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Comments on EPA's proposal "Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process"

Submitted online via Regulations.gov to docket EPA-HQ-OAR-2020-0044-0001

The following comments are being submitted by the University of California, San Francisco (UCSF) Program on Reproductive Health and the Environment (PRHE).

We appreciate the opportunity to provide comments on the U.S. Environmental Protection Agency (EPA) proposed rulemaking "Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process."¹

This proposed cost-benefit rule proposes to require that EPA summarize benefit-cost information with and without co-benefits (positive side effects of regulation), which may encourage decision-makers to downplay co-benefits when deciding whether a proposal is economically justified. This methodology is a far departure from established, peer-reviewed and validated analytical practices; co-benefits must be considered as part of any benefit-cost analysis (BCA) conducted according to current scientific principles.² The proposal as written could seriously harm public health, putting vulnerable populations such as infants and children most at risk. Co-benefits are critical to health-protective policy, best exemplified by the Mercury and Air Toxics Standards (MATS) that EPA issued for power plants in 2012. MATS drove significant decreases in the releases of mercury and other toxic chemicals (such as fine particle pollution) from electric utility steam generating units (EGUs),³ resulting in large benefits to public health, especially for children.⁴ We agree with the International Society for Environmental Epidemiology (ISEE) North America Chapter, and are strongly opposed to this regulation; we recommend that EPA withdraw the proposed rulemaking immediately.

EPA should withdraw this proposed rule immediately.

The proposal contains fundamental flaws and overall will not improve the use of science for decision-making, and EPA has failed to provide a reasonable science or policy rationale supporting these actions. It is unclear why a formal rulemaking is necessary, given existing guidelines already provide consistent and transparent cost-benefit analyses, such as Executive Order 12866, which requires cost-benefit analyses for significant rules, OMB Circular A-4, and EPA's Guidelines for Preparing Economic Analysis.^{5,6,7} EPA's National Center for Environmental Economics (NCEE) is also already updating the

¹ EPA (2020). Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process. Available: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2020-0044-0001>

² US EPA. (2010). Guidelines for Preparing Economic Analyses. Washington, DC: National Center for Environmental Economics, US EPA. Available: <https://www.epa.gov/sites/production/files/2017-08/documents/ee-0568-50.pdf>

³ US EPA. (2018). Introduction to the Toxics Release Inventory and the 2016 TRI National Analysis Report. Washington, DC: US EPA. Available: https://www.epa.gov/sites/production/files/2018-01/documents/2016_trina_webinar.pdf

⁴ Giang, A., & Selin, N. E. (2016). Benefits of mercury controls for the United States. *Proceedings of the National Academy of Sciences*, 113(2), 286–291. <https://doi.org/10.1073/pnas.1514395113>

⁵ Executive Order 12866. (1993). Regulatory Planning and Review. Available: <https://www.archives.gov/files/federal-register/executive-orders/pdf/12866.pdf>

⁶ Office of Management and Budget, (2003). Circular A-4: Regulatory Analysis. Washington D.C.: US Government Publishing Office. Available: <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A4/a-4.pdf>

⁷ US EPA (December 2010) Guidelines for Preparing Economic Analyses. pp.7-3. Washington D.C.: US EPA. "Analysts should take care to think through potential secondary or indirect effects of the policy options as well, as these may prove to be important."

Agency's "Guidelines for Preparing Economic Analysis," and the EPA Science Advisory Board (SAB) has released a draft report offering comments and revisions.⁸

The proposed rule imposes arbitrary standards and criteria governing the inclusion of scientific studies to inform the Agency's understanding of concentration-response relationships, which could unduly restrict the scientific data being considered by the Agency. The proposed rule supports making data and models used to inform a BCA "publicly available," which would exclude critical scientific data from consideration.⁹ EPA and numerous other agencies such as the Food and Drug Administration (FDA)) routinely make regulatory decisions without having access to publicly available data. Lacking access to part or all of the data and models would not prevent EPA from determining the validity of scientific methods and conclusions or using this science to inform decisions, as EPA repeatedly states in its own plan to increase access to results of EPA-funded scientific research.¹⁰ We address this point in detail in our comments to EPA on its proposed rule and supplement to "Strengthen Transparency in Regulatory Decision making."¹¹ Overall, we find the proposed rule is not consistent with the principles of open science, and lacks a scientific basis or policy rationale.^{12,13}

