



July 22, 2024

To: Environmental Protection Agency Science Advisory Board

Re: Draft report of the Environmental Justice Science and Analysis Review Panel on the Draft Revised Technical Guidance for Assessing Environmental Justice in Regulatory Analysis, 89 Fed. Reg. 53077 (Docket No. FRL – 12041-01-OA)

The Institute for Policy Integrity at New York University School of Law (Policy Integrity)¹ respectfully submits the following comments to the Environmental Protection Agency (EPA) Science Advisory Board (SAB) regarding its *Draft Report on the EPA's Draft Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (Draft Revised EJTG).² Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decision making through advocacy and scholarship in the fields of administrative law, economics, and public policy.

EPA SAB seeks comments on its draft peer review report of the EPA's Draft Revised EJTG, which reviews the methods and procedures described in EPA's Draft Revised EJTG for evaluating environmental justice concerns in regulatory actions. In these comments, Policy Integrity makes three key recommendations that the SAB can use to advise EPA:

- 1. The SAB should advise EPA to distinguish EJ analyses from analyses that characterize distributional effects in the Draft Revised EJTG.** An analysis of the distributional effects of regulatory actions can provide some insight into how costs and benefits may or may not be equitably distributed across populations, but they do not fully address the distributional, procedural, recognition, and restorative aspects of environmental justice (EJ). Similarly, conducting an EJ analysis may not necessarily supplant the need to also conduct a study that assesses distributional effects on other populations of concern. EPA should clearly lay out these differences since conflating the two provides unclear direction on what analysts need to do for each distinct analysis.
- 2. When conducting quantitative analyses, the SAB should advise EPA to encourage analysts to monetize the effects when possible instead of presenting only probability risks or volumetric values.** By not monetizing the effects of regulatory actions as they pertain to EJ issues, analysts run the risk of presenting information in ways that will cause decisionmakers and the public to overlook important consequences due to

¹ This document does not purport to represent the views, if any, of New York University School of Law.

² *Draft Revision of Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*, 88 Fed. Reg. 78,358 (proposed Nov. 15, 2023) (Docket No. EPA-HQ-OA-2013-0320) (Draft Revised EJ Technical Guidance).

documented cognitive biases. Additionally, by converting all information to a common metric, monetization will allow analysts to compare and contrast baseline numbers with other policy alternatives.

- 3. If EPA determines that it cannot conduct a particular analysis or cannot fully monetize or quantify elements of an analysis, the SAB should advise EPA to document its reasons behind that decision.** Documenting such instances of decisionmaking will make the agency’s process less opaque, encourage transparency, and improve communication with the public.

Background

EPA first published the *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis* (EJ Technical Guidance) in 2016.³ The purpose of the EJ Technical Guidance was to outline analytic expectations and discuss technical approaches and methods that can be used by EPA analysts to evaluate the environmental justice (EJ) effects of regulatory actions. For the Draft Revised EJ Technical Guidance, EPA states, “Updates to the technical guidance reflect advancements in the state of the science; other new peer-reviewed Agency guidance documents; and new priorities and direction related to the conduct of EJ analysis, including Executive Order 14096.”⁴

I. EPA Should Distinguish EJ Analyses From Analyses That Assess Distributional Effects in the Draft Revised EJTG.

Analyses that characterize how regulatory effects are disaggregated across various population groups can be an important tool to examine distributional issues within the context of the environment. But, they do not address all issues that are generally part of an environmental justice⁵ analysis.

There are four key pillars for the types of “justice” that the movement seeks to address: (1) distributive (equitable distribution of environmental risks and benefits); (2) procedural (inclusion and meaningful participation in decisionmaking); (3) social (processes that proactively recognize and tackle rooted inequities); and (4) corrective (rectifying injustices and inequalities).⁶ Executive Order 14096 calls attention to the four pillars in various ways, including: to the distributional pillar by requiring agencies to “take steps to address disproportionate and adverse

³ EPA, *Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*, EPA-HQ-OW-2023-0222-213 (2016) (EJ Technical Guidance).

⁴ *Public Comment on the Revised Technical Guidance for Assessing Environmental Justice in Regulatory Analysis*, 88 Fed. Reg. 78,358 (proposed Nov. 15, 2023) (Docket No. EPA-HQ-OA-2013-0320).

