Comments on the Federal Aviation Administration Draft Transition Plan to Unleaded Gasoline – for Public Comment.[1]

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Structure of this comment:

- Overview
- Section-by-Section Comments and Recommendations on the Transition Plan
- Reflections on the Federal Register Comment Process for this Action
- Conclusion

OVERVIEW

This comment is in addition to all other comments submitted to the Federal Register on this action.

Oregon Aviation Watch endorses comments submitted by Earthjustice, Aviation-Impacted Communities Alliance (AICA), Lewis and Clark Law School, and James Lubischer, MD.

Purpose of this submission: To urge the FAA to establish public health and the environment as the primary focus of the transition plan. Ensure that the transition is fair, just, inclusive, and transparent. Towards that end, expand the list of stakeholder participants to include community groups, environmental, children's advocacy, and environmental justice organizations as well as medical associations and educational institutions.

The FAA maintains that it "has supported technical efforts for unleaded fuel development and deployment since the early 1990's" (see 3.1.1 on pg. 14 of the Transition Plan). Though 30 years have elapsed since the FAA commenced these efforts, during which time every country on the planet banned lead in automotive fuel, the FAA still has not established regulations or clear time-lines for prohibiting lead in aviation gasoline. It stands to reason that if a predominantly market-driven approach was effective, lead would have been removed from aviation fuel decades ago.

Moreover, there is a significant risk of failure if the transition plan is based primarily on market-forces, as this approach is being led by the very agencies, organizations and individuals that currently benefit from the status quo. Indeed, some have been

instrumental in delaying the transition to unleaded fuel despite the current availability of an FAA-approved, unleaded, drop-in replacement.

Abbreviations:

- "Transition Plan" refers to Federal Aviation Draft Transition Plan to Unleaded Gasoline – Draft Transition Plan – For Public Comment
- "NASEM" – refers to National Academies of Sciences, Engineering, and Medicine report. Per the Executive Summary, "The guidance provided in the Transition Plan relies on recommendations in the congressionally mandated 2021 NASEM… report, 'Options for Reducing Lead Emissions from Piston Engine Aircraft'…" Pg. 5. Please note: In September of 2022, 18 months after the release of this publication, the FAA approved GAMI G100UL, an unleaded, drop-in replacement fuel that can be used in all spark-engine piston-engine aircraft.
- "Endangerment Finding" - Environmental Protection Agency (EPA) 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 (10/23/2023)

SECTION-BY-SECTION COMMENTS

1. Introduction

"In 2023, the Environmental Protection Agency (EPA) issued its Final Endangerment Finding that emissions of lead from certain aircraft cause or contribute to the lead air pollution that may reasonable be anticipated to endanger public health and welfare under the Clean Air Act." (Pg. 8 of the Transition Plan)

This sentence appears to be one of the few mentions of the Endangerment Finding on the devastating impact of lead exposure. Due to the serious and potentially irreversible effects of lead poisoning, OAW suggests that the following recommendations be included in the final document.

RECOMMENDATIONS:

Flesh out this section explaining why the EPA issued an Endangerment Finding on leaded aviation fuel, to include the following:

1. The damaging effects of lead on humans, wildlife, plants and the environment.

2. The elevated risk of lead poisoning for people who live near airports as evidenced by the airport lead studies discussed later in these comments.

3. Acknowledgment that aviation lead poisoning constitutes a public health emergency that requires urgent, expedited action to remove this toxin from fuel at the earliest possible opportunity, well before 2030 if possible.

4. Expand participation to include additional stakeholders such as impacted community groups, environmental, children's advocacy, and environmental justice organizations as well as medical associations and educational institutions to ensure that market-driven considerations do not overshadow the significant dangers posed by leaded aviation fuel.

According to the NASEM report,

> ***"A highly toxic substance, lead is known to have profoundly adverse effects on the development of infants and children, and it can remain in the body for decades, causing lasting harm. Furthermore, it is a persistent pollutant. As a mineral naturally found underground, once lead is extracted and released by human activity, it stays in the environment and its levels accumulate with additional emissions." (NASEM, Pg. 15)***
>
> ***"Since lead was phased out of automotive gasoline more than 30 years ago, the leaded aviation gasoline (avgas) used by piston-engine aircraft has become the predominant source of lead pollution in the United States. Lead exposure can result in an array of negative health effects in humans and there are no known safe levels of lead exposure, as measured by blood lead concentrations." (NASEM, Pg. 125)***

The EPA considered numerous studies on the harms caused to humans, animals, plant life and the environment before issuing its final decision. Per the document***, "lead has been demonstrated to exert a broad array of deleterious effects on multiple organ systems."***[2]

The following information gathered from the final Endangerment Finding speaks to the serious and potentially irreversible effects of lead poisoning.

