February 19, 2025
US Environmental Protection Agency
1200 Pennsylvania Avenue
Washington DC, 20004

Re: Docket No. EPA-HQ-OLEM-2024-0360

We appreciate the opportunity to comment on the Interim Framework for Advancing Consideration of Cumulative Impacts, referred to as "Framework" (docket no. EPA-HQ-OLEM-2024-0360). We are environmental health researchers who study the risks of exposures to multiple chemical and non-chemical stressors and various public health outcomes. Our institutional affiliation is included for identification purposes only, and we declare no actual or perceived financial conflicts of interest. We offer specific points to support and strengthen the Framework.

1. **Capacity building.** We strongly support this Framework's immediate goal of "building capacity for analysis and consideration of cumulative impacts with training inside the EPA and through grants and other mechanisms outside of the EPA" (Figure 4 legend in the Framework). There is ample evidence from the scientific literature that the cumulative impacts from environmental health hazards and social stressors can result in adverse population health outcomes. There is an urgent need to develop consensus on the importance of, and processes for, considering cumulative impacts at the regulatory level. EPA should support bi-directional relationships between researchers and practitioners in and outside of EPA.

2. **Use the best available science**. We especially support Principle 5 for considering Cumulative Impacts, and we add that in addition to acting with a sense of urgency, the EPA should use the best available science. As stated in the Framework's Key Goals, a cumulative impacts framework empowers the EPA to "fully and accurately characterize the realities communities face." Cumulative impacts assessment allows the EPA to understand environmental risks and needs more accurately. As the Framework acknowledges, scientists have been developing the literature on quantifying multiple exposures on health effects for decades. In addition to the examples in the framework, numerous studies document that psychosocial stressors can interact with chemical exposures to enhance adverse toxicological and epidemiological endpoints associated with chemical exposures (Payne Sturges et. al., 2018).

3. **Engage regulatory partners**. Although not addressed in the Interim Framework, engagement with and collaboration among regulatory partners is key. Regulatory agencies have very specific mandates. To consider the "totality of exposures and their effects on health and quality of life" requires communication and coordination of analyses and decision-making across regulatory agencies dealing with different protocols, environmental media, health outcomes, and jurisdictions. In particular, with cumulative impacts involving Tribal and/or Indigenous populations, it is a necessity that organizations heavily involve members of the Tribal and/or Indigenous community.

5. **Provide specific guidance on when cumulative impacts would be relevant or consistent with the law.** Without a specific description of when it is relevant or consistent with the law to consider a cumulative impacts approach OR how cumulative impacts would be considered in specific contexts, the practical usefulness of this framework is limited. Table 1 in the Framework provides examples of cumulative impact tools. It would be helpful to see analyses of how these tools have been used in practice, as well as any evaluations on their impact on communities and stakeholders.

6. **Provide a plain-language executive summary**. The Framework discussed is comprehensive and would be greatly enhanced by adding an Executive Summary. This summary could outline the key components and

rationale for the Framework to advance health outcomes. Additionally, an Executive Summary written in accessible lay terms would offer a clear and concise overview for decision makers (and further, for the public), assisting decision makers in grasping the significance of using this Framework.

7. **Discuss implementation**. Although we support the detailed discussion of the importance and potential methodologies of examining cumulative impacts, there is a lack of information on how to mitigate these impacts on vulnerable communities. As the goal is to improve health in communities overburdened by multiple stressors, we recommend briefly mentioning the potential broad strategies for tackling these issues.

In summary, we support developing this Framework for advising decision makers on the importance and process of examining cumulative impacts. We suggest a few modifications that could clarify and strengthen the Framework.

Sincerely,

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References

Payne-Sturges, D. C., Scammell, M. K., Levy, J. I., Cory-Slechta, D. A., Symanski, E., Carr Shmool, J. L., Laumbach, R., Linder, S., & Clougherty, J. E. (2018). Methods for Evaluating the Combined Effects of Chemical and Nonchemical Exposures for Cumulative Environmental Health Risk Assessment. *International Journal of Environmental Research and Public Health*, *15*(12), 2797. https://doi.org/10.3390/ijerph15122797