⁵ Exec. Order No. 14096 § 2(b), 88 Fed. Reg. 25,251, 25,253 (April 26, 2023) defines environmental justice as the “just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people: (i) are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and (ii) have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.”

⁶ Robert Kuehn, *A Taxonomy of Environmental Justice*, 30 ELR 10681 (2004).

human health and environmental effects”⁷; (2) to the procedural pillar by asking agencies to provide opportunities for “the meaningful engagement of persons and communities with environmental justice concerns” as appropriate and consistent with law⁸; (3) to the social pillar by calling for analysis to affirmatively identify disproportionate effects⁹; and (4) to the corrective pillar by calling on agencies to “address historical inequities [and] systematic barriers.”¹⁰ An EJ analysis focuses on identifying and addressing “disproportionately high and adverse human health or environmental effects” and focused only on that and not the other effects.¹¹

If analysts conduct an analysis of distributional effects in a tailored way, they can provide insight on the “distributive” aspect of EJ (the first pillar) by illustrating how costs and benefits may or may not be equitably distributed across EJ populations. Moreover, these analyses can boost transparency for stakeholders and concerned citizens enabling action,¹² which advances the distributional and procedural aspects of EJ. But by itself, this kind of analysis cannot fulfill all of the distributional, procedural, social, and corrective pillars of EJ. Similarly, conducting an EJ analysis does not necessarily obviate the need to conduct a separate analysis of distributional effects, because even a monetized assessment of the distribution of EJ effects will not capture the distribution of non-EJ effects resulting from a policy choice, or the distributional effects on populations other than EJ populations.

The SAB should advise EPA to clearly lay out these differences, since conflating the two analyses provides unclear direction on what analysts need to do for each distinct process. It is important to note that while analyzing the distribution of effects helps inform certain EJ issues, it does not substitute for a thorough EJ analysis and process that (ideally) addresses all four pillars of the EJ movement.

II. EPA Should Encourage Analysts to Monetize Effects When Feasible, Instead of Presenting Only Quantitative Probability Risks or Volumetric Values

EPA notes at multiple points in the Draft Revised EJTG that quantitative analyses are preferred over qualitative ones. That statement reflects best practices, but EPA should further emphasize that monetized analyses are preferred over other quantitative ones when possible. Monetization refers to assigning dollar values to outcomes or effects.¹³ Economic theory

⁷ Exec. Order No. 14096 § 3(ii), 88 Fed. Reg. at 25,253.

⁸ *Id.* at §3(vii), 88 Fed. Reg. at 25,254.

⁹ *Id.* at §3(a)(i), 88 Fed. Reg. at 25,253.

¹⁰ *Id.* at §3(a)(iii), 88 Fed. Reg. at 25,253-54.

¹¹ Exec. Order No. 12898 §1-101, 59 Fed. Reg. 7,629 (February 16, 1994).

¹² Caroline Cecot, *Symposium on Modernizing Regulatory Review: Stimulating Distributional Analysis*, Notice & Comment – A blog for the Yale Journal on Regulation (June 7, 2023) <https://www.yalejreg.com/nc/stimulating-distributional-analysis-by-caroline-cecot/>

¹³ Note that monetization is distinct from applying weights in cost-benefit analyses. Utility (or welfare) weights refer to a set of weights that are applied to the benefits and costs accruing to groups at varying levels of income in order to account for the diminishing marginal utility of income. According to the principle of diminishing marginal utility, each additional unit of consumption provides incrementally lesser benefits to the recipient, implying that one-dollar worth of consumption has a greater impact on the welfare of a poor person than it does on the welfare of a wealthy person. See Paul Krugman And Robin Wells, MICROECONOMICS at 251-252 (7th Edition, 2008) for details on the principle of diminishing marginal utility, and Daniel Acland and David Greenberg, *Distributional Weighting and Welfare/equity Tradeoffs: A New Approach*, 14 Journal of Benefit-Cost Analysis 68, 69 (2023) for a discussion about the use of utility weights in benefit-cost analyses.

documents two cognitive biases that explain why monetization is a better tool for quantification than probability risk values or volume estimates (for example, metric tons of CO₂ emissions, or parts per million of heavy metal concentration in water). The first, “probability neglect,” causes people to disregard probabilities under uncertain conditions because it is difficult for them to understand how risks and probabilities work at a basic level, as documented by Rottenstreich and Hsee in a famous experiment.¹⁴ The second cognitive bias is “scope neglect,” which causes people to ignore the magnitude of the problem when estimating how valuable it will be to address the problem.¹⁵ By only quantifying (and not monetizing) the effects of regulatory actions as they pertain to EJ issues, agencies run the risk of presenting information in ways that will cause decisionmakers and the public to overlook important consequences.