Adverse Effects of Lead on Children

Per the EPA*,* ***"scientific evidence has long been established demonstrating that young children (due to rapid growth and development of the brain) are vulnerable to a range of neurological effects resulting from exposure to lead. Low levels of lead in young children's blood have been linked to adverse effects on intellect, concentration, and academic achievement, and as the EPA has previously noted 'there is no evidence of a threshold below which there are no harmful effects on cognition from [lead] exposure…Evidence suggests that while some neurocognitive effects of lead in children may be transient, some lead-related cognitive effects may be irreversible and persist into adulthood, potentially contributing to lower educational attainment and financial well-being."***[3]

The Endangerment Finding emphasized that children are disproportionately impacted by exposure to lead. Potential adverse health outcomes include:

- diminished IQ
- externalizing behaviors comprising attention, increased impulsivity, and hyperactivity
- developmental effects (i.e., delayed pubertal onset)
- conduct disorders in children and young adults,
- depression, anxiety and withdrawn behavior
- auditory function decrements
- fine and gross motor function decrements
- decreased academic performance
- poorer performance on tests of executive function
- learning impairments throughout childhood and into adolescence[4]

U.S. Centers for Disease Control (CDC) has warned that there is no safe level of lead in a child's blood. Moreover, the agency's website states, ***"Children who live near airports may be exposed to lead in air and soil from aviation gas used in piston engine aircrafts."***

The CDC lead prevention webpage also addresses the economic impacts of lead poisoning, ***"Preventing childhood lead exposure is cost-effective. According to an analysis from the Health Impact Project, eliminating lead hazards from the places where children live, learn, and play could generate approximately $84 billion in long-term benefits per birth cohort."***[5]

Adverse Effects of Lead on Adults

Lead is linked with serious negative health impacts in adults, some of which occur at very low blood lead levels, including, but not limited to,

- hypertension
- coronary heart disease
- higher morbidity rates from cardiovascular disease
- cognitive function decrements
- symptoms of depression and anxiety
- psychopathological effects
- male reproductive problems
- lowered immune system functioning
- cancer
- miscarriages
- lower birth weight newborns
- decreased red blood cell function and survival
- reduced kidney function
- auditory deficits[6]

A 2018 Lancet Public Health article further confirms the relationship between lead exposure and increased mortality rates in adults:

> ***"Our findings suggest that, of 2.3 million deaths every year in the USA, about 400,000 are attributable to lead exposure, an estimate that is about ten times larger than the current one. The key reason for this difference is because the previous estimate assumed cardiovascular disease was only evident at concentrations of lead in blood as low as 5 µg/dL. Our findings show that concentrations of lead in blood lower than 5 µg/dL (<0.24 µmol/L) are associated with all-cause mortality, cardiovascular disease mortality, and ischaemic heart disease mortality. In other studies, amounts of lead in blood lower than 10 µg/dL (<0.483 µmol/L) were associated with cardiovascular disease mortality, but our study is the first to test whether the relation with cardiovascular disease mortality was evident in a population with concentrations of lead in blood below 5 µg/dL (<0.24 µmol/L). These results suggest that low-level lead exposure is an important, largely overlooked, risk factor for death in the USA, particularly for cardiovascular disease deaths…"***
>
> ***"In our study, the estimated number of deaths from all causes and cardiovascular disease that were attributable to concentrations of lead in blood were surprisingly large; indeed, they were comparable with the number of deaths from current tobacco smoke exposure."***[7]

The EPA has also found that lead exposure can impair the reproduction, development, growth and survival rates of terrestrial and aquatic vertebrate, invertebrate and plant life.[8]

In addition, it persists in the environment.

