

January 17, 2023

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U.S. Environmental Protection Agency  
Docket ID No. EPA-HQ-OAR-2022-0389

To Whom It May Concern:

The National Association of Clean Air Agencies (NACAA) is pleased to provide comments on EPA's "Proposed Finding That Lead Emissions from Aircraft Engines That Operate on Leaded Fuel Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare," published in the *Federal Register* on October 17, 2022 (87 Fed. Reg. 62,753).<sup>1</sup> NACAA is the national, non-partisan, non-profit association of air pollution control agencies in 40 states, including 117 local air agencies, the District of Columbia and five territories. The air quality professionals in our member agencies have vast experience dedicated to improving air quality in the U.S. These comments are based upon that experience. The views expressed in these comments do not represent the positions of every state and local air pollution control agency in the country.

NACAA supports this action in which the EPA Administrator proposes to find "that lead air pollution may reasonably be anticipated to endanger the public health and welfare within the meaning of section 231(a) of the Clean Air Act" and, further, "that engine emissions of lead from certain aircraft cause or contribute to the lead air pollution that may reasonably be anticipated to endanger public health and welfare under section 231(a) of the Clean Air Act."<sup>2</sup> The basis of these findings is the comprehensive review and consideration by agency experts of extensive scientific evidence that has been accrued over decades and peer-reviewed by EPA's Clean Air Scientific Advisory Committee,<sup>3</sup> as described in the action.

"Covered aircraft" under this proposal are any aircraft capable of using leaded aviation gasoline. The majority of these covered aircraft are piston-engine powered, most typically small aircraft that carry two to ten passengers, which represent the largest single source of lead emissions into the air in the U.S. In 2008, piston-engine aircraft contributed 59 percent of total U.S. lead emissions into the air; by 2017, the contribution climbed to 70 percent because of decreasing emissions from other ambient lead sources.<sup>4</sup>

As EPA notes, it is not proposing aircraft lead emission standards in this action. Should the agency finalize these findings, it would then move forward to propose and take comment on emission standards under Clean Air Act section 231.

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<sup>1</sup> <https://www.govinfo.gov/content/pkg/FR-2022-10-17/pdf/2022-22223.pdf>

<sup>2</sup> *Ibid*, 62,753.

<sup>3</sup> <https://casac.epa.gov/ords/sab/f?p=105:17:11377933030519>

<sup>4</sup> *Supra* note 1 at 62,761.

EPA summarizes in the proposal its conclusions relative to lead exposure and effects observed in children and in adults, as well as other observed effects not specific to any age group. Significantly, EPA cites “the ‘causal relationship’ between lead exposure during childhood (pre and postnatal) and a range of health effects in children, including the following: Cognitive function decrements; the group of externalizing behaviors comprising attention, increased impulsivity, and hyperactivity; and developmental effects (i.e., delayed pubertal onset)” and “the ‘likely-to-be-causal’ relationship between lead exposure and conduct disorders in children and young adults, internalizing behaviors such as depression, anxiety and withdrawn behavior, auditory function decrements, and fine and gross motor function decrements.”<sup>5</sup>

Moreover, EPA reiterates its previous conclusion that “it is clear that lead exposure in childhood presents a risk; further, there is no evidence of a threshold below which there are no harmful effects on cognition from lead exposure.”<sup>6</sup> The Centers for Disease Control confirm this: “Protecting children from exposure to lead is important to lifelong good health. No safe blood lead level in children has been identified. Even low levels of lead in blood have been shown to negatively affect a child’s intelligence, ability to pay attention, and academic achievement.”<sup>7</sup>

Among adults, EPA reports, for example, that lead exposure can adversely affect cardiovascular function, blood pressure, kidney function and reproductive function. The agency cites a recent study assessing cardiovascular mortality rates in adults 65 and older living within a few kilometers and downwind of runways.<sup>8</sup> Although the study did not include an evaluation of blood lead levels, the researchers found higher mortality rates in adults living near single-runway airports (where the aircraft affected by this proposal are prominent) in years with more piston-engine air traffic, but not in adults living near multi-runway airports, suggesting the potential for adverse adult health effects near some airports.

EPA must also consider the disproportionate impact of lead emissions on environmental justice communities across the country. EPA discusses in the proposal the importance of considering the environmental justice implications of lead emissions from covered aircraft. Not only do “blood lead levels in children from low-income households remain higher than those in children from higher income households, and the most exposed Black children still have higher blood lead levels than the most exposed non-Hispanic White children,”<sup>9</sup> there is “a greater prevalence of people of color and of low-income populations within 500 meters or one kilometer of some airports compared with people living more distant.”<sup>10</sup>

For all of these reasons and more, as detailed in the proposal, NACAA supports EPA’s proposed endangerment finding for lead emissions from aircraft that operate on leaded fuel.

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<sup>5</sup> *Ibid*, 62,775.

<sup>6</sup> *Ibid*, 62,776.

<sup>7</sup> <https://www.cdc.gov/nceh/lead/prevention/health-effects.htm>

<sup>8</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9140422/>

<sup>9</sup> *Supra* note 1 at 62,767.

<sup>10</sup> *Ibid*, 62,756.

Once again, on behalf of NACAA, we thank you for this opportunity to comment. If you have any questions or would like further information, please contact either of us or Nancy Kruger, Deputy Director of NACAA.

Sincerely,



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