

# Oral Statement Regarding the Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter

*Daren Bakst*

*December 3, 2019*

*Public Meeting of the Chartered Clean Air Scientific Advisory Committee (CASAC) on Particulate Matter and Ozone*

My name is Daren Bakst and I am a Senior Research Fellow at The Heritage Foundation. The views I express in this statement are my own, and shouldn't be construed as representing any official position of The Heritage Foundation.

I appreciate this opportunity to speak at today's meeting.

I'd like to make two brief points.

## **1) The policy assessment should properly consider “null” studies**

Any decision to revise, or not revise, the existing and extremely stringent PM<sub>2.5</sub> standards will have a major effect on the well-being of Americans.

Therefore, it is especially critical that decisions of this magnitude, and the recommendations informing those decisions, be based on sound and transparent science.

As has been pointed out by other commenters, including Dr. James Enstrom,<sup>1</sup> the draft policy assessment fails to properly consider numerous well-respected studies that raise doubts on the relationship between PM<sub>2.5</sub> and mortality. The assessment also relies on studies that support an adverse health relationship of PM<sub>2.5</sub> while generally ignoring studies that cast doubt on that relationship.

Any final policy assessment should identify and properly consider the important studies that may not fall in line with “conventional wisdom.” Casual dismissals of these studies don't suffice. If they are properly considered, then that may change conclusions drawn about the public health impact of PM<sub>2.5</sub> and, at a minimum,

---

<sup>1</sup> See e.g. “Criticism of EPA-452/P-19-001 September 2019 Policy Assessment for the Review of the National Ambient Air Quality Standards for Particulate Matter, External Review Draft,” James E. Enstrom, October 17, 2019, <http://scientificintegrityinstitute.org/JEEPMPA102219.pdf> (accessed December 2, 2019).

would likely change perspective on the risk levels connected to PM<sub>2.5</sub>.

The EPA Administrator must use his judgment to determine if the existing PM<sub>2.5</sub> standards are requisite to protect the public health. Unless he has a complete and unbiased assessment of the science, he won't have the necessary information to make an informed judgment. The lack of null findings in the policy assessment, when such findings are well-known, is strong evidence, in and of itself, that the draft policy assessment is likely insufficient.

## **2) The policy assessment should only use studies in which there was proper access to underlying data and models**

The public, including experts in their respective fields, should have access to underlying data and models for studies that are being used to shape public policy. As a matter of transparency, scientific conclusions are insufficient without clarity on how those conclusions were reached. This is especially true given the reproducibility crisis in science.

A 2016 *Nature* survey found that 52 percent of researchers surveyed agreed that there was a significant crisis of reproducibility, 90 percent of the respondents agreed that was either a significant or slight crisis, and only 3 percent said there was no crisis.<sup>2</sup> This same survey found that “[m]ore than 70% of researchers have tried and failed to reproduce another scientist’s experiments, and more than half have failed to reproduce their own experiments.”<sup>3</sup>

While reproducibility is important, this doesn't mean that legal and privacy protections should be violated. However, concern over privacy shouldn't be a blanket excuse to simply prohibit access to information that can be disseminated without such concerns. This includes access to underlying data and models for PM<sub>2.5</sub> studies.

Assuming there are legitimate confidentiality concerns if certain information is made public,<sup>4</sup> this still shouldn't preclude a wide range of experts from gaining

---

<sup>2</sup> Monya Baker, “1,500 Scientists Lift the Lid on Reproducibility,” *Nature*, Vol. 533, No. 7604 (May 2016), pp. 452–454, <https://www.nature.com/news/1-500-scientists-lift-the-lid-on-reproducibility-1.19970> (accessed December 2, 2019).

<sup>3</sup> *Ibid.*

<sup>4</sup> This is merely an assumption for the sake of argument and not a concession on the point.

necessary access to information if proper privacy precautions are taken.  
If the underlying information can't be properly evaluated for a study, this makes it very difficult to simply conclude that the study is the best available science. Science should by its very nature be open to challenge and frequent testing.

Any final policy assessment should ensure that proper access to underlying data and models is provided. If there are rigorous PM<sub>2.5</sub> studies that do not have these privacy concerns, then they should be given priority over comparable studies whose underlying data isn't sufficiently available for evaluation.

--

Thank you again for this opportunity to provide comments.