Rule 74.12 Surface Coating of Metal Parts and Products (Adopted 11/11/03)
Rule 74.15 Boilers, Steam Generators and Process Heaters (Adopted 11/08/94)
Rule 74.15.1 Boilers, Steam Generators and Process Heaters (Adopted 06/13/00)
Rule 74.16 Oil Field Drilling Operations (Adopted 01/08/91)
Rule 74.20 Adhesives and Sealants (Adopted 01/11/05)
Rule 74.23 Stationary Gas Turbines (Adopted 1/08/02)
Rule 74.24 Marine Coating Operations (Adopted 11/11/03)
Rule 74.24.1 Pleasure Craft Coating and Commercial Boatyard Operations (Adopted 01/08/02)
Rule 74.26 Crude Oil Storage Tank Degassing Operations (Adopted 11/08/94)
Rule 74.27 Gasoline and ROC Liquid Storage Tank Degassing Operations (Adopted 11/08/94)
Rule 74.28 Asphalt Roofing Operations (Adopted 05/10/94)
Rule 74.30 Wood Products Coatings (Adopted 06/27/06)
Rule 75 Circumvention (Adopted 11/27/78)
Rule 101 Sampling and Testing Facilities (Adopted 05/23/72)
Rule 102 Source Tests (Adopted 04/13/04)
Rule 103 Continuous Monitoring Systems (Adopted 02/09/99)
Rule 154 Stage 1 Episode Actions (Adopted 09/17/91)
Rule 155 Stage 2 Episode Actions (Adopted 09/17/91)
Rule 156 Stage 3 Episode Actions (Adopted 09/17/91)
Rule 158 Source Abatement Plans (Adopted 09/17/91)
Rule 159 Traffic Abatement Procedures (Adopted 09/17/91)
Rule 220 General Conformity (Adopted 05/09/95)
Rule 230 Notice to Comply (Adopted 11/09/99)

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[FR Doc. E7–22457 Filed 11–15–07; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 87

[EPA–HQ–OAR–2007–0294; FRL–8495–4]

Petition Requesting Rulemaking To Limit Lead Emissions from General Aviation Aircraft; Request for Comments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of petition for rulemaking.

SUMMARY: Friends of the Earth has filed a petition with EPA, requesting that EPA find pursuant to section 231 of the Clean Air Act that lead emissions from general aviation aircraft cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare and that EPA propose emissions standards for lead from general aviation aircraft. Alternatively, Friends of the Earth requests that EPA commence a study and investigation of the health and environmental impacts of lead emissions from general aviation aircraft, if EPA believes that insufficient information exists to make such a finding. The petition submitted by Friends of the Earth explains their view that lead emissions from general aviation aircraft endanger the public health and welfare, creating a duty for the EPA to propose emission standards. EPA invites information and comments from all interested parties on the issues raised by this petition.

DATES: Comments must be received on or before March 17, 2008.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2007–0294, by one of the following methods:

- *www.regulations.gov*: Follow the on-line instructions for submitting comments.
- Email: *a-and-r-docket@epa.gov*, Attention Docket ID No. OAR–2007–0294.
- Fax: (202) 566–9744
- Mail. Send your comments to: Air and Radiation Docket, Environmental Protection Agency, Mailcode: 6102T, 1200 Pennsylvania Ave., NW., Washington, DC 20460, Attention: Docket ID No. OAR–2007–0294.
- Hand Delivery. Deliver your comments to: Air and Radiation Docket in the EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC, Attention: Docket ID No. OAR–2007–0294. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA–HQ–OAR–2007–0294. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *www.regulations.gov*. The *www.regulations.gov* website is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through *www.regulations.gov* your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm*.

Docket: All documents in the docket are listed in the *www.regulations.gov* index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at the Air and Radiation Docket in the EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave., NW., Washington, DC, Docket ID No. OAR–2007–0294. This docket is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air and Radiation Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Bryan Manning, Assessment and Standards Division, Office of Transportation and Air Quality, 2000 Traverwood Drive, Ann Arbor, MI 48105; *telephone number:* 734–214–4832; *fax number:* 734–214–4816; *e-mail address: manning.bryan@epa.gov,* Assessment and Standards Division Hotline; telephone number: (734) 214–4636; e-mail address: *asdinfo@epa.gov*.