> ***"Lead emitted in the past can remain available for environmental or human exposure for an extended time in some areas. Depending on the environment where it is deposited, it may to various extents be resuspended into the ambient air, integrated into the media on which it deposits, or transported in surface water runoff to other areas or nearby waterbodies. Lead in the environment today may have been airborne yesterday or emitted to the air long ago. Over time, lead that was initially emitted to air can become less available for environmental circulation by sequestration in soil, sediment and other reservoirs."***[9]

Elevated Blood Lead Levels in Children Living Near Airports: Airport Lead Studies

There are now five studies involving over a million children and more than 500 airports that provide compelling evidence that children living in the vicinity of airports that service piston-engine aircraft are at greater risk of elevated blood lead levels.

Reid-Hillview Airport Lead Study (2021)

An 8/3/2021 lead study[10] was commissioned by Santa Clara County, California in response to concerns about the toxic lead emissions generated by aviation activity at the Reid-Hillview Airport (RHV). The study included an analysis of data from January 1, 2011 to December 31, 2020 of over 17,000 blood lead level samplings of children residing within one and a half miles of the airport at the time the blood draws were taken. The researchers found that ***"Under periods of high piston-engine aircraft traffic, children proximate to Reid-Hillview airport experience an increase in BLLs [blood lead levels] in excess of what the children of Flint experienced during the FWC [Flint Water Crisis]."*** The study also revealed that the volume of piston-engine air traffic and the amount of leaded fuel sold on a monthly basis to RHV fixed based operators contributed to increased blood lead levels.

In the words of Dr. Sammy Zahran, a leading researcher on the study, ***"The Flint water crisis from start to finish unfolded in less than a year and a half. By contrast at Reid-Hillview, the release of lead into the lived environment is a continuous, non-stop, daily unabated flow of an undeniably harmful toxicant. I remind you that we are talking about more than a thousand pounds of lead released annually on nearby populations."***

An article published on January 10, 2023 in the journal PNAS Nexus, Leaded Aviation Gasoline Exposure Risk and Child Blood Lead Levels[11] provides additional detail on the Reid-Hillview Airport lead study. The Significance Statement in the report speaks to the enormous quantities of lead released onto impacted communities by the aviation sector, ***"In the United States, hundreds of millions of gallons of tetraethyl lead-formulated gasoline are consumed by piston-engine aircraft (PEA) annually, resulting in an estimated half-million pounds of lead emitted into the environment."***

Michigan Airport Lead Study (2017)

The Effect of Leaded Aviation Gasoline on Blood Lead in Children,[12] published in 2017, involved over 1 million children and 448 airports in Michigan. Dr. Sammy Zahran et al. found that "child BLLs: 1) increased dose-responsively in proximity to airports, 2) declined measurably among children sampled in the months after the tragic events of 9-11, resulting from an exogenous reduction in PEA [piston-engine aircraft] traffic, 3) increased dose-responsively in the flow of piston-engine aircraft traffic across a subset of airports, 4) increased in the percent of prevailing wind days drifting in the direction of a child's residence and 5) behave intuitively and significantly when considering two-way and three-way interactions of our main treatment variables."

As stated in the report, ***"The consequences of lead exposure in childhood are lasting. Neural-imaging studies find that adults exposed to lead as children have reduced gray matter in regions of the brain known to govern executive judgment, impulsivity and mood regulation... Economists have convincingly linked these intellectual and socio-emotional traits of judgment and impulsivity***

to long-term life outcomes... persons exposed to lead in early life experience 'an unfolding series of adverse behavioral outcomes: behavior problems as a child, pregnancy and aggression as a teen, and criminal behavior as a young adult.'"

North Carolina Airport Lead Study (2024)

On 8/9/2024 an article entitled Association between Residential Distance to Airport and Blood Lead Levels in Children under 6 Living in North Carolina, 1992–2015 was published in the *Environmental Health Perspectives* journal. This research builds on an earlier study by Marie Lynn Miranda, Rebecca Anthopolos, and Douglas Hastings published in June of 2011.

The study, which considered the blood lead levels of 943,602 children living within 10 kilometers [6.21 miles] of airports across 100 North Carolina counties, found a "significant adverse effect of avgas use on children's BLLs [Blood Lead Levels]..."

