



COMMENTS OF THE GENERAL AVIATION AVGAS COALITION

ON THE

**RELEASE OF DRAFT INTEGRATED REVIEW PLAN FOR THE NATIONAL
AMBIENT AIR QUALITY STANDARDS FOR LEAD**

EPA DOCKET NO. EPA-HQ-OAR-2010-0108

I. INTRODUCTION

On April 12, 2011, the Environmental Protection Agency (“EPA”) published in the *Federal Register* a Notice of Availability for the “Release of Draft Integrated Review Plan for the National Ambient Air Quality Standards for Lead” (the “Draft IRP”). 76 Fed. Reg. 20347. The General Aviation AvGas Coalition (the “Coalition”) respectfully submits the following comments on the Draft IRP.

The Coalition is comprised of associations that represent industries, businesses, and individuals that may be directly impacted by any revision to the national ambient air quality standards (“NAAQS”) for lead (“Pb”). Coalition membership includes the Aircraft Owners and Pilots Association (“AOPA”), the Experimental Aircraft Association (“EAA”), the General Aviation Manufacturers Association (“GAMA”), the National Air Transportation Association (“NATA”), the National Business Aviation Association (“NBAA”), the American Petroleum Institute (“API”) and the National Petrochemical and Refiners Association (“NPRA”). Together, these organizations represent general aviation aircraft owners, operators, and manufacturers, and the producers and distributors of aviation gasoline.¹

Since the establishment of the first lead NAAQS in 1978, the general aviation and petroleum industries have been committed to safely reducing lead emissions. Today, 100 octane low lead (“100LL”) aviation gasoline (or “avgas”) contains 50 percent less lead than it did when the lead NAAQS were first introduced. The general aviation industry is aggressively working to further reduce the lead content of avgas.² Ultimately, the general aviation community is committed to an unleaded future and has engaged in extensive research seeking a feasible unleaded alternative to today’s leaded aviation gasoline. However, the technical challenges of removing lead from aviation gasoline are formidable. Despite extensive efforts, no unleaded replacement has been found and approved that provides adequate and comparable safety and performance to 100LL. But work on this important issue continues and is accelerating, with new efforts to study and develop alternative aviation fuels, including a joint effort involving EPA and the Federal Aviation Administration (“FAA”).³

The Draft IRP concerns the Coalition for two reasons. First, changes to lead monitoring requirements in 2010 will provide important new data on lead emissions, but not until at least 2012. Second, recent revisions to the lead NAAQS in 2008 may have a significant impact on lead emissions, exposure, and any related risk analysis. The timeline as proposed in the Draft IRP does not allow for full consideration of these recent changes affecting lead emissions and the availability of lead monitoring data. Accordingly, the Coalition recommends that EPA either determine that changes to the lead NAAQS are not appropriate at this time, or revise the Draft IRP to extend certain phases of the NAAQS review process to allow for the consideration of new data and changes in emissions resulting from implementation of the 2008 lead NAAQS.

¹ Appendix A contains additional information about Coalition members.

² Pending revisions to the current avgas standard, ASTM D910, would recognize avgas with a reduced tetraethyl lead (“TEL”) content, identified as grade 100/130VLL. This new standard would approve avgas identical to the current 100LL standard, but with about 20 percent less TEL.

³ The Unleaded Avgas Transition Aviation Rulemaking Committee (the “Avgas ARC”), comprised of FAA, EPA, and industry representatives, held its first meeting on March 16-17, 2011. Additional information is available at <http://www.faa.gov/about/initiatives/avgas/>.

II. REGULATORY BACKGROUND

A. Lead NAAQS

Section 108 of the Clean Air Act (“CAA”) requires EPA to list certain air pollutants and issue air quality criteria for those pollutants.⁴ Section 109 of the CAA requires EPA to establish primary and secondary NAAQS for these listed “criteria pollutants.”⁵ In 1978, EPA listed lead as a criteria pollutant and established the first lead NAAQS, setting both the primary and secondary standards at a level of 1.5 micrograms per cubic meter (µg/m³).⁶

Section 109 of the CAA requires that EPA “shall complete a thorough review” of NAAQS established under Section 108, “at 5-year intervals,” and revise those standards “as may be appropriate.”⁷ EPA first reviewed lead standards in the mid-1980s, but did not revise the 1978 lead NAAQS.⁸ In 2004, EPA began its second review of the lead NAAQS, which concluded in 2007.⁹ That review resulted in the first change to the 1978 lead NAAQS and a dramatic tightening of both the primary and secondary lead standards, from 1.5 µg/m³ to 0.15 µg/m³.¹⁰ EPA concluded that this ten-fold tightening of the lead NAAQS “is requisite to protect public health, including the health of sensitive groups, with an adequate margin of safety.”¹¹ This revision to the lead NAAQS became effective on January 12, 2009.¹² Just over one year later, EPA initiated the current lead NAAQS review by issuing a “call for information” on Feb. 26, 2010.¹³