SUPPLEMENTARY INFORMATION:

I. General Information

A. What Should I Consider as I Prepare My Comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through www.regulations.gov or e-mail. Clearly

mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD–ROM that you mail to EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI). In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for Preparing Your Comments.* When submitting comments, remember to:

- Identify the appropriate docket identification number in the subject line on the first page of your response. It would also be helpful if you provided the name, date, and **Federal Register** citation related to your comments.
- Explain your views as clearly as possible.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Make sure to submit your comments by the comment period deadline identified.

II. The Friends of the Earth Petition

This notice is seeking comment on and information related to a petition for an EPA finding and rulemaking and collateral relief from the Friends of the Earth. This petition is seeking the regulation of lead emissions from piston-powered general aviation aircraft under section 231 of the Clean Air Act. The complete petition of Friends of the Earth is available from their Web site, the docket, from the EPA Web site at: *www.epa.gov/otaq/aviation.htm,* or from the individual listed under **FOR FURTHER INFORMATION CONTACT** above.

Friends of the Earth is an environmental advocacy organization headquartered in Washington, DC. The petition they submitted concerns the use of leaded aviation gasoline in piston-powered general aviation aircraft in the U.S. Friends of the Earth believes that ''EPA action regarding lead in general aviation aircraft is long overdue. Studies increasingly show that lead in any quantity threatens the public welfare. Lead emissions from general aviation aircraft constitute a substantial proportion of all current lead air emissions. As a result of the use of leaded aviation gasoline, humans and ecological receptors at or near general aviation airports may be exposed to elevated levels of lead.''

Friends of the Earth contends that ''safe unleaded alternatives to aviation gasoline do exist. Since 1999, the research and development process has produced unleaded fuels that have received approval from the FAA for current use. Tens of thousands of low-performance aircraft have received supplemental type certificates allowing them to run on unleaded automobile gasoline (commonly referred to as mogas in the aviation community). Additionally, a mogas alternative, 82UL, has been developed for use by some low-performance planes. The combination of these two fuels can be utilized by nearly seventy percent of all piston-driven aircraft. Additionally, the FAA allows a select number of planes to run on an ethanol based aviation fuel (AGE85); the remaining thirty percent of general aviation planes can potentially use this unleaded gasoline.''

The Friends of the Earth petition was addressed to EPA. Both EPA and the FAA have specific statutorily defined roles regarding aviation. EPA through section 231 of the Clean Air Act can make findings regarding air pollution emissions from aircraft and set standards regulating such emissions and FAA has the statutory authority to regulate the fuel used in aircraft (49 U.S.C. 44714). By this Notice, EPA is soliciting comment on the petition, specifically on the points discussed in the section ''Request for Comments'' presented below. EPA will use this information in its statutory assessment of whether lead emissions from piston-powered general aviation cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare.

III. Background Regarding Lead in Aviation Fuel

In a variety of chemical forms and exposure pathways, lead has long been recognized as causing serious adverse health effects. In 1978 EPA established a National Ambient Air Quality Standard for lead of 1.5 micrograms per cubic meter, as a maximum quarterly average. Research completed since that time, discussed in EPA's *Air Quality Criteria Document for Lead* (2006) indicates that health effects of lead occur at blood lead levels lower than those previously reported and include concerns not previously studied (available at *www.epa.gov/ncea*). The adverse effects of lead include neurotoxic effects (e.g., IQ loss in children), effects on the immune system, red blood cell production, cardiovascular system, kidney, bones, teeth and reproductive and developmental systems. EPA is currently conducting a review of the NAAQS which has included the assessment of health and welfare effects of lead documented in the *Air Quality Criteria Document for Lead* (2006). Integral to the NAAQS review are decisions regarding the adequacy of the current standard for lead and whether the Agency should retain or revise it. Consistent with the court order regarding this review, the review and regulatory development process will be completed by September 1, 2008. Additional information about the review is available at: *http://www.epa.gov/ttn/naaqs/standards/pb/s_pb_index.html.*

