

Second Draft Lead National Ambient Air Quality Standards Risk Assessment for Public Review and Clean Air Science Advisory Committee Review

Fact Sheet

Action

- On July 31, 2007, the Environmental Protection Agency (EPA) released a second draft of its risk assessment report as part of the agency's review of the national ambient air quality standards (NAAQS) for lead. EPA is seeking public comment on this draft technical document.
- EPA has provided the draft report to the Clean Air Science Advisory Committee (CASAC), a group of independent scientific and technical experts that provides advice to EPA. The CASAC will review the report at a public meeting in Research Triangle Park, N.C. on August 28 and 29, 2007. This meeting is open to the public.
- Completing and reviewing a risk assessment is part of the extensive scientific and technical process EPA uses to review any national ambient air quality standard.
- The purpose of the draft document, "*Lead Human Exposure and Health Risk Assessments for Selected Case Studies*," is to describe the design, methodology and results of the human exposure and health risk assessments for lead.
- EPA *evaluated* three case studies in this draft risk assessment: 1) a hypothetical general urban case study; 2) an area around a primary lead smelter; and 3) an area around a secondary lead smelter. The assessment examined several different levels of lead in the air: 1) at the current standard, 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$); 2) at levels based on current conditions (obtained from urban monitoring data), 0.87 $\mu\text{g}/\text{m}^3$ and 0.14 $\mu\text{g}/\text{m}^3$; and 3) at alternative standards based on recommendations from CASAC: 0.5 $\mu\text{g}/\text{m}^3$ down to 0.05 $\mu\text{g}/\text{m}^3$
- This draft full-scale assessment incorporates recommendations from CASAC earlier this year on a draft pilot phase *assessment*. The draft pilot phase assessment was released in December 2006.
- The draft risk assessment does not interpret results or draw any conclusions about the adequacy of current standards. Once finalized, the information in the assessment will be considered along with other technical assessments and policy assessments as EPA completes its review of the current lead standards.

Next Steps

- EPA will carefully review and consider comments received during the public comment period and at the August CASAC meeting. The agency intends to release a final human exposure and health risk assessment technical support document this fall.

- EPA will consider the results of the final assessment along with information from its review of scientific information on lead in developing a policy assessment to be completed this fall.
- EPA will meet the current court-ordered schedule to propose action to revise or retain the current lead standards by May 1, 2008 and to take final action by September 1, 2008.

Background

- The Clean Air Act requires EPA to set National Ambient Air Quality Standards for "criteria pollutants." Currently, lead and five other major pollutants are listed as criteria pollutants. (The others are ozone, nitrogen oxides, carbon monoxide, sulfur oxides, and particulate matter.) The law also requires EPA to periodically review the standards to ensure that they provide adequate health and environmental protection, and to update those standards as necessary.
- In response to a case filed by the Missouri Coalition for the Environment, the U.S. District Court, Eastern District of Missouri, Eastern Division, issued a decision in September, 2005 that a review of the lead NAAQS should be completed by September 1, 2008. The court-ordered schedule requires EPA to propose whether to revise the standards by May 1, 2008, and issue a final rule by Sept. 1, 2008.
- Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Motor vehicle emissions have been dramatically reduced with the phase-out of leaded gasoline in the nation's motor vehicle gasoline supply. Some general aviation planes and racecars still use leaded fuel; additionally, lead is a trace contaminant in diesel fuel and gasoline.
- Larger industrial sources of lead emissions currently include metals processing, particularly primary and secondary lead smelters, among others. EPA's lead air quality monitoring strategy generally focuses on areas surrounding these industrial sources.
- Lead concentrations in the air we breathe have decreased dramatically. From 1980 to 2005, the national annual maximum quarterly average has gone down 96 percent. Only two areas, the East Helena, Montana Area (including Lewis and Clark counties), and part of Jefferson County in Herculaneum, Mo. are designated nonattainment for the current National Ambient Air Quality Standards for lead. The industrial facility contributing to the lead problem in the East Helena area closed in 2001.

How to Comment

- EPA will accept comment on the second draft Lead Risk Assessment through August 29, 2007. Comments, identified by Docket ID No. EPA-HQ-OAR-2006-0735, may be submitted by one of the following methods:
 - www.regulations.gov: follow the on-line instructions for submitting comments.
 - E-mail: Comments may be sent by electronic mail (e-mail) to a-and-r-Docket@epa.gov, Attention Docket ID No. EPA-HQ-OAR-2006-0735.
 - Fax: Fax your comments to: 202-566-1741, Attention Docket ID. No. EPA-HQ-OAR-2006-0735.
 - Mail: Send your comments to: Air and Radiation Docket and Information Center, Environmental Protection Agency, Mail Code: 6102T, 1200 Pennsylvania Ave., NW, Washington, DC, 20460, Attention Docket ID No. EPA-HQ-OAR-2006-0735.
 - Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, D.C. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

On the web:

- <http://www.epa.gov/ttnnaqs/standards/pb>