B. Lead Monitoring Requirements

In addition to making significant changes to lead NAAQS standards, the 2008 rulemaking also requires extensive state-level monitoring, reporting and air modeling of lead emissions.¹⁴ In late 2010, EPA made further changes to lead monitoring requirements, which became effective on January 26, 2011.¹⁵ These changes lowered the 2008 lead NAAQS monitoring threshold from 1.0 tons per year (tpy) to 0.5 tpy for industrial facilities. According to EPA, about 96 industrial facilities meet or exceed the 0.5 tpy threshold, and monitoring agencies will be required to install and operate lead monitors at these sources. The 2010 lead monitoring rules also require lead monitoring at airports meeting or exceeding a 1.0 tpy threshold, plus 15 additional airports with lead emissions between 0.5 and 1.0 tpy.¹⁶ That data will inform a

⁴ CAA § 108(a); 42 U.S.C.A. 7408(a).

⁵ CAA §§ 109(a)-(b); 42 U.S.C.A. 7409(a)-(b).

⁶ 43 Fed. Reg. 46246 (Oct. 5 1978).

⁷ CAA § 109(d)(1), 42 U.S.C. s 7409(d)(1).

⁸ See 73 Fed. Reg. 66964, 66966-68 (Nov. 12, 2008) (describing lead NAAQS rulemaking history).

⁹ *Id.*

¹⁰ *Id.* at 67006.

¹¹ *Id.*

¹² *Id.* at 66964

¹³ 75 Fed. Reg. 8934 (Feb. 26, 2010).

¹⁴ The 2008 lead NAAQS rulemaking acknowledged prior deficiencies in the “ambient air monitoring network” for lead, which limited EPA’s ability to analyze ambient lead levels and conduct exposure and risk modeling. 73 Fed. Reg. at 66981. Due to these data limitations, EPA “could not sharply separate Pb linked to ambient air from Pb that is background,” resulting in “a slight overestimate” of certain risks. *Id.*

¹⁵ 75 Fed. Reg. 81126 (Dec. 27, 2010).

¹⁶ *Id.* at 81131-32.

monitoring study assessing the need for additional lead monitoring at airports.¹⁷ Finally, the 2010 rules make significant changes to non-source oriented lead monitoring requirements.¹⁸ These changes will result in at least 111 new lead monitors, more than doubling the existing number, which will collect important information on ambient levels of lead.¹⁹ However, these monitors are not required to be on-line until December 27, 2011.²⁰ As a result, a full year of data will not be available until 2013.

III. COMMENTS

A. The IRP Should Allow for Consideration of New Lead Monitoring Data

In the 2008 lead NAAQS rulemaking, EPA recognized the limited availability of lead monitoring data.²¹ Changes to lead monitoring requirements in 2008, and again in 2010, were intended to allow EPA to “achieve better understanding of ambient Pb air concentrations near Pb emission sources and to provide better information on exposure to Pb in large urban areas.”²² As the IRP recognizes, “[w]hile non-source-oriented monitoring data can be used for designation purposes, the main objective for non-source-oriented monitoring is to gather information on neighborhood scale lead concentrations that are typical in urban areas *so to better understand ambient air related Pb exposures* for the general population” (emphasis added).²³

Despite the clear importance of collecting and considering new data on lead emissions and exposure during the next lead NAAQS review, the Draft IRP timeline does not allow for consideration of this information. As proposed, the Science Assessment (“SA”) would begin in April 2011 and be complete by June 2012.²⁴ And the Risk/Exposure Assessment (“REA”) would begin in June 2011 and be complete by January 2013.²⁵ However, the majority of the 270 ambient lead monitors required by the 2008 and 2010 rules will not be on-line and collecting data until the end of 2011. Moreover, a full year of data from the new lead monitoring network will be unavailable until 2013. Because the first two drafts of the SA will be complete before the new lead monitors are required to be on-line, the SA will not be able to fully consider important new data on ambient lead. Similarly, the Draft IRP proposes to conclude the REA *before* a complete year of new monitoring data is even available for consideration, despite EPA’s explicit statement that the new monitors are intended to provide new, important information on ambient air exposure. Accordingly, the proposed timelines for both the SA and REA are inadequate and should be extended to allow consideration of new data resulting from the ambient lead monitoring network. Similarly, because the Policy Assessment/Rulemaking (“PA”) phase depends on prior phases, it should also be extended to allow consideration of new monitoring

¹⁷ *Id.*

¹⁸ *Id.* at 81132-33.

¹⁹ *Id.* at 81134.