Thirty-five years ago, cars and trucks were the major contributors of lead emissions to the air. In the 1970s, EPA set national regulations to gradually reduce the lead content in gasoline. In 1974, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. EPA banned the use of leaded gasoline in highway vehicles after December 1995. As a result of EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector have dramatically declined (96 percent between 1980 and 2005). The large reductions in lead emissions from motor vehicles have changed the nature of the air quality lead problem in the United States. Industrial processes, particularly primary and secondary lead smelters, utility boilers, and battery manufacturers taken together, are now responsible for most lead emissions into the atmosphere.

Currently, tetraethyl lead (TEL) is added to gasoline used in most piston-engine powered aircraft. The 2002 National Emissions Inventory (NEI) estimates that lead emissions from the use of leaded aviation gasoline (commonly referred to as avgas) are 491 tons; this accounts for 29 percent of the air pollution emissions inventory for lead, and is overall, the largest source category. This estimate is based on the Department of Energy estimate of about 281 million gallons of avgas supplied in the U.S. in 2002 (data available at *http://www.tonto.eia.doe.gov/dnav/pet/hist/mgaupus1A.htm*). In 2006 the volume of avgas supplied in the U.S. was about 280 million gallons. The majority of avgas contains up to 0.56 grams of lead per liter (2.12 grams of lead/gallon). This is referred to as 100 Low Lead (100LL). There is another grade of 100

octane avgas that contains 1.12 grams of lead per liter, but this product is not widely available.

According to the Federal Aviation Administration (FAA) General Aviation and Air Taxi Activity and Avionics (GAATAA) survey (2005), there were over 190,000 piston-engine powered aircraft engaged in flight operations in the U.S. in 2005; these aircraft comprised approximately 90 percent of the aircraft in the general aviation fleet. In 2005, approximately 29 million landing and take-off events (58 million total operations) were conducted by piston-engine powered aircraft. Among the total hours flown by general aviation aircraft, about 68 percent occurred in a piston-engine powered aircraft. According to the General Aviation Manufacturers Association (GAMA), there were approximately 2,750 new piston-engine powered aircraft manufactured in 2006. This is the largest production volume over the past ten years and reflects an average annual increase in sales that ranged from eight to 43 percent during the preceding 10-year period except for 2001 and 2002. GAMA estimates that the average piston-engine powered aircraft is 35–40 years old.

Avgas and automotive unleaded gasoline are both derived and blended from the refining of petroleum. However, due to the different nature of engine designs and operating environments these two types of gasoline are different in their chemical composition. Avgas is refined and blended to meet ASTM specification D910 while automotive unleaded gasoline (commonly referred to as mogas) meets ASTM specification D4814. Generally, avgas is transported independent of other fuel to avoid cross-contamination and to maintain the tight specifications of avgas required for proper engine operation in general aviation applications. TEL is added to avgas to increase octane, prevent knock,[1] and prevent valve seat recession and subsequent loss of compression for engines without hardened valves. Lead and other additives are added downstream of the refinery; most avgas is distributed by truck directly from the refinery to the bulk gasoline terminals or bulk plants or to the storage tanks and refueling equipment at airports.

Most piston engines used in general aviation are type certified by FAA for the use of leaded avgas (mostly 100LL). The FAA has issued supplemental type certificates (STCs) qualifying piston engines used in general aviation to use unleaded avgas. There are two types of unleaded gasoline reflected in these STCs. The first type of unleaded gasoline which can be used under STCs is ethanol-free unleaded automotive gasoline (mogas). Most aircraft using this mogas have low-compression engines which were originally certified to run on leaded 80/87 avgas and require only 87 antiknock index gasoline. The second type is known as 82UL avgas, which is unleaded fuel similar to automobile gasoline but without additives. It may be used in aircraft that have an STC for the use of automobile gasoline with an aviation lean octane rating of 82 or less or an antiknock index of 87 or less. ASTM specification D6227 has been established for 82UL but this fuel has not yet been produced for general distribution.[2] About 97 percent of gasoline used in piston-engine powered aircraft is leaded avgas, mostly 100LL. The remaining three percent is ethanol-free unleaded automotive gasoline (mogas).