As stated in the Introduction, ***"Even with progress in lead poisoning prevention, research has consistently shown there is no safe blood lead level (BLL) for children. Behavioral and cognitive deficits are associated with lead exposure, even at low levels. Unfortunately, many piston-engine aircraft are still fueled by leaded aviation gas (avgas)."***[13]

North Carolina Airport Lead Study (2011)

As noted above, an earlier study of North Carolina airport, published in October 2011, also found elevated blood lead levels in children living near airports. A Geospatial Analysis on the Effects of Aviation Gasoline on Childhood Blood Lead Levels[14] involved the observation of 125,000 blood lead levels (BLLs) in 6 North Carolina counties in proximity to the 66 airports located in these jurisdictions. According to the authors of the study, ***"Our results suggest that children living within 500 m of an airport at which planes use leaded avgas have higher blood lead levels than other children. This apparent effect of avgas on blood lead levels was evident also among children living within 1,000 m of airports. The estimated effect on blood lead levels exhibited a monotonically decreasing dose–response pattern, with the largest impact on children living within 500 m."*** In their conclusion they stated, ***"Our analysis indicates that living within 1,000 m of an airport where avgas is used may have a significant effect on blood lead levels in children."***

Colorado Airport Lead Study (2024)

The Association Between Childhood Blood Lead Levels and Proximity to Airports in Colorado[15] published by *Springer Link* on May 22, 2024, examined blood lead levels in children age 18 years and younger over a 10-year period from January 1, 2011, to December 31, 2020, in relation to 12 unidentified Colorado airports. When comparing their findings to some of the earlier studies discussed above, the researchers pointed out that, "One notable difference between the present study and the three previously published studies is Colorado's relatively smaller sample size of blood lead tests near

airports. Low blood lead testing rates, especially in rural areas, are Colorado's most significant challenge to lead poisoning prevention."

Despite the smaller sample size and other limitations discussed in the study, it is significant that researchers found a correlation between blood lead levels and proximity to airports. The report went on to recommend an increase in blood lead testing, ***"Lowering exposure to lead lowers the risk of health effects, and new research emphasizes the danger of even low levels of exposure. Testing is critical not only to protect children who might have lead exposure but also because it provides valuable public health data needed to investigate less well-studied exposure pathways and how they affect BLLs."***

Yet rather than focusing on protecting public health and the environment from the scourge of lead poisoning, the Transition Plan gives precedence to pilot safety and market forces. Bear in mind that the very pilots the FAA-Eagle initiative purports to represent are the ones responsible for pumping 470 tons of lead into the atmosphere on an annual basis.

Source of Lead Emissions

According to the Endangerment Finding,

> ***"Lead emissions from covered aircraft are the largest single source of lead to air in the U.S., contributing over 50 percent of lead emissions to air starting in 2008…In 2017, approximately 470 tons of lead were emitted by engines in piston-powered aircraft, which constituted 70 percent of the annual emissions of lead to air in that year. Lead is emitted at and near thousands of airports in the U.S."***[16]

This same document also states,

> ***"Lead emitted by piston-engine aircraft can have impacts in the local environment, and, due to their small size (i.e., typically less than one micron in diameter), lead-bearing particles emitted by piston engines may disperse widely in the environment. However, lead emitted during the landing and takeoff cycle, particularly during ground-based operations such as start-up, idle, preflight run-up checks, taxi and the take-off roll on the runway, may deposit to the local environment and/or infiltrate into buildings… Depending on ambient conditions (e.g. ozone and hydroxyl concentrations in the atmosphere), alkyl lead may exist in the atmosphere for hours to days and may therefore be transported off airport property into nearby communities."***[17]

A review of the Eagle Interactive Toolkit data on pg. 9 of the Transition Plan reveals that there are 461,049 registered pilots nationwide, including 143,880 student pilots who account for 31% of the total. The U.S. Census Bureau estimates that there are a total of 341.8 million people in the U.S., thus registered pilots make up just over 0.1% of the total population. It is this miniscule sliver, just over 1/10 of 1%, that is

responsible for releasing close to a half million tons of lead over adversely impacted communities every single year.

The NASEM report provided information from a 2019 pilot and aircraft owner survey conducted by the FAA. It included data on types of aircraft, number of hours flown and reasons for flying. Approximately 15,000 hours of flight time by piston-engine aircraft were reported that year. A summary of their findings on hours logged is bulleted below.

