity has detailed in multiple comments to EPA, not only does a domestic-only estimate of the social cost of greenhouse gases fail to consider how international effects will spill over to directly affect U.S. welfare through our globally interconnected economies, health systems, and security, and not only does a domestic-only estimate fail to consider the multiple extraterritorial interests of U.S. citizens and residents, but it also fails to consider the repercussions from foreign reciprocal actions. If all other countries were to likewise consider only their own domestic climate effects and ignore the damages its emissions cause to the United States, U.S. welfare would suffer. Indeed, economic models have shown that for such reasons, the “strategic” social cost of carbon should always be higher than the domestic-only social cost of carbon.¹³ The SAB should remind EPA that how the United States treats other countries will directly affect U.S. welfare—especially when it comes to climate change.

The draft *Guidelines* do appropriately note that just because a regulated entity’s facilities are located in the United States does not necessarily mean that regulatory effects are limited to domestic citizens if those firms have foreign shareholders, and the *Guidelines* rightly call for a balanced approach to

¹¹ 2020 Draft *Guidelines* at 5-14.

¹² *Id.* at 5-1 (emphasis added).

¹³ See, e.g., Policy Integrity et al., Comments on Quantifying and Monetizing Greenhouse Gas Emissions in the Safer Affordable Fuel-Efficient Vehicles Proposed Rule at 6-13 (Oct. 26, 2018), https://policyintegrity.org/documents/Emissions_Standards_PRIA_SCC_Comments_Oct2018.pdf.

standing between costs and benefits.¹⁴ However, that statement is followed by a recommendation to “report separately” any “impacts beyond national borders.”¹⁵ It seems unlikely that the *Guidelines* intend to apply that recommendation to the regulatory costs or cost-savings accruing in part to foreign shareholders; given recent practices by EPA, it seems more likely instead that the *Guidelines* intend for certain benefits or forgone benefits to be “reported separately.” Yet it would not be balanced treatment of costs and benefits to relegate certain climate effects to a separate reporting while continuing to group all cost effects together regardless of the shares held by foreign entities. Nor is it clear, in the context of climate change, what it means to report certain effects “separately” from a domestic-only accounting when the existing models cannot produce any accurate estimate of a “domestic-only” social cost of carbon.¹⁶

The SAB should encourage EPA to take a different, and more balanced, approach to “standing” in the context of climate change.

Reaffirm the Full and Balanced Treatment of “Changes in Other Environmental Contaminants”

The draft *Guidelines* avoid using the terms “co-benefits” or “ancillary benefits” because they can be misinterpreted “as having legal or policy meaning that is unintended.”¹⁷ Instead, the *Guidelines* use phrases like “other environmental contaminants” or “contaminants” that are not “the primary statutory objective.”¹⁸ While EPA is certainly correct that terms like “co-benefits” have at times led to inappropriately relegating such effects to second-class status, and while the draft *Guidelines* do appropriately reaffirm that all important effects should be calculated in totaling net social benefits, it is not clear that the new terminology adopted by the *Guidelines* will fare much better. In particular, as discussed more below, distinguishing between pollutants that are the “statutory objective” and those that are “other” could lead to a similarly inappropriate belittlement of certain key effects.

The draft *Guidelines* call to “clearly distinguish between benefits that arise from the statutory objective of the regulation and other welfare effects of the regulation, when it is possible to do so.”¹⁹ In theory some distinction could perhaps be discussed in the text of a preamble or regulatory impact analysis. However, drawing such distinctions in a summary table, without providing sufficient context, could lead to the “other welfare effects” being discounted relative to the “benefits from statutory objective.” Such a result would be inconsistent with the *Guidelines* policy that “when calculating net benefits all welfare effects should be included, as it is the total willingness to pay for all changes induced by a regulation that determinates economic efficiency.”²⁰ Moreover, in practice, distinguishing between an effect that meets the “statutory objective” and one that does not is challenging. Take, for example, the benefits that come from reducing particulate matter when regulating mercury and other toxic pollutants under Section 112 of the Clean Air Act: though particulate matter certainly can also be regulated through other statutory provisions, the benefits from particulate matter reductions are directly relevant to the evaluation of whether it is “appropriate and necessary” under Section 112 to regulate power plants.²¹

¹⁴ Compare *id.* at 14-15 with 2020 Draft *Guidelines* at 5-2.