The Experimental Aircraft Association and Petersen Aviation estimate that ethanol-free unleaded gasoline can be used in approximately 40 percent of the piston-engine powered aircraft fleet (e.g., those aircraft with low-compression engines).[3] In contrast, in order to prevent knock or detonation during the combustion process, high-compression piston engines require higher octane than typical unleaded gasoline provides. These aircraft also typically have higher utilization rates and fuel consumption rates than their low-compression counterparts. The AOPA estimates that high-compression piston-engine powered aircraft currently consume approximately 70 percent of the leaded avgas supplied nationally, and that the remaining 30 percent of the leaded avgas is used in aircraft that could also use ethanol-free unleaded automotive gasoline.

Efforts to explore reduced lead emissions from piston-engine powered aircraft have primarily focused on fuels to replace 100LL avgas, with less attention given to potential engine modifications. The FAA conducts research exploring replacement fuels for use in piston-engine powered aircraft at its William J. Hughes Technical Center. Publications from this research can be found at *http://www.actlibrary.tc.faa.gov/* by searching for 'unleaded avgas'. The Coordinating Research Council has organized the Unleaded Aviation Gasoline Development Group which brings together FAA, AOPA, GAMA, the Experimental Aircraft Association, airframe manufacturers, engine manufacturers, fuel producers and other interested parties. The objective of the group is to facilitate development of a high-octane unleaded aviation gasoline as an environmentally compatible, cost-effective replacement for the current 100LL avgas. Documents regarding the CRC Unleaded Aviation Gasoline Development Group can be found in the docket for this notice.

At the 23rd World Assembly of the International AOPA, Lennart Persson of Hjelmco Oil in Sweden suggested that a 91/96 octane unleaded avgas could be a transparent switchover for 70 percent of the U.S. general aviation fleet. He indicated that this fuel would provide similar performance to 100LL avgas and has done so successfully in Sweden for 15 years. It is now offered for sale at 70 locations in Sweden. For more information see *http://www.iaopa.org/info/assembly23/ppts/persson.pdf*

IV. Request for Comments

EPA is soliciting public comment on any and all aspects of the petition from Friends of the Earth regarding issues related to the use of lead in general aviation gasoline. To assist us in developing our response to the petition EPA specifically requests information and comment on the following.

1. EPA requests information related to human and environmental lead exposures and effects around airports. Specifically, we request information on concentrations of lead in the air, soil, surface water or other environmental media at or near airports where leaded avgas is used. Information regarding sources of lead in addition to leaded avgas in these areas is also requested.

2. We request information on levels of lead in indoor dust in homes in the vicinity of airports where leaded avgas is used and information regarding the presence of leaded paint in those homes.

3. We request information on blood lead levels in children and adults residing or attending school in the vicinity of an airport where leaded avgas is used.

[1] Knocking is the sound produced when some of the unburned fuel in the cylinder ignites spontaneously resulting in rapid burning and a precipitous rise in cylinder pressure that creates the characteristic knocking or pinging sound (Chevron 2005 available at: *http://www.chevronglobalaviation.com/docs/aviation_tech_review.pdf*).

[2] 82UL has not yet been produced for general distribution due to limited demand. It would be a fraction of the 100LL market. It is an aviation grade product, and thus, refiners can not simply alter mogas to make 82UL.

[3] The Experimental Aircraft Association and Petersen Aviation data are available at *www.aviationfuel.org* and *www.autofuelstc.com/autofuelstc/pa/PetersenAviation.html.*

4. We request information on the characteristics of the populations residing in the vicinity of an airport where leaded avgas is used, specifically, information regarding the number of children six years and younger, the number of schools, daycare facilities, retirement homes, and the socioeconomic status of the population.

5. EPA request information on the volume of leaded avgas and unleaded aviation gasoline (mogas) supplied at individual airports nationwide.

6. EPA requests comment on locations where unleaded aviation gasoline is available and the reason for its apparent lack of widespread availability. We request the submission of information related to supplying unleaded aviation gasoline at airports and how potential fuel distribution issues could be addressed.