The rule inappropriately limits the type of scientific data that can be used in economic analysis as the currently proposed rule would codify a detailed set of "best practices" for cost-benefit analyses of the Clean Air Act. In particular, the proposed rule would prevent EPA from valuing the full range of potential health effects, as the rule proposes to limit quantifying benefits for only those health effects where the "scientific evidence indicates there is (a) a clear causal or likely causal relationship between pollutant exposure and effect".¹⁴ This is in direct contradiction to economic principles that have been published by USEPA economists in the peer-reviewed literature.¹⁵ As discussed, this would significantly limit the consideration of important health benefits. For example, there EPA does not currently use a summary descriptor for most noncancer health effects, even when there is scientific data showing a relationship between environmental contaminant exposure and noncancer health effects. So, under this rulemaking, reductions in the types of exposures associated with noncancer health effects would be assumed to have **zero** benefit, despite scientific evidence to the contrary. Additionally, evidence with less confidence or more uncertainty, such as 'suggestive', would also not be valued. This is not scientifically appropriate, as less confidence in the evidence does not mean there is zero probability of effect. Further, even when there is less confidence in the outcome, there is still value placed on limiting exposure to these outcomes (referred to as Willingness to Pay). Assuming there is zero Willingness to

⁸ EPA. (2020). SAB Draft Peer Review of EPA's Revised Guidelines for Preparing Economic Analyses. Available: [https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentBOARD/40F2ADC8D6E4BB868525857B007234D5/\\$File/6.2.20+draft+report.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/LookupWebProjectsCurrentBOARD/40F2ADC8D6E4BB868525857B007234D5/$File/6.2.20+draft+report.pdf)

⁹ EPA (2020). Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process. Pg. 35622. Available: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2020-0044-0001>

¹⁰ EPA (2016) Plan to increase access to results of EPA-funded scientific research. pg. 4-5 Available: <https://www.epa.gov/sites/production/files/2016-12/documents/epascientificresearchtransparencyplan.pdf>

¹¹ EPA. (2020). Strengthening Transparency in Regulatory Science. Comment submitted by Swati Rayasam, Science Associate, Program on Reproductive Health and the Environment, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco et al. Available: <https://www.regulations.gov/document?D=EPA-HQ-OA-2018-0259-12546>

¹² Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., Breckler, S. J., ... Yarkoni, T. (2015). Promoting an open research culture. *Science*, 348(6242), 1422–1425. doi: 10.1126/science.aab2374

¹³ Thorp, H. H., Skipper, M., Kiermer, V., Berenbaum, M., Sweet, D., & Horton, R. (2019). Joint statement on EPA proposed rule and public availability of data (2019). *The Lancet*, 394(10214). doi: 10.1016/s0140-6736(19)32945-9

¹⁴ EPA (2020). Increasing Consistency and Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process. Pg. 35620. Available: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2020-0044-0001>

¹⁵ Mcgartland, A., Revesz, R., Axelrad, D. A., Dockins, C., Sutton, P., & Woodruff, T. J. (2017). Estimating the health benefits of environmental regulations. *Science*, 357(6350), 457-458. doi:10.1126/science.aam8204

Pay for less certain health outcomes is not consistent with economic principles or literature.¹⁶ Thus, adoption of this policy will lead to underestimation of the true health benefits.

EPA should not implement this proposal for any Agency decision, whether major or minor, including the Clean Air or Clean Water Act, as there are already established and sufficient guidelines for conducting BCA. Further, it is inappropriate to codify how economic and scientific analyses should be conducted. Codifying scientific and economic methods will hinder best use of science and economic principles as it fixes scientific and economic methods at one point in time thus limiting the ability to incorporate new and improved scientific and economic methods as they emerge. This practice will lead to inadequate use of science in making decisions.

We appreciate the opportunity to provide public input. Please do not hesitate to contact us with any questions regarding these comments.

Sincerely,

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¹⁶ Mcgartland, A., Revesz, R., Axelrad, D. A., Dockins, C., Sutton, P., & Woodruff, T. J. (2017). Estimating the health benefits of environmental regulations. *Science*, 357(6350), 457-458. doi:10.1126/science.aam8204