

Lead: An Environmental Justice Issue

The avgas endangerment finding petition addresses the disproportionate impact of aviation generated lead pollution on minority populations.

“The majority of general aviation airports with the highest lead emissions are located in communities of color. Communities of color are already disproportionately burdened by chemical exposures and, in particular, by exposures to lead. Black children have body burdens of lead that are higher, on average, than their white counterparts, both in utero and after they are born. Lead emissions from activity at these general aviation airports contribute to this disparity.

In certain areas, the populations more likely to reside near airports are those with less education and less wealth. EPA has acknowledged that ‘[c]hildhood lead exposure is especially prevalent in many communities that represent the lowest income and most diverse populations with significant cumulative environmental risk from pollution.’ Given that the severity of health effects increases as lead exposure increases, children who live near airports and are also experiencing poverty—a condition that may make children both more susceptible to lead absorption due to undernourishment and more exposed to lead by poor infrastructure and older homes—are at a particularly high risk of harm. Acknowledging that emissions from leaded avgas harms children is necessary to fulfill EPA’s commitment to ‘protect the most vulnerable communities and members of society, especially children.’”¹

An Earthjustice “demographic analysis of the areas around the fifty highest lead-emitting general aviation airports, according to the 2017 National Emissions Inventory...revealed that 60% or more of these airports had populations living within one mile that consisted of a higher percentage of people of color than the national average.”²

In addition, a 2017 study, “The Effect of Leaded Aviation Gasoline on Blood Lead in Children,” by Dr. Sammy Zahran et. al., found that, “In Michigan, populations of lower socioeconomic status are more likely to reside near airports. Compared to more distant neighborhoods . . . neighborhoods within 2 km of an airport have significantly higher percentages of households receiving public assistance . . . and lower levels of educational attainment among adults . . .”³

¹ Letter to EPA Administrator Michael Regan from Earthjustice. (10/12/2021). Pg. 5-6. Last accessed online on 01/30/2022 at [2021.10.12_leadedavgasp petition.pdf \(earthjustice.org\)](#).

² Letter to EPA Administrator Michael Regan from Earthjustice. (08/24/2022). Pg. 5. Footnote 18. Last accessed online on 01/31/2022 at [2021.08.23 - leaded avgas petition final with exhibits.pdf \(earthjustice.org\)](#).

³ Zahran, Sammy, Iverson, Terrence, McElmurry, and Weiler, Stephan. [The Effect of Leaded Aviation Gasoline on Blood Lead in Children](#). Journal of the Association of Environmental and Resource Economists, JAERE. Volume 2. (July 2017) Pg. 577. Last accessed online on 01/31/2022 at [\(PDF\) The Effect of Leaded Aviation Gasoline on Blood Lead in Children \(researchgate.net\)](#).