7. EPA requests information on the characteristics of piston engine general aviation operation, including annual LTOs by airport, LTO characteristics per airport and aircraft/engine type including mode, time-in-mode, and fuel flow rate in mode. Related to this, EPA requests information on the frequency and duration of local area flights (including touch/go operations) and flight durations within the mixing layer.

8. EPA requests information on the disposal of leaded avgas after a pilot checks the fuel before starting the aircraft. Specifically, we request information on how this fuel is discarded (i.e., is it deposited on the tarmac) or otherwise handled?

9. Leaded avgas contains ethylene dibromide which acts as a scavenger for lead by converting lead oxide to lead bromide compounds which are volatile and easily exhausted from the engine. This prevents lead oxide depositing on the valves and spark plugs where it could damage the engine. EPA requests information on the variation in lead emission rates at various operating modes and power settings and the quantity of lead retained in the engine and engine oil as a fraction of the lead in the fuel combusted.

10. EPA is requesting comments on the potential use of replacement fuels for use in piston-engine powered aircraft. Approximately 40 percent of the piston-engine powered aircraft fleet is certified with an STC allowing the use of ethanol-free unleaded gasoline (82UL or ''mogas''), but these fuels are not widely available at airports. Information available to EPA suggests that 30 percent of the 100LL avgas consumed could be replaced by unleaded gasoline. These aircraft are equipped with low-compression engines that may also run on leaded aviation fuel when mogas or 82UL is not available.

11. We request analysis of the prospects for developing an unleaded fuel for the general aviation fleet that will meet the needs of high-compression engines, including additional research needed.

12. EPA is requesting comment on the viability of a high-octane unleaded aviation gasoline in a high-compression engine to provide equivalent performance and safety to 100LL avgas.

13. In this context, EPA requests comment on the viability of the use of ethyl tertiary-butyl ether (ETBE) or other octane enhancing compounds for unleaded fuel.

14. We also request information on what modifications would need to be made to the existing fleet of high-compression engines as well as new engines, with appropriate lead time, for them to operate on high-octane unleaded fuel with an equivalent margin of safety. In particular, we solicit comment on electronic ignition systems (full authority digital engine control) and knock (detonation) sensors, including comments on further research on these technologies. One example for consideration is the Teledyne Continental Motors/Aerosance Powerlink FADEC system.

15. EPA also requests information on the ability of current engines to operate on avgas with a decreased lead content relative to 100LL, and identification of the minimum lead content needed to maintain safe engine operation.

16. EPA requests comment on the storage of avgas, specifically, issues related to above ground storage capacity compared to below-ground storage capacity.

17. EPA requests comment on the availability of additives less toxic than lead to enhance aviation gasoline octane.

18. We request comment on the long-term availability of TEL as an avgas additive.

19. We request information related to the feasibility and costs of any potential options for limiting lead emissions from existing aircraft.

20. We request comment on the STCs which have been approved to allow for the use of unleaded gasoline in general aviation, the percent and characteristics of the current fleet covered by STCs, and obstacles to wider acceptance and application of the STCs.

21. EPA is requesting comment on additional research on alcohol-based fuels of which we should be aware. The FAA has approved a very limited number of STCs for use of ethanol-based AGE–85 fuel (85% ethanol in 15% unleaded gasoline) under a preliminary fuel specification. Subsequent approvals allowing more widespread use of AGE–85 are pending the development of a final, aviation-grade fuel specification to ensure potential safety concerns with the fuel are fully vetted by the FAA and the aviation industry.

22. EPA is requesting comment on additional research or information regarding the use of diesel engines in general aviation, particularly regarding equipment changes and the related costs. The FAA has approved Type Certificates and STCs for diesel-cycle engines that use widely-available, unleaded jet fuel.

Before the end of the comment period, please send all comments and related information to the address indicated in the **ADDRESSES** section at the beginning of this notice.

Dated: November 9, 2007.

Stephen L. Johnson,

Administrator.

[FR Doc. E7–22456 Filed 11–15–07; 8:45 am]

BILLING CODE 6560–50–P