Monetizing the effects will have the added advantage of converting all information to a common metric. This will allow analysts to compare and contrast the baseline numbers with other policy alternatives, leading to an improved decision-making process and more informed policymaking.¹⁶

III. EPA Should Instruct Analysts to Document Justifications for Decisions to Not Conduct a Particular Analysis

In the Draft Revised EJTG, EPA encourages analysts to maintain documentation of their analytical process in three key places:

1. In Section 3.1 of the Draft Revised EJ Technical Guidance, EPA “encourages analysts to document key reasons why a particular question cannot be addressed to help identify future priorities for filling key data and research gaps.”
2. In Section 3.2, it encourages the documentation of the “process of identifying what level of analysis is feasible.”

¹⁴ See Yuval Rottenstreich and Christopher Hsee, *Money, Kisses, and Electric Shocks*, 12 *Psychological Science* 185, 188 (2001) find that participants were willing to pay roughly similar amounts to avoid receiving electric shocks with large differences in certainty levels. They were willing to pay \$7 to avoid a 1% chance of receiving a shock, compared to only \$3 extra (\$10 in total) to avoid an almost certain chance (99%) of receiving the shock.

¹⁵ See e.g., William Desvousges, F. Reed Johnson, Richard Dunford, Kevin Boyle, Sara Hudson, KN Wilson, *MEASURING NONUSE DAMAGES USING CONTINGENT VALUATION: AN EXPERIMENTAL EVALUATION OF ACCURACY* at 66 (2nd Edition, 2010) find that people are unable to meaningfully distinguish between the value of preventing 2,000 migratory birds from dying in oil ponds, compared to 20,000, and 200,000 birds.

¹⁶ It should be noted that monetization refers to assigning dollar values to outcomes or effects and not to applying utility weights. Utility (or welfare) weights refer to a set of weights that are applied to the benefits and costs accruing to different groups of concern in order to account for diminishing marginal utility. According to the principle of diminishing marginal utility, each additional unit of consumption provides incrementally lesser benefits to the recipient, implying that one-dollar worth of consumption has a greater impact on the welfare of a poor person than it does on the welfare of a wealthy person. Monetizing effects and applying utility weights are therefore separate analytical choices, and the latter may not always be appropriate in EJ analyses. See Paul Krugman and Robin Wells, *MICROECONOMICS* at 251-252 (2008) for details on the principle of diminishing marginal utility, and Daniel Acland and David Greenberg, *Distributional Weighting and Welfare/equity Tradeoffs: A New Approach*, 14 *Journal of Benefit-Cost Analysis* 68, 69 (2023) for a discussion about the use of utility weights in benefit-cost analyses.

3. In Section 5.3.2.1, EPA recommends that analysts document their rationale if they choose to assess population groups defined by risk- or effect-modifiers in the scoping stage of an HHRA.

All three points mentioned above reflect best practices, but there is an additional instance where EPA can encourage further documentation: when they decide not to conduct any analyses because it is either not required or does not offer additional insights.¹⁷ In such a scenario, EPA recommends that analysts coordinate with economists from the Office of Policy to evaluate the feasibility of analyzing these costs.¹⁸ To encourage transparency and improve communication with the public, EPA can go further and ask analysts to also provide a concrete justification and document situations when it is decided (either by themselves, or after consulting with the Office of Policy) to not conduct a particular analysis because is either not required or not relevant.

Respectfully,

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¹⁷ Draft Revised EJ Technical Guidance, *supra* note 2, at 76: “For instance, often the costs of regulatory action are passed onto consumers as higher prices or changes in wages that are spread fairly evenly across many households. When these price increases are small, the effect on an individual household also will likely be relatively small. In this case, further analysis is unlikely to yield additional insights.”

¹⁸ *Id.*