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SUBJECT: Comments to the Science Advisory Board Economic Guidelines Review Panel

The California Environmental Protection Agency, California Air Resources Board (“CARB”), and State Water Resources Control Board (collectively, “CalEPA”) submit the following comments to the Science Advisory Board’s Economic Guidelines Review Panel regarding the draft Guidelines for Preparing Economic Analysis.

Regulatory agencies’ ability to develop informed, transparent, rational, and legally defensible regulations depends on comprehensive and objective cost-benefit analysis.¹ CalEPA recognizes the importance of the Guidelines in supporting U.S. EPA’s full estimation and consideration of potential costs and benefits when considering regulatory actions. Some of CalEPA’s Boards, Departments, and Offices have utilized the current Guidelines² to analyze economic impacts, in conjunction with State-level requirements.³

Aside from the specific concerns about the draft Guidelines discussed below, we encourage the Panel to consider the draft Guidelines in the context of U.S. EPA’s recent and forthcoming actions. On June 13, 2018, U.S. EPA issued an Advance Notice of Proposed Rulemaking to solicit comment on potential regulations to govern the agency’s approach to cost-benefit analyses and the weight given certain costs and benefits in regulatory decision-making.⁴ Commenters, including CARB, interpreted the ANPRM to suggest U.S. EPA’s intent to promulgate a regulation that would force the agency to emphasize costs and deemphasize benefits in future regulatory decision-making.⁵ This includes potentially requiring the agency to consider “cumulative” regulatory costs and benefits of multiple regulations⁶ and, particularly, limiting the weight that could be given to co-benefits.⁷ On May

¹ See E.O. 12866, Sept. 30, 1993, 58 Fed. Reg. 51735 (October 4, 1993); E.O. 13563, Jan. 18, 2011, 76 Fed. Reg. 3821 (January 21, 2011).

² U.S. EPA Guidelines for Preparing Economic Analyses, National Center for Environmental Economics, Dec. 17, 2010, updated May 2014.

³ E.g., the California Administrative Procedure Act, Cal. Gov. Code section 11340 et seq., Cal. Health & Safety Code sections 38506, 38562.5 (requiring CARB, when adopting certain rules and regulations, to “consider the social costs of the emissions of greenhouse gases,” defined as “an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year.”).

⁴ 83 Fed. Reg. 27524 (June 13, 2018).

⁵ CARB Comment on Advance Notice of Proposed Rulemaking, “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process,” 83 Fed. Reg. 27524, Regulation Identifier Number 2010–AA12, submitted August 13, 2018. CARB’s comment on the ANPRM is Attachment 1 to this letter.

⁶ See 83 Fed. Reg. at 27527 (“To what extent would it be helpful for EPA to require consideration of cumulative regulatory costs and benefits of multiple regulations during the rulemaking process[?]”)

⁷ See 83 Fed. Reg. at 27526 (“[C]ommenters argued in past rulemakings the Agency has justified the stringency of a standard based on the estimated benefits from reductions in pollutants not directly regulated by the action (*i.e.*, ‘ancillary Air Resources Board • Department of Pesticide Regulation • Department of Resources Recycling and Recovery • Department of Toxic Substances Control • Office of Environmental Health Hazard Assessment • State Water Resources Control Board • Regional Water Quality Control Boards

13, 2019, Administrator Andrew Wheeler issued a memorandum explaining that, rather than proposing an overarching regulation based on the ANPRM, the agency would “proceed with cost-benefit reforms using a media-specific approach,” or regulations pertaining to individual U.S. EPA’s statutory authorities, beginning with the Clean Air Act.⁸ In the same memorandum, Administrator Wheeler announced his direction to the Office of Policy to develop the Guidelines revisions that are the subject of your current review. Notably, Administrator Wheeler described the impetus for the ANPRM and subsequent actions as “stakeholders [having] identified instances when the agency underestimated costs, overestimated benefits or evaluated benefits and costs inconsistently.”⁹ (The memorandum indicated no concern for potential overestimation of costs or underestimation of benefits.)

We particularly raise these concerns in light of U.S. EPA’s recent reconsideration of its Mercury and Air Toxics Standards (MATS), in which the agency reversed its prior determination that regulating mercury emissions from power plants is “appropriate and necessary.”¹⁰ U.S. EPA arrived at this reversal by dramatically recalibrating the weight given to the quantified benefits of reducing particulate matter, which is a co-benefit of reducing the mercury emissions targeted by the regulation. The resulting analysis compared total regulatory costs to the sole benefit of mercury regulation that U.S. EPA had quantified or monetized—avoided IQ loss in children from prenatal exposure via consumption of self-caught, freshwater fish—and alleged that the agency is unable to disaggregate direct and indirect compliance costs.¹¹