²⁰ *Id.*

²¹ 73 Fed. Reg. 66986 (“there are significant limitations with the current monitoring network”); *id.* at 66987 (“the Administrator recognizes significant limitations with the current monitoring network”); *id.* at 66992 (“the current monitoring network . . . lacks monitors near many significant Pb sources”).

²² 73 Fed. Reg. 67025.

²³ Draft IRP 6.3:20-23.

²⁴ Draft IRP 2.2, t. 2-1.

²⁵ *Id.*

and exposure data, thereby avoiding the problem EPA faced when promulgating the 2008 lead NAAQS—a lack of data.

B. EPA Should Fully Consider the Effects of the 2008 Lead NAAQS Before Again Revising the Lead NAAQS

The latest revision to the lead NAAQS became effective on January 12, 2009, and may significantly alter lead emissions across the country.²⁶ But the full effect of this first-ever lead NAAQS revision will not be realized for several years, due to the implementation timeline established by the CAA and EPA. Accordingly, any further lead NAAQS revisions are premature and inappropriate until the effects of the 2008 lead NAAQS revision can be realized, measured, and taken into account.

NAAQS are primarily implemented through state implementation plans (“SIPs”). Under applicable CAA provisions, SIP revisions are due within three years of a new NAAQS standard, a deadline that EPA may extend by up to 18 months.²⁷ EPA has stated that SIP revisions implementing the 2008 lead NAAQS are not due until June 2013—well *after* completion of the SA and REA phases proposed in the Draft IRP.²⁸ In addition, states with nonattainment areas are required to attain the 2008 lead NAAQS no later than five years from the effective date of the nonattainment designation.²⁹ EPA did not make attainment and non-attainment designations concurrent with the 2008 lead NAAQS revision,³⁰ electing instead to await additional lead monitoring data.³¹ In 2010, EPA made initial designations for 17 counties,³² and plans to complete its designations in late 2011.³³ And because additional monitoring data will not be available until at least 2012, EPA may then determine “whether to undertake a redesignation to nonattainment, issue a ‘SIP Call’ . . . or take other discretionary steps.”³⁴ In other words, complete designations under the 2008 lead NAAQS will not be complete until late 2011, and are likely to be revised in light of newly available monitoring data. Because EPA does not plan to complete nonattainment designations until 2011 or later, and because a non-attainment designation triggers a five-year compliance clock, full implementation of the 2008 lead NAAQS may not occur until 2017 or later.

The 2008 lead NAAQS is ten times more stringent than the 1978 lead NAAQS. EPA has already designated 17 counties as “non-compliance” and additional designations may result in further SIP revisions, corresponding emissions limits, and other measures to bring those areas into compliance with the 2008 lead NAAQS. As a result, once fully implemented the 2008 lead NAAQS will undoubtedly alter the current emissions inventory and likely reduce exposure to ambient lead. Notwithstanding these potentially significant effects, EPA began the current NAAQS review process *less than one year* after finalizing the 2008 lead NAAQS. And the Draft

²⁶ 73 Fed. Reg. 66964.

²⁷ CAA § 110(a)(1); 42 U.S.C.A. 7410(a)(1); *see also* 73 Fed. Reg. 67034.

²⁸ Draft IRP 2.2, t. 2-1.

²⁹ 73 Fed. Reg. 67034-5.

³⁰ *Id.* at 67032.

³¹ *Id.* at 67032.

³² 75 Fed. Reg. 71033 (Nov. 22, 2010).

³³ *See* 75 Fed. Reg. 81131.

³⁴ *Id.*

IRP proposes a schedule that would conclude substantive aspects of the lead NAAQS review process in 2013, well before any impact of the 2008 lead NAAQS can be realized or measured.³⁵

While the CAA requires a NAAQS review “at five year intervals,” revisions to the NAAQS are to be made only “as may be appropriate”³⁶—a decision to *not* revise the 2008 lead NAAQS is within EPA’s discretion and defensible as such.³⁷ And revisions to the lead NAAQS are not appropriate until EPA is able to evaluate the potentially significant effects of the 2008 lead NAAQS. Accordingly, EPA should determine that revising the lead NAAQS is not appropriate until EPA can fully assess the effects of implementing the 2008 lead NAAQS. In the alternative, EPA should extend the timeframes proposed in the Draft IRP to allow for consideration of changes in lead emissions and exposure resulting from the implementation of the 2008 lead NAAQS.