- Air Taxis - 2%
- Business Transportation - 8%
- Personal and Recreational Use – Just under 45%
- Pilot Training - 40%
- Aerial Observation and Agricultural Services - Less than 2%
- Other Uses - 4% (This category included air and rescue, aerial firefighting, police aviation, traffic reporting, and emergency medical airlifts as well as air tours, sightseeing, airshows, parachute jumping and air racing.)

This survey reveals that the majority of hours flown by piston-engine aircraft are logged by personal, recreational and student pilots, who combined, accounted for 85% of all hours flown by piston engine aircraft. (See pgs. 31-35 of the NASEM publication for additional information on this topic.)

As a result, despite the well-documented dangers of lead poisoning posed by piston-engine aircraft, millions of people are exposed to lead on a daily basis.

The EPA estimates that ***"approximately 5.2 million people live within 500 meters of an airport runway, 363,000 of whom are children aged five and under. The EPA also estimates that 573 schools attended by 163,000 children in kindergarten through twelfth grade are within 500 meters of an airport runway."*** The agency further explains, ***"On individual days, concentrations of lead from piston-engine aircraft emissions can be elevated above background levels at distances of 1,000 meters downwind of a runway, depending on aircraft activity and prevailing wind direction."***[18] This then puts millions more people at risk. Bear in mind that this figure does not even begin to include the millions of people living 10 to 20 miles from airports where repetitive flight training activity occurs on a routine basis.

Section 3: Role of the FAA in the Transition to Unleaded Fuel Comments

Per the Endangerment Finding,

> ***"Upon EPA's issuance of regulations, the FAA shall prescribe regulations to ensure compliance with the EPA's emission standards pursuant to***

section 232 of the Clean Air Act. In contrast to the findings, those future standards would apply to and have an effect on other entities outside the Federal Government. In addition, pursuant to 49U.S.C. 44714, the FAA has a statutory mandate to prescribe standards for the composition or chemical or physical properties of an aircraft fuel or fuel additive to control or eliminate aircraft emissions which the EPA has found endanger public health or welfare under section 231(a) of the Clean Air Act. In issuing these final findings, the EPA is making such a finding for emissions of lead from engines in covered aircraft."

Section 3.2 of the Transition Plan, Authority to Regulate Fuel

This section acknowledges that the 2023 EPA Endangerment Finding endows the FAA with new authority "to prescribe and enforce fuel standards" in implementing the transition to unleaded fuel.

> ***"…with the EPA Endangerment Finding related to lead emissions, the FAA must exercise its authority in 49 USC 44714 to prescribe standards for the composition or chemical or physical properties of a fuel or fuel additive. 49 USC 44711 (a)(9) prohibits the manufacture, delivery, sale, or offer for sale of fuel that is in violation of FAA fuel composition requirements once they are established. These two provisions grant FAA the authority to prescribe and enforce fuel standards and will represent a shift in the FAA's role with respect to the regulation of aviation fuels as the transition to unleaded fuels takes place."*** (Transition Plan, Pg. 14)

The remainder of Section 3 is devoted to explaining the merits of allowing industry consensus to dictate the roll-out schedule of the unleaded fuel transition. This approach is far too passive, as evidenced by its 30-year history of failure to eliminate lead from aviation fuel.

RECOMMENDATION: In keeping with its new authority, the FAA must adopt a more assertive role to ensure that the transition to unleaded aviation fuel succeeds in timely fashion.

6. Transition Plan Deep Dive: Phase 2

This section speaks about FAA, industry and EAGLE stakeholders. (Pg. 31) Noticeably absent are adversely impacted communities, environmental groups, medical associations and educational institutions. As a result, the Transition Plan has an inbuilt bias towards market forces.

RECOMMENDATION: In light of the severe impacts of lead on public health and the environment, including increased morbidity rates and permanent brain damage, stakeholders involved in the decision-making process should be expanded to include groups that recognize the urgency of eliminating lead aviation fuel such as impacted

community, environmental, children's advocacy and environmental justice groups as well as medical associations and educational institutions**.**

6.6. Infrastructure: Fuel storage and distribution infrastructure

This section states that there are "…approximately 3200 U.S. airports reporting sales of 100LL (includes public use and private facilities)…"

RECOMMENDATION: Privately owned non-NPIAS airports (even those classified as public use) that are not eligible for FAA Airport Improvement Program (AIP) funding, should be required to cease the sale of 100LL if unwilling to privately invest in unleaded gasoline alternatives. If they choose not to transition, they can purchase fuel at NPIAS airports that offer unleaded fuel alternatives.

