

A large, faint watermark of the EPA logo is centered in the background. The logo consists of a circular seal with the words "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY" around the perimeter. In the center of the seal is a stylized flower with three leaves and a circular center containing a sun-like symbol.

An Update on EPA's Work on Aircraft Lead

Briefing for the NACAA Mobile Sources and
Fuels Committee
August 23, 2022



Overview

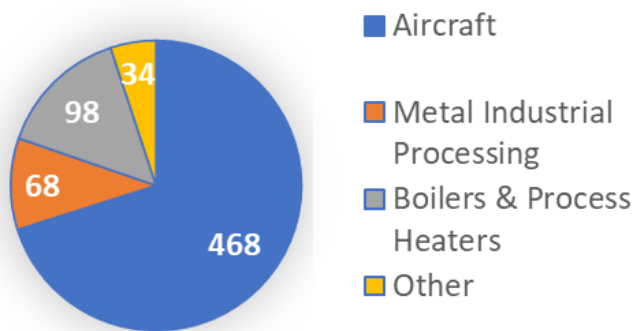
- Background
- EPA's current actions
- EPA and FAA authorities

Aircraft That Use Leaded Fuel

- This action covers aircraft that use leaded fuel
 - Lead increases octane, prevents “knock”
- The majority are piston-engine aircraft, which in the U.S. are used for general aviation & air taxi
 - Instructional flying, personal transportation, business
 - Goods and services transport

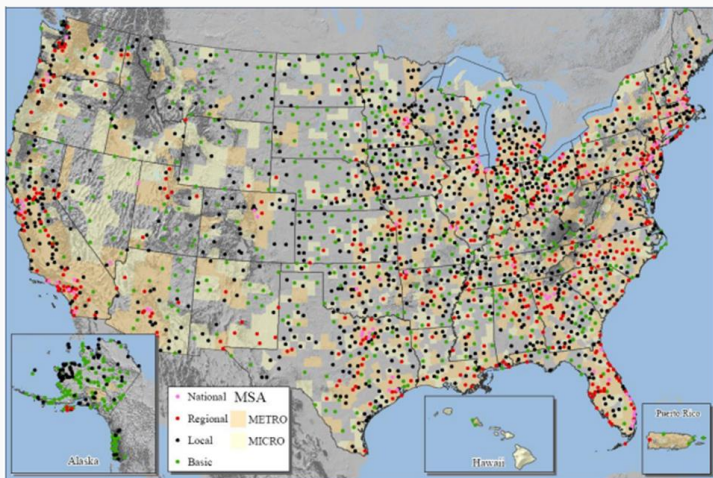


2017 Lead Emissions to Air, tons

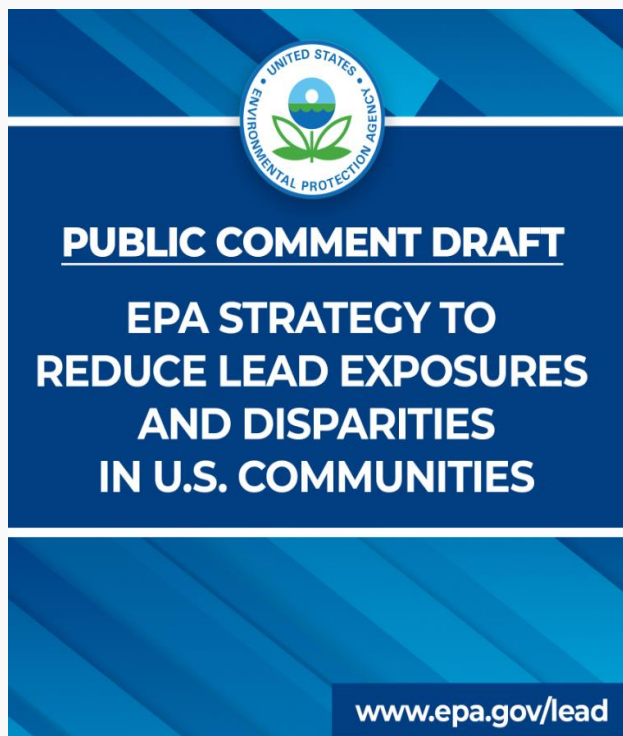


EPA's Analysis of Aircraft Lead Emissions

- National Emissions Inventory assessment.
- Air quality monitoring at airports to evaluate attainment of the lead National Ambient Air Quality Standard.
- Air quality modeling and model-extrapolated estimates of lead concentrations at U.S. airports.
- Analysis of populations residing near or attending school near U.S. airports.



Children's Health is an EPA Priority



- EPA has longstanding concern regarding the potential impact of aircraft emissions of lead on communities living near airports.
- It is one of the EPA Administrator's highest priorities to reduce children's exposure to lead, and this issue in particular poses concerns regarding environmental justice for those who live near airports.
- In comments on the draft EPA Strategy to Reduce Lead Exposures and Disparities in U.S. Communities, EPA heard from stakeholders about the urgency needed to address aircraft lead emissions.

EPA and FAA Authorities



Clean Air Act Section 231(a)(2)(A) provides that: “The Administrator shall, from time to time, issue proposed emission standards applicable to the emission of any air pollutant from any class or classes of aircraft engines which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.”



FAA has two separate authorities:

- CAA section 232, after consultation with EPA, prescribe regulations to ensure compliance with EPA’s emissions standards.
- 49 USC § 44714, FAA has authority to regulate fuel composition.



EPA's Current Focus

- EPA is developing a proposal under the Clean Air Act regarding whether lead emissions from piston-engine aircraft cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.
 - For convenience, we refer to this action collectively as the “endangerment finding.”
- We’re currently planning to issue this proposal in 2022.
- The proposal will undergo public notice & comment. After evaluating comments on proposal, we plan to issue any final decision in 2023.



Implications of the Endangerment Finding

- EPA's proposed Endangerment Finding is seen as an important action even though the finding does not establish requirements.
- If finalized, the finding will be a first step toward application of EPA's and FAA's statutory authorities to address lead pollution from aircraft.
- Finalizing the proposed Endangerment Finding would trigger two duties:
 - For EPA to propose regulatory standards for lead emissions from aircraft engines, after which FAA would need to propose regulations to enforce EPA's engine emissions standards.
 - For FAA to prescribe standards for the composition of aircraft fuel.



Considerations Regarding Standard Setting

- EPA has authority to set emission standards for new and in-use aircraft engines.
- Engine emission standards would involve EPA and FAA working together to carefully consider safety, lead time to develop and apply requisite technology, cost and noise.
- The potential rulemaking process for emission standards would provide opportunities for industry, states, Tribes, NGOs, and other interested parties to provide their input through public review and comment.



Contacts and Websites

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EPA's websites for information on aircraft lead:

- <https://www.epa.gov/regulations-emissions-vehicles-and-engines/epas-data-and-analysis-piston-engine-aircraft-emissions>
- <https://www.epa.gov/regulations-emissions-vehicles-and-engines/petitions-and-epa-response-memorandums-related-lead>
- <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-lead-emissions-aircraft>