



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF AIR QUALITY PLANNING AND STANDARDS**

DRAFT

Technical Note – Pb Emission Inventory Review Plan

What is the purpose of this plan?: On October 15, 2008 EPA substantially strengthened the national ambient air quality standards (NAAQS) for lead (see 73 FR 66934). EPA revised the level of the primary (health-based) standard from 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to $0.15 \mu\text{g}/\text{m}^3$, measured as total suspended particles (TSP) and revised the secondary (welfare-based) standard to be identical in all respects to the primary standard. In conjunction with strengthening the lead NAAQS, EPA identified the need for states to improve existing lead monitoring networks by requiring monitors to be placed in areas with sources that emit one ton or more per year (tpy) of lead and in urban areas with more than 500,000 people. States will base their specific siting decisions regarding Pb monitoring on dispersion modeling results and reviews of the existing emission inventories for Pb are necessary to ensure accurate model results.

Why are states being asked to review Pb point source emissions at this time?

States are required to include the plans for source-oriented Pb monitors in their monitoring plans scheduled for submission to the EPA regional offices by July 1, 2009 and to have these new Pb monitors operational by January 1, 2010. As part of the annual monitoring plan process, states must also complete public review of the plans prior to submittal to EPA. Given the steps that must be completed by July 1, 2009, we are asking states to initiate their reviews of the emissions data for Pb as soon as possible.

What should states do to review Pb point source emissions?

Resources to assist with reviews of Pb emissions have been posted on the Clearinghouse for Inventories and Emission Factors (CHIEF) web site at <http://www.epa.gov/ttn/chief/net/2005inventory.html>. There you will find files labeled “2005 NEI v2 Lead Stationary Source...” for each state. Each file has two tables. The table labeled “2005 lead NEI TRI Compare...” illustrates the results of comparisons between sources and emissions in the Toxics Release Inventory (TRI) and NEI. A second table labeled “2005 NEI v2 Lead Stationary Source...” lists detailed stack and process level information on sources in the NEI. We are asking states to review both tables to verify point sources with emissions of 1 ton per year or more of Pb. In particular, states should focus their efforts on sources with emissions greater than the 1 ton threshold that they believe have actual emissions less than 1 ton per year. States should also examine point sources that are below the 1 ton per year threshold where emissions are believed to have the potential to exceed the new NAAQS.

When reviewing emission estimates, states should ensure that the estimates are based upon results of reliable source testing, application of appropriate emission factors or use of other credible approaches. States are urged to examine process level emissions and review important stack data including latitudes and longitudes that may be important for air quality modeling. While data on source controls and control efficiencies are not necessary for purposes of monitor siting, these data should also be reviewed since they could be helpful during the designations process that will follow.

We expect that additional information will be forthcoming early in 2009 to help states review and revise point source Pb emission estimates.

What about mobile sources of Pb?

Pb emission estimates for 3,414 airport facilities in the U.S. are presented in a Technical Support Document (TSD) titled *Lead Emissions from the Use of Leaded Aviation Gasoline in the United States* which is available at http://www.epa.gov/ttn/chief/net/tsd_avgas_pb_inventory_2002.pdf. Data from the TSD updates Pb emissions in the 2005 NEI Version 2.0 and may be used by states for assessing monitor locations. In particular, states should focus their efforts on airports that are estimated to emit more than 1 ton per year and airports that are in the same county as, or proximal to a point source that emits more than 1 ton per year. The TSD provides guidance for states to improve upon national default values used to estimate airport-specific Pb emissions. For the purposes of considering population-oriented monitor siting, states can use the database titled 'CBSA airport facilities' available at www.epa.gov/otaq/aviation.htm to identify potential locations of Pb emissions from piston-engine aircraft activity.

When should states complete their reviews?

To provide sufficient time for states to develop their Pb monitoring plans (including completing all necessary modeling), include these plans in their annual monitoring plan and complete the public review process prior to the July 1, 2009 due date for the annual monitoring plans, we are encouraging states complete their reviews of Pb point source emission estimates by March 1, 2009 target date. States should contact their regional office to discuss earlier due dates to meet regional needs.

States are urged to provide notice to their regional office by January 31 of the data they plan to submit for review, discuss the process for submitting revisions to their estimates, and establish a date for the region to respond.

Where should states send their updated point source Pb data? The focus of this effort is on improving the Pb point source emission estimates to be used in developing monitoring plans that will be reviewed by regional offices. Therefore, states should send Pb point source emission updates to their regional offices for review. We are of course also interested in improving the Pb point source emission estimates in the NEI and suggest that states consider including the new data in future submittals under the Air Emissions Reporting Requirements (AERR) rule. This will provide a means for EPA to include the new data in future NEI updates.

What will be the role of the EPA regional offices and OAQPS in the review process?

The regional offices will be conducting reviews of the Pb point source emission estimates with states and thus will be the primary contacts for questions regarding emission estimates. OAQPS will play a support role by developing tools to facilitate reviews of point source emissions. We will also act as a clearinghouse for information developed by the regions to promote consistent reviews.

Who should states contact for more information?

General questions on the implementation strategy for Pb emission inventories should be directed to Dennis Beaugard at 919-541-5512 or beaugard.dennis@epa.gov. Questions that are specific to revisions for facility and process level emission estimates should be directed to your regional office. Mobile source emissions questions should be directed to Marion Hoyer of EPA's Office of Transportation and Air Quality at 734-214-4513 or hoyer.marion@epa.gov. For additional information on Pb Monitoring requirements, please contact Kevin Cavender of the Air Quality Assessment Division, Ambient Air Monitoring Group, 919-541-2364 or cavender.kevin@epa.gov.

This document and other documents intended to assist monitoring agencies implement the Pb monitoring requirements can be found at - <http://www.epa.gov/ttn/amtic/pb-monitoring.html>