¹⁵ 2020 Draft *Guidelines* at 5-2.

¹⁶ See Policy Integrity Comments on Monetizing Greenhouse Gas Emissions, *supra*, at 16-20.

¹⁷ 2020 Draft *Guidelines* at 5-18, n.129.

¹⁸ *Id.* at 5-18 to 5-19.

¹⁹ *Id.* at 5-3.

²⁰ *Id.* at 5-3.

²¹ See Policy Integrity, Comments to SAB on Scientific and Technical Basis of EPA’s Proposed Mercury and Air Toxics Standards for Power Plants Residual Risk and Technology Review and Cost Review at 3 (Jan. 10, 2020),

The SAB should reassess whether language about “other” welfare effects will prevent in inappropriate belittlement of key effects, and the SAB should advise EPA on how to ensure full and balanced treatment of all key effects without making subjective and problematic determinations about which effects meet a “statutory objective” and which do not.

The draft *Guidelines* also include some language that (though the wording is somewhat unclear) seems to suggest that when analysts expect a rule to have large co-benefits, they should consider alternative ways of “obtaining these unrelated benefits”—presumably referring to options that use other authorities to conduct separate rulemakings to achieve those co-benefits more directly.²² This suggestion first requires clarification as to what exactly is meant, and then once clarified the suggestion must be carefully reviewed by the SAB and the public. For starters, undertaking multiple regulations, each focused on individual pollutants rather than a unified, multi-pollutant regulatory strategy, may carry additional costs: administrative costs from designing and issuing multiple regulations; paperwork costs from implementing and complying with multiple regulations; and any lost efficiencies that a multi-pollutant compliance strategy may achieve that distinct pollutant-specific rulemakings might preclude. Additionally, any analysis of a regulatory alternative that requires a separate rulemaking would have to consider the realistic probability of whether such alternate or separate rulemakings could actually occur. Such an analysis could prove vexing if not impossible for an administration, especially when different authorities span across different agencies or different offices within an agency, each with their own rulemaking and enforcement capacities. Indeed, the *Guidelines* generally do not permit EPA to consider separate rules that have not yet even been proposed let alone finalized in either the baseline or policy scenarios of a cost-benefit analysis.²³ Moreover, as courts have repeatedly reminded agencies, the existence of overlapping authorities does not excuse an agency from rationally implementing all of its statutory mandates: “The two obligations may overlap, but there is no reason to think the two agencies cannot both administer their obligations”²⁴; “Just as EPA lack authority to refuse to regulate on the grounds of [the existence of another] statutory authority, EPA cannot defer regulation on that basis.”²⁵ As the *Guidelines* already acknowledge, the rational implementation of rulemaking authorities requires the consideration of net social benefits including from reductions of other environmental contaminants. The SAB should ask EPA first to clarify its suggestion on considering other “ways of obtaining these unrelated benefits,” and then should carefully review that proposal.

Resolve the Inconsistent Positions on Which Other Regulations Are Part of the Baseline

The draft *Guidelines* seems to make inconsistent statements on when non-finalized regulations should be part of a baseline. On the one hand, the *Guidelines* say that only “if an industry is *certain* to be regulated by some other means (e.g., by court order or state action) but that regulation has not yet been implemented” [emphasis original] should that regulation be included in the baseline.²⁶ Though the

https://policyintegrity.org/documents/J_Lienke_-_written_statement_for_SAB_re_MATS_Reconsideration_-_January_2020_%28signed%29.pdf.

²² 2020 Draft *Guidelines* at 5-19 (“[I]f the regulation is expected to induce large benefits from changes in environmental contaminant(s) beyond those arising from the primary statutory objective of the regulation, an analysis of a policy option where those contaminant(s) are regulated, either separately or simultaneously with the contaminants that are the primary statutory objective of the regulation, it may be useful [sic] to determine whether there are more economically efficient or appropriate ways of obtaining these unrelated benefits.”).

²³ *Id.* at 5-10.