CalEPA appreciates and respects the professionals of the National Center for Environmental Economics, and views most aspects of the draft revised Guidelines as appropriately reflecting the relevant literature. However, we urge the Panel, as it proceeds with its review, to consider the draft revised Guidelines in their full context—of agency political decisions seeking to manipulate, and codify manipulation of, the principles of full and objective economic analysis¹²—and to identify and challenge revisions that may help to further these efforts.¹³

benefits’ or ‘co-benefits’). For example, in the Mercury and Air Toxics Standards (MATS) rule (77 FR 9304, February 16, 2012), the monetized benefits from one of the pollutants being directly regulated (*i.e.*, mercury) were significantly lower than the estimated costs of the rule, and the quantified benefits in the regulatory impact analysis outweighed the costs because of the benefits from reductions in ambient fine particulate matter (82 FR 16736, April 6, 2017)”; 83 Fed. Reg. at 27527 (“What improvements would result from a general rule that specifies how the Agency will factor the outcomes or key elements of the benefit-cost analysis into future decision making? For example, to what extent should EPA develop a general rule on how the Agency will weigh the benefits from reductions in pollutants that were not directly regulated (often called “co-benefits’ or ‘ancillary benefits’) . . . ?”).

⁸ Andrew Wheeler, Memorandum to Assistant Administrators, “Increasing Consistency and Transparency in Considering Benefits and Costs in the Rulemaking Process,” May 13, 2019.

⁹ *Ibid.*

¹⁰ 85 Fed. Reg. 31286 (May 22, 2020).

¹¹ CARB’s comment on the MATS reconsideration is Attachment 2 to this letter.

¹² *I.e.*, the cost-benefit ANPRM (83 Fed. Reg. 27524 (June 13, 2018)), final MATS reconsideration (85 Fed. Reg. 31286 (May 22, 2020)), and forthcoming statute-specific cost-benefit proposals discussed above.

¹³ To the extent that inadequate or improper cost-benefit analysis justifies inadequate or improper regulatory decisions, CalEPA Boards, Departments, and Offices could be impelled to consider changes to our own regulations or procedures, consistent with applicable federal and state law, to ensure that the State can effectively and appropriately protect the environment and the public health.

The revised Guidelines must require consideration of all likely benefits, including co-benefits.

Objectivity, transparency, and legal defensibility¹⁴ in regulatory decision-making necessitate full analysis of *all* costs and *all* benefits of a proposed regulation, along with regulatory and non-regulatory alternatives.¹⁵ While the draft revised Guidelines generally affirm the necessity of evaluating all costs and benefits, aspects of the Guidelines may contradict or frustrate this foundational principle.

A primary example is the draft revised Guidelines' treatment of co-benefits, also termed ancillary benefits. The draft revised Guidelines term them "welfare effects of the regulation" that do not "arise from the statutory objective of the regulation,"¹⁶ and characterize such benefits as "unrelated" to the "primary statutory objective."¹⁷ The draft revised Guidelines recommend that analysts differentiate benefits arising from the statutory and non-statutory objectives of the regulation.¹⁸ Aside from the technical challenges of drawing these distinctions, this recommendation appears to set the stage for future decisions, like the MATS reconsideration, that subvert full consideration of regulatory benefits. The draft revised Guidelines also suggest that analysts consider "whether there are more economically efficient or appropriate ways of obtaining" these benefits,¹⁹ and "describe other options that directly regulate those contaminants."²⁰ However, analysts' development of regulatory options that bypass consideration of co-benefits create greater potential for minimizing regulatory benefits and improperly determining that regulation would be unjustified.

The revised Guidelines must not undermine considerations highly relevant to global climate change.

The draft revised Guidelines contain a new section addressing "economic 'standing,'" or whose gains and losses to consider.²¹ The draft revised Guidelines imply that the answer is self-evident, asserting, "for domestic policy making standing is typically limited to the national level in order to maximize the welfare of residents"; "[r]egulations typically only apply to a nation's own residents who have consented to adhere to the same set of rules and values for collective decision making"; and "most domestic policies are expected to have relatively negligible effects on other countries."²²

Yet the draft revised Guidelines fail to address considerations specific to global climate change. Given the interconnectedness of the global economy and security, climatic damages outside U.S.

¹⁴ For example, a National Highway Transportation Safety Administration vehicle fuel economy rule was invalidated as arbitrary and capricious because it failed to consider the social cost of carbon. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198, 1200 (9th Cir. 2008) (agencies "cannot put a thumb on the scale by undervaluing the benefits and overvaluing the costs" of reducing GHGs; "[w]hile the record shows that there is a range of values, the value of carbon emissions reduction is certainly not zero.").

¹⁵ See E.O. 12866, Sept. 30, 1993, 58 Fed. Reg. 51735 (Oct. 4, 1993); E.O. 13563, Jan. 18, 2011, 76 Fed. Reg. 3821 (Jan. 21, 2011); Office of Management and Budget Circular A-4, Sept. 17, 2003.

