



**Re:** Proposed Rule: Strengthening Transparency in Regulatory Science  
**Docket ID:** EPA-HQ-OA-2018-0259-0001  
**Presented by:** Ann Reid, executive director  
**Date:** August 7, 2018

On behalf of the National Center for Science Education, a non-profit organization affiliated with the American Association for the Advancement of Science and the National Science Teachers Association, which promotes and defends accurate and effective science education, I write to oppose the EPA's proposed rule "Strengthening Transparency in Regulatory Science" and to urge the EPA to withdraw its proposal.

The National Research Council's *A Framework for K-12 Science Education*—which now forms the basis for the science education standards of thirty-nine states—emphasizes the need for students to understand that "scientific knowledge advances through collaboration and in the context of a social system with well-developed norms."<sup>1</sup> Among those norms is a shared understanding of what constitutes adequate evidence, what responsibilities researchers have to make their materials, methods, and data available for review and reproducibility, and how best to manage trade-offs between important values such as transparency and privacy.

A critical goal of science education is to equip future citizens with the ability to ask questions, collect appropriate evidence, and reach sound conclusions—in other words, with the ability to apply scientific skills in their daily lives. By learning how evidence is evaluated in the scientific enterprise, students should also gain confidence that government policies and regulations are based on the best scientific evidence available. Adoption of the EPA's proposed rule excluding studies for which all data cannot be made public or that cannot be reproduced for legitimate and unavoidable reasons would send a deeply misleading message, ignoring the thoughtful processes that scientists use to ensure that all relevant evidence is considered in reaching the most accurate possible understanding of the phenomenon under consideration.

As Harvard University's Naomi Oreskes—a member of NCSE's board of directors—recently noted in the pages of the journal *Nature*:

Many EPA watchers believe that the rule targets long-term epidemiological studies that linked air pollution to shorter lives and were used to justify air-quality regulations. In my view, the rule could keep that and other high-quality evidence from being used to shape regulations, even if there are legitimate reasons, such as patient privacy, why some data cannot be made public. It could potentially retroactively exclude an enormous amount of respected evidence.<sup>2</sup>

The proposed rule would not directly influence curriculum and instruction in the nation's public schools, but it would, if adopted, risk undercutting the hard work that science teachers do to give the next generation a clear understanding of how scientific evidence is properly used to guide sound public health and environmental quality decisions. The future citizens who will soon be responsible for making informed decisions about our environment deserve better.

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<sup>1</sup> National Research Council, *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*, Washington, DC: The National Academies Press, 2012, p. 27

<sup>2</sup> Naomi Oreskes, "Beware: Transparency Rule is a Trojan Horse," *Nature* 557:469 (2018)