

**Texas Commission on Environmental Quality's (TCEQ) Comments to the
U.S. Environmental Protection Agency's (EPA)
Integrated Review Plan for the National Ambient Air Quality Standards for Lead
Docket ID No. EPA-HQ-OAR-2010-0108**

General

Lead (Pb) fits awkwardly into the regulatory structure established for dealing with air pollutants through a National Ambient Air Quality Standard (NAAQS). For the vast majority of the public, inhalation of lead in ambient air and exposure to contemporary lead deposition from ambient air are, at most, minor sources of lead exposure.

Because there are multiple pathways for lead exposure, meeting a NAAQS for lead, no matter how low the standard cannot alone ensure protection of public health from lead toxicity. Key elements in protecting the public from lead toxicity include protection from: (1) lead in both interior and exterior house paint; (2