¹⁶ Draft Revised Guidelines, April 3, 2020, p. 5-3.

¹⁷ *Id.* at 5-19.

¹⁸ *Id.* at 5-3.

¹⁹ *Id.* at 5-19.

²⁰ *Id.* at 3-6.

²¹ *Id.* at 5-1.

²² *Ibid.*

borders have both direct and indirect domestic impacts. These include impacts to U.S. citizens (including U.S. military service members) who live abroad and/or have significant investments abroad; potential impacts to trade flows and global commodity markets that affect the U.S. economy; impacts to U.S. military sites abroad; and other risks to national security with significant potential costs.²³ In 2017, the National Academies of Sciences, Engineering, and Medicine released a report examining potential approaches for a comprehensive update to the social cost of carbon methodology to ensure resulting cost estimates reflect the best available science.²⁴ The report highlights the challenges in developing domestic estimates, given complex interactions related to migration, and economic and political destabilization.²⁵ Such analysis makes clear that maximizing the welfare of U.S. citizens and residents involves considering climate impacts beyond U.S. borders—as does appropriate regulatory analysis.

Long-term analyses, including of climate change impacts, are highly sensitive to discount rates. The draft revised guidelines also discuss intergenerational effects and long-term discount rates without proposing sample or default discount rates that may be appropriate to evaluating longer-term climate impacts. Seventeen years ago, Office of Management and Budget Circular A-4 suggested that discount rates ranging from 1 to 3 percent would be appropriate for intergenerational discounting. In a recent peer-reviewed report, researchers surveyed 197 experts on long-term social discount rates.²⁶ While there was much variation, the median preferred social discount rate was 2 percent, and 92 percent of experts surveyed preferred a social discount rate between 1 and 3 percent.

The revised Guidelines must recognize employment benefits of regulation.

Consistent with our own practices for economic impact analysis, CalEPA supports rigorous analysis of the employment impacts of proposed regulations, including both costs and benefits. The revised Guidelines should explicitly recognize that regulations can result in foregone jobs, usually in relatively high polluting industries, and can also result in job gains. The Guidelines should also recognize that regulations often result in substantial cost-savings—sometimes even net negative cost—when regulated entities realize lower production costs, increase market share, and generate employment gains.²⁷

²³ Public Law 115-91, December 12, 2017, 131 Stat. 1283, § 335.

²⁴ *Ibid.*

²⁵ National Academies of Science, Engineering, and Medicine, *Valuing Climate Damages: Updating Estimation of the Social Cost of Carbon Dioxide*, 2017, available at <http://www.nap.edu/24651> (“National Academies”), conclusion 2-4 (“It is important to consider what constitutes a domestic impact in the case of a global pollutant that could have international implications that impact the United States. More thoroughly estimating a domestic [social cost of carbon dioxide] would therefore need to consider the potential implications of climate impacts on, and actions by, other countries, which also have impacts on the United States.”). Importantly, the report also concludes that the existing integrated assessment models (IAM) used to estimate the social costs of greenhouse gases are not calibrated for domestic-only valuations. *Id.* at 12.

²⁶ Drupp, Moritz, et al., *Discounting Disentangled*, *American Economic Journal: Economic Policy*, 10 (4): 109-34, 2018, available at <https://www.aeaweb.org/articles?id=10.1257/pol.20160240&&from=f>.

²⁷ *E.g.*, CARB, Standardized Regulatory Impact Assessment (SRIA) for the Advanced Clean Trucks Regulation, August 8, 2019, available at

http://www.dof.ca.gov/Forecasting/Economics/Major_Regulations/Major_Regulations_Table/documents/SRIA-Advanced_Clean_Truck_080819_DOE.pdf; CARB, SRIA for Innovative Clean Transit Regulation, April 19, 2018, available

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When the assumption of full employment does not hold, as in the current economic situation, additional labor required for compliance activities can lead to a net gain in employment, and economic growth. Furthermore, full-employment or lack thereof is best understood at a regional level, as labor markets among different regions show significant variability. The portrayal of a job gain from a regulation as always resulting in a displacement of work from another activity is not generally correct.

In conclusion, we urge the Panel to ensure that the revised Guidelines maintain the rigor and objectivity that have characterized prior versions, and we thank the Panel for its important work.

Sincerely,



Jared Blumenfeld

Secretary for Environmental Protection



Richard W. Corey

Executive Officer, California Air Resources Board



Eileen Sobeck

Executive Director, State Water Resources Control Board

Attachments

1. CARB's comment on U.S. EPA's Cost-Benefit ANPRM (August 13, 2018).
2. CARB's comment on U.S. EPA's MATS reconsideration NPRM (April 16, 2019).

at

http://www.dof.ca.gov/Forecasting/Economics/Major_Regulations/Major_Regulations_Table/documents/ICT_SRIA_ARB_4-23-18.pdf.