IV. CONCLUSION

The 2008 lead NAAQS revisions represent a ten-fold tightening of a NAAQS standard that had been in place for 30 years. But SIP revisions implementing the 2008 lead NAAQS are not due until 2013, and implementation for nonattainment areas may not occur until 2017. Because implementation of the 2008 lead NAAQS could result in significant reductions in lead emissions, revising the lead NAAQS is premature until the impact of those changes can be realized, measured, and considered in the next NAAQS review. In addition, the 2008 lead NAAQS review process was hampered by a lack of adequate monitoring data. Now, EPA proposes to embark on another round of lead NAAQS revisions without allowing enough time to collect and evaluate data from a new lead monitoring network. Instead, EPA should ensure that any Science Assessment and Risk/Exposure Assessment phases are structured in a manner that allows full consideration of new and valuable lead monitoring data. For these reasons, EPA should either determine that a revision of the lead NAAQS is not appropriate at this time, or revise the Draft IRP to extend the SA and REA phases (and any related Policy Assessment and rulemaking) to allow full consideration of the 2008 lead NAAQS and data collected by the new lead monitoring network.

³⁵ Draft IRP 2.2, t. 2-1.

³⁶ CAA § 109(d)(1); 42 U.S.C.A. 7409(d)(1).

³⁷ See *Environmental Defense Fund v. Thomas*, 870 F.2d 892, 900 (2nd Cir. 1989) (CAA does not impose mandatory duty to revise the NAAQS; while a district court may require EPA to take “some formal action” under CAA § 109(d), it “does not have jurisdiction to compel [EPA] to revise the NAAQS.”).

Respectfully submitted,



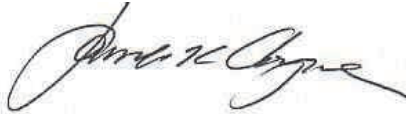
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APPENDIX A

ABOUT THE GENERAL AVIATION AVGAS COALITION

The Aircraft Owners and Pilots Association (AOPA)

The Aircraft Owners and Pilots Association is a not-for-profit individual membership organization of more than 415,000 pilots and aircraft owners. AOPA's mission is to effectively serve the interests and needs of its members as aircraft owners and pilots and establish, maintain, and articulate positions of leadership to promote the economy, safety, utility, and popularity of flight in general aviation aircraft. Representing two thirds of all pilots in the United States, AOPA is the largest civil aviation organization in the world.

The Experimental Aircraft Association (EAA)

The Experimental Aircraft Association is a non-profit individual membership organization of 170,000 pilots and aircraft owners with a wide range of aviation interests and backgrounds. EAA's mission is dedicated to providing aviation access to all who wish to participate. As part of that, EAA is committed to protecting the right to fly and own recreational aircraft, promoting opportunities to experience and enjoy aviation, preserving aviation history and heritage, and preparing for tomorrow and future generations of aviators. EAA has chartered approximately 1,000 Chapters which promote local aviation activities in their communities and regions.

The General Aviation Manufacturers Association (GAMA)

The General Aviation Manufacturers Association represents over 65 of the world's leading manufacturers of fixed-wing general aviation airplanes, engines, avionics, and components. In addition to building nearly all of the general aviation airplanes flying today, GAMA member companies also operate aircraft fleets, airport fixed-based operations, pilot training, and maintenance facilities worldwide.

The National Air Transportation Association (NATA)

The National Air Transportation Association, the voice of aviation business, is the public policy group representing the interests of aviation businesses before Congress, federal agencies and state governments. NATA's 2,000 member companies own, operate and service aircraft. These companies provide for the needs of the traveling public by offering services and products to aircraft operators and others such as fuel sales, aircraft maintenance, parts sales, storage, rental, airline servicing, flight training, Part 135 on-demand air charter, fractional aircraft program management and scheduled commuter operations in smaller aircraft. NATA members are a vital link in the aviation industry providing services to the general public, airlines, general aviation and the military.

The National Business Aviation Association (NBAA)

Founded in 1947 and based in Washington, DC, the National Business Aviation Association is the leading organization for companies that rely on general aviation aircraft to help make their

businesses more efficient, productive and successful. The Association represents more than 8,000 Member Companies of all sizes and located across the country.

The American Petroleum Institute (API)

The American Petroleum Institute is the only national trade association that represents all aspects of America's oil and natural gas industry. Our more than 400 corporate members, from the largest major oil company to the smallest of independents, come from all segments of the industry. They are producers, refiners, suppliers, retailers, pipeline operators and marine transporters, as well as service and supply companies that support all segments of the industry.

The National Petrochemical and Refiners Association (NPRA)

The National Petrochemical & Refiners Association is a national trade association based in Washington, D.C. representing more than 450 members, including virtually all U.S. refiners and petrochemical manufacturers. Our members supply consumers with a wide variety of products used daily in their homes and businesses. These products include gasoline, diesel fuel, home heating oil, jet fuel, lubricants, and the chemicals that serve as "building blocks" for everything from plastics to clothing to medicine to computers and many other products essential to maintaining and improving the nation's quality of life.