²⁴ *Massachusetts v. EPA*, 549 U.S. 497, 532 (2007).

²⁵ *Coalition for Responsible Regulation v. EPA*, 684 F.3d 102, 127 (D.C. Cir. 2012).

²⁶ 2020 Draft *Guidelines* at 5-6.

term “certain” is not defined, it clearly suggests something beyond mere speculation about what actions states or courts might take in the future. The *Guidelines* also note that not even a legal obligation for a state to act necessarily means that such unfinalized state rules should go into the baseline; instead, “only if the state would issue the water quality standards in the absence of EPA action can a *reasonable case* be made for including the state action in the baseline.”²⁷ The standards seem to be reasonableness and some degree of certainty.

Yet, on the other hand, the *Guidelines* inappropriately hold up the 2019 repeal of the Waters of the United States rule as an exemplar of the use of multiple baselines. That repeal adjusted its baselines by alleging “uncertain[ty]” on “the degree to which states would continue to regulate their waters at the 2015 standard.” In fact, not only was *any* state action following the repeal extremely uncertain to ever take place, but the assumptions made in the baselines for the analysis of the Waters of the United States repeal were eminently *unreasonable*—including the assumption that the very same states that were vigorously litigating to repeal the Clean Water Rule would turn around and immediately enact similar protections on their own.²⁸

The Science Advisory Board should encourage EPA not to use the Clean Water Rule repeal or replacement as an example of proper consideration of state regulations in a baseline, but instead should support the standards of certainty and reasonableness in defining the baseline.

The Section on Discount Rates Needs Further Updates

The Charge Questions memorandum did not flag Chapter 6 on discounting as having undergone significant revisions. The draft *Guidelines* do seem to make some small changes that help emphasize that rules with intergenerational effects should focus on a consumption rate of interest for the discount rate (as opposed to a rate based on returns to private capital) but also consider a lower discount rate or a declining schedule of discount factors.²⁹ Those are good tweaks to the existing guidelines, but a revised set of guidelines should go further. The SAB should encourage EPA to specifically recommend a schedule of declining discount rates to use in regulatory analyses with sufficiently long time horizons—and perhaps to use for all analyses. Indeed, the default 3% and 7% discount rates for standard regulatory analyses also need to be rethought, most notably because, in January 2017, the Council of Economic Advisers found that both values were out of date.³⁰ The National Academy of Sciences has also recommended that for intergenerational climate effects, discount rates should be based on consumption rates of interest, and that agencies should explore a declining discount rate framework, which would also help harmonize the approach to discount rates between climate and non-climate costs and benefits.³¹ Besides the need to rethink discount rates in the context of climate change regulations, EPA’s recent analysis of its water quality standards for lead and copper, which had monetized net benefits exceeding costs at a 3% discount rate but not at a 7% discount rate, also highlighted the need

²⁷ *Id.* at 5-10 (emphasis added).

²⁸ See Policy Integrity, Comments to the SAB on Commentary on the Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act at 6-7 (Jan. 10, 2020), https://policyintegrity.org/documents/Policy_Integrity_Comments_to_Chartered_Science_Advisory_Board_on_Clean_Water_Rule_%28signed%29.pdf.

²⁹ *Id.* at 6-24.

³⁰ CEA, *Discounting for Public Policy* (Jan. 2017), https://obamawhitehouse.archives.gov/sites/default/files/page/files/201701_cea_discounting_issue_brief.pdf.

³¹ Nat’l Acad. of Sci., *Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide* at 19 (2017), <https://www.nap.edu/download/24651#>.

for more agency guidance on discount rates, including on the issue of private versus social discount rates.³²

Updating the Value of Mortality Risk Reductions

While Policy Integrity has not yet had time to fully review all the definitions in the glossary (as per Charge Question #5), it is odd that the definition of “Value of Statistical Life” uses an example for calculating the VSL a figure (\$5 million)³³ that is most definitely not EPA’s actual estimate of the value of mortality risk reductions (i.e., \$7.4 million in \$2006).³⁴ Instead, it would be more appropriate for the *Guidelines* first to use EPA’s actual VSL as the example in the definitions section, and second to present all values of the VSL in inflation-adjusted current dollars (such as 2019\$), as the SAB has recommended before.³⁵

