

**Fact Sheet:
First Draft Staff Paper for Lead**

Action

- On December 5, 2006, the Environmental Protection Agency (EPA) released its first *Draft Staff Paper for Lead*. This document is part of the Agency's ongoing review of the National Ambient Air Quality Standards (NAAQS) for lead (Pb).
- On or about December 15, 2006, EPA will release its draft *Lead Human Exposure and Health Risk Assessments and Ecological Risk Assessment for Selected Areas (Pilot Phase)*. Together, these documents are the second step in the extensive scientific and technical assessment process EPA uses to review any national ambient air quality standard.
- The first step in that process is the preparation of an Air Quality Criteria Document, a comprehensive assessment of scientific data about the health and environmental effects associated with the pollutant under review -- in this case, lead. EPA released the final Air Quality Criteria for Lead in September 2006.
- Based on the information contained in the Air Quality Criteria Document for Lead, the draft Staff Paper includes assessments and preliminary analyses related to:
 1. air quality characterization,
 2. integration and evaluation of health information,
 3. human exposure analysis and health risk assessment, and
 4. evaluation and analysis of information on vegetation damage and other welfare effects.

This initial draft document does not include any conclusions or recommendations with regard to potential retention or revision of the lead NAAQS. EPA expects to release such conclusions and potential policy options for the Administrator's consideration in summer 2007.

- To date, the lead NAAQS review has followed EPA's historic approach to reviewing NAAQS, including issuing a criteria document and a first draft staff paper. The Agency is now moving forward to implement a new, more efficient process for conducting NAAQS reviews. EPA intends to transition to that new process during the course of the lead NAAQS review.
- The final policy assessment is intended to help "bridge the gap" between the scientific assessment contained in the Air Quality Criteria Document and the judgments required of the EPA Administrator in determining whether it is appropriate to retain or revise the NAAQS for lead.
- The draft *Lead Human Exposure and Health Risk Assessments and Ecological Risk Assessment for Selected Areas (Pilot Phase)* is a technical support document that will present

the initial results from a human exposure analysis, a health risk assessment, and an ecological risk assessment.

- The first *Draft Staff Paper for Lead* is available on the internet at: http://www.epa.gov/ttn/naaqs/standards/pb/s_pb_cr_sp.html. On or about December 15, 2006, the draft *Lead Human Exposure and Health Risk Assessments and Ecological Risk Assessment for Selected Areas (Pilot Phase)* will be available on the internet at: http://www.epa.gov/ttn/naaqs/standards/pb/s_pb_cr_td.html. EPA will accept public comment on these documents until February 5, 2007.

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 dioxide, 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 (Missouri Coalition for the Environment vs EPA, Civil Action No. 4:04-CV-0066 (ERW) (E.D. Mo. Sept. 14, 2005)). The court-ordered schedule requires EPA to:
 - finalize the Air Quality Criteria Document for Lead by October 1, 2006 (this date has been met);
 - prepare a draft of the Staff Paper by January 1, 2007;
 - finalize the Staff Paper no later than November 1, 2007;
 - have the proposed rulemaking signed no later than May 1, 2008; and
 - complete a final rulemaking by September 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. The magnitude of motor vehicle emissions was reduced dramatically 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, among other sources, metals processing, particularly primary and secondary lead smelters. 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%. Only 2 areas, the East Helena, MT Area including Lewis and Clark Counties, and part of Jefferson County in

Herculaneum, MO, are designated as not meeting 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.

- In conducting this review, the Agency is aware of the dramatic alteration in the basic patterns of air lead emissions in the U.S. since listing lead as a criteria pollutant and establishing the 1978 lead NAAQS. As noted above, the reduction of lead in gasoline has resulted in dramatic reductions in airborne lead emissions and a significant shift in the types of sources with the greatest lead emissions. Further, the 1990 Clean Air Act Amendments, listed lead compounds as hazardous air pollutants under Section 112 which requires EPA to:
 1. establish technology-based (or "MACT") emission standards for listed source categories emitting lead compounds, and
 2. establish risk-based standards, as necessary, for those categories of sources for which EPA has issued MACT standards.

Given the significantly changed circumstances since lead was listed in 1976, this review will evaluate the status of lead as a criteria pollutant in light of currently available information and assess whether revocation of the standard is an appropriate option for the Administrator to consider.

Next Steps

- The Clean Air Science Advisory Committee (CASAC), a Congressionally mandated group of independent scientific and technical experts, will review the first *Draft Lead Staff Paper* and the draft *Lead Human Exposure and Health Risk Assessments and Ecological Risk Assessment for Selected Areas (Pilot Phase)* at a public meeting to be announced shortly in the *Federal Register*. This meeting will be open to the public.
- EPA will carefully review and consider comments received during both the public comment period and the upcoming CASAC meeting. The Agency expects to release conclusions and potential policy options for the Administrator's consideration, and a revised *Lead Human Exposure and Health Risk Assessments and Ecological Risk Assessment for Selected Areas (Pilot Phase)* in summer 2007.

How to Comment

- EPA will accept comment on the first *Draft Lead Staff Paper* and the draft *Lead Human Exposure and Health Risk Assessments and Ecological Risk Assessment for Selected Areas (Pilot Phase)* through February 5, 2007. Comments, identified by Docket ID No. EPA-HQ-OAR-2006-0735, may be submitted by one of the following methods:
 1. www.regulations.gov: follow the on-line instructions for submitting comments.
 2. 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.
 3. Fax: Fax your comments to: 202-566-1741, Attention Docket ID. No. EPA-HQ-

OAR-2006-0735.

4. 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.
5. Hand Delivery or Courier: Deliver your comments to: EPA Docket Center, 1301 Constitution Ave., NW, Room 3334, Washington, DC. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.