9. Risks to Transition

9.1 Cost

This section includes the following statement, "End users have expressed concerns regarding price differential." This section should factor in the societal costs of failing to curtail this ongoing source of lead poisoning that daily affects millions of U.S. residents.

RECOMMENDATION: This section should factor in the societal costs. As noted earlier in this document, the CDC lead prevention webpage on the economic impacts of lead poisoning includes the following quote, "Preventing childhood lead exposure is cost-effective. According to an analysis from the Health Impact Project, eliminating lead hazards from the places where children live, learn, and play could generate approximately $84 billion in long-term benefits per birth cohort."[19]

9.3 Schedule (critical path)

This section states that "The critical path forward can be distilled down to four critical items: fuel production, fuel infrastructure, fleet readiness, and supporting policy-all supporting a market-driven transition. Should there be significant scheduling delays in any one of the four areas, it would not only put other areas at risk but would also put the entire transition timeline at risk."

RECOMMENDATION: In the interest of public health and the environment, the FAA should come up with a Plan B that might involve a significant reduction in GA piston-engine activity should there be a failure to eliminate leaded aviation fuel by 2030. As noted earlier in this document, the vast majority of piston-engine aircraft activity is personal, recreational, and instructional in nature. Most people in this country can't afford to own private airports, airstrips and personal aircraft.

10. Rulemaking Activities

“The FAA recognizes that the EPA’s positive Endangerment Finding will require FAA to conduct rulemaking in support of removing lead as a fuel component of aviation gasoline and as a fuel additive (49 U.S.C. 44714). Exact timing of rulemaking activities cannot be determined until the transition has progressed sufficiently.” (Transition Plan, Pg. 46)

As stated in the Endangerment Finding,

> ***“Upon EPA’s issuance of regulations, the FAA shall prescribe regulations to ensure compliance with the EPA’s emission standards pursuant to section 232 of the Clean Air Act. In contrast to the findings, those future standards would apply to and have an effect on other entities outside the Federal Government. In addition, pursuant to 49U.S.C. 44714, the FAA has a statutory mandate to prescribe standards for the composition or chemical or physical properties of an aircraft fuel or fuel additive to control or eliminate aircraft emissions which the EPA has found endanger public health or welfare under section 231(a) of the Clean Air Act. In issuing these final findings, the EPA is making such a finding for emissions of lead from engines in covered aircraft.”***[20]

The FAA maintains that it “has supported technical efforts for unleaded fuel development and deployment since the early 1990’s” (see pg. 14 of the Draft Transition Plan). Though 30 years have elapsed since the FAA commenced these efforts, during which time every country on the planet banned lead in automotive fuel, the FAA still has not established regulations or time-lines for prohibiting lead in aviation gasoline. It stands to reason that if a market driven approach was effective, lead would have been removed from aviation fuel decades ago.

RECOMMENDATION: Begin the mandated rule-making process without further delay.

REFLECTIONS ON THE FEDERAL REGISTER COMMENT PROCESS FOR THIS ACTION

We have commented on a number of Federal Register postings in the past. In each instance there was a straightforward process for leaving public comments. In addition, access to previously posted comments by others was readily available. But in the case of the Transition Plan, there were a number of irregularities. For instance:

- Instead of linking to a comment page, when we clicked on the public comment button, we were directed to an FAA page.
- On some occasions, when we and others clicked on public comment, the message stated that the comment period had already closed even though the Federal Register identified 3/13/2026 as the final comment date. Though this

was corrected a couple weeks ago, it certainly discouraged people from leaving comments.

- Access to previously posted comments by others is denied.
- In addition, the Federal Register identified two FAA contact people under the "For Further Information Contact" section. However, on Monday 3/09/2026 when we attempted to reach Paul Wrzesinski at the phone number provided, we received a message stating that the call could not be completed as dialed. On Wednesday 3/11/2026, when reviewing the FAA "Aircraft Certification Service (AIR) Draft Publications Open for Comment" website, we noticed a different phone number for Paul Wrzesinski. Fortunately, this one did go through and we were able to leave a message. Mr. Wrzesinski returned our call and answered our questions. He also confirmed that it was not necessary to fill out the Matrix form and that comments could be sent to the email listed on the site in a narrative format.
- We are grateful to Mr. Wrzesinski for his assistance. Nonetheless, the overall process in responding to this Federal Register Notice has been confusing, complicated, and circuitous. So much so that one can't help but suspect it was deliberately designed to discourage community input.

Lead poisoning is a serious matter that can directly impact the life trajectory of those exposed. For some, exposure to this toxin is ultimately lethal. Others are sentenced to a life of brain damage and the many challenges they face as a result. For this reason, it is essential that concerned residents are given a voice in the process. The way this Federal Register Notice was handled is yet another indication of the barriers and obstacles thrown in the path of banning leaded aviation fuel once and for all. Moving forward, we urge the FAA to develop an open, inclusive, and transparent public process aimed at prohibiting lead poisoning by the aviation sector.

CONCLUSION

For far too long, the FAA has promoted the interests of pilots and airports that are willfully, knowingly and intentionally exposing residents to this pernicious neurotoxin, a situation that persists even though FAA-approved unleaded options such as General Aviation Modification Incorporated (GAMI) G100UL are currently available.

For all the reasons put forward in this submission, Oregon Aviation Watch urges the FAA to prioritize public health and environmental considerations rather than market-driven initiatives, as their primary focus in expediting a ban on leaded aviation fuel, ideally before 2030.

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[1] Federal Aviation Administration Draft Transition Plan to Unleaded Gasoline – for Public Comment. January 2026, Version 1.0.

[2] 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. Environmental Protection Agency (EPA). Federal Register/Vol. 88, No. 202. Rules and Regulations. (10/20/2023). Pg. 72395.

[3] Ibid. Pg. 72373.

[4] Ibid. Pg. 72395-72396.

[5] Preventing Childhood Lead Poisoning. U.S. Centers for Disease Control. (June 12, 2024).

[6] 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. Pg. 72396-72397.

[7] Low-Level Lead Exposure and Mortality in US Adults: A Population-Based Cohort Study. Lanphear, Bruce P et al., The Lancet Public Health, Volume 3, Issue 4, e177 - e184. (April 2018).

[8] 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. Federal Register. Vol. 88, No. 202. Rules and Regulations. (10/20/2023) Pg. 72397.

[9] Ibid. Pg. 72375.

[10] Leaded Aviation Gasoline Exposure Risk at Reid-Hillview Airport in Santa Clara County, California. Mountain Data Group. (8/03/2021).

[11] Zahran, Sammy, Keyes, Christopher, and Lanphear, Bruce. Leaded Aviation Gasoline Exposure Risk and Child Blood Lead Levels. PNAS Nexus. Vol. 2, Issue 1. (1/10/2023).

[12] Zahran, Sammy, Iverson, Terrence, Mcelmurry, Shawn and Weiler, Stephen. The Effect of Leaded Aviation Gasoline on Blood Lead in Children. Journal of the Association of Environmental and Resource Economists. 2(4):575-610. (July 2017).

[13] Soale AN, Callender R, Guignet D, Shadbegian R, Miranda ML. Association between Residential Distance to Airport and Blood Lead Levels in Children under 6 Living in North Carolina, 1992-2015. Environ Health Perspect. 2024 Aug;132(8):87701. doi: 10.1289/EHP14362. Epub 2024 Aug 9. PMID: 39120950; PMCID: PMC11315044.

[14] Miranda ML, Anthopolos R, Hastings D. A Geospatial Analysis on the Effects of Aviation Gasoline on Childhood Blood Lead Levels. Environ Health Perspect; 119(10):1513-6. (October 2011).

[15] Berg, K., Snow, M. & Richardson, K. The Association between Childhood Blood Lead Levels and Proximity to Airports in Colorado. *Discov Environ* 2, 32 (5/22/2024).

[16] Environmental Protection Agency (EPA) 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. Federal Register. Vol. 88, No. 202. Rules and Regulations. (10/20/2023). Pg. 72378.

[17] Ibid. Pg. 72383.

[18] Ibid. Pg. 72386.

[19] Preventing Childhood Lead Poisoning. U.S. Centers for Disease Control. (June 12, 2024).

[20] Environmental Protection Agency (EPA) 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. Federal Register. Vol. 88, No. 202. Rules and Regulations. (10/20/2023). Pg. 72372.