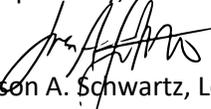
Indeed, it is not clear that the *Guidelines* yet reflect all of the SAB’s past recommendations on the VSL. For example, while this draft of the *Guidelines* make a special note that VSL estimates based on risks of immediate fatalities may overestimate what people are willing to pay for reducing the risk of a delayed health effect like cancer,³⁶ the *Guidelines* do not mention EPA’s prior proposals for a cancer premium, the SAB’s endorsement in 2011 of further study of a cancer differential,³⁷ or the SAB’s continued openness in 2017 to future evidence of a cancer premium.³⁸ In short, there may be just as many reasons to think that the current VSL *underestimates* willingness to pay to avoid cancer risks from environmental contaminants, and so the *Guidelines’* note about a possible overestimate reflects an unbalanced view.

Other Issues for Further Review

Policy Integrity hopes to comment more fully during the SAB review panel’s next steps on the additional discussion of employment effects added to the *Guidelines*. It is essential to keep analyses of employment effects balanced, as regulations can trigger both hiring as well as layoffs. The reference in the *Guidelines* to “connections between wealth and health”³⁹ in particular deserves careful review, since much of the literature actually suggests not a direct wealth-health connection, but instead that both effects are related to other factors, like education.

Policy Integrity also would like the chance to review more carefully the *Guidelines* on benefit transfer analysis, CGE models, and other subjects in future comment opportunities during this SAB review process.

Respectfully,


Jason A. Schwartz, Legal Director
Institute for Policy Integrity
jason.schwartz@nyu.edu

³² See Policy Integrity, Comments on National Primary Drinking Water Regulations: Lead and Copper Rule Revisions (Feb. 12, 2020), https://policyintegrity.org/documents/EPA_Lead_Copper_Rule_Comments_2020.02.11.pdf.

³³ *Id.* at i-12.

³⁴ *Id.* at B-1.

³⁵ See SAB’s 2017 Review of EPA’s Proposed Methodology for Updating Mortality Risk Valuation Estimates for Policy Analysis.

³⁶ 2020 Draft *Guidelines* at B-5.

³⁷ See SAB’s 2011 Review of Valuing Mortality Risk Reductions for Environmental Policy: A White Paper.

³⁸ See *supra*.

³⁹ 2020 Draft *Guidelines* at 9-18.

Additional Materials:

Policy Integrity, Comments on Advance Notice of Proposed Rulemaking for “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process,” (Aug. 13, 2018), https://policyintegrity.org/documents/EPA_CBA_ANPR_Comments.pdf

Policy Integrity, Comments to the Chartered Science Advisory Board on Consideration of the Scientific and Technical Basis of EPA’s Proposed Rule “Strengthening Transparency in Regulatory Science” (Jan. 10, 2020), https://policyintegrity.org/documents/Policy_Integrity_Comments_on_SAB_Draft_Report_on_Science_Transparency_Rule_%28signed%29.pdf.

Policy Integrity, Supplemental Comments on the Safer Affordable Fuel-Efficient Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks (Dec. 21, 2018), https://policyintegrity.org/documents/Policy_Integrity_Supplemental_Comments_NHTSA_2018.12.21.pdf

Policy Integrity, Comments to SAB on Scientific and Technical Basis of EPA’s Proposed Mercury and Air Toxics Standards for Power Plants Residual Risk and Technology Review and Cost Review (Jan. 10, 2020), https://policyintegrity.org/documents/J_Lienke_-_written_statement_for_SAB_re_MATS_Reconsideration_-_January_2020_%28signed%29.pdf

Policy Integrity, Comments to the SAB on Commentary on the Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act (Jan. 10, 2020), https://policyintegrity.org/documents/Policy_Integrity_Comments_to_Chartered_Science_Advisory_Board_on_Clean_Water_Rule_%28signed%29.pdf.

Policy Integrity, Comments on National Primary Drinking Water Regulations: Lead and Copper Rule Revisions (Feb. 12, 2020), https://policyintegrity.org/documents/EPA_Lead_Copper_Rule_Comments_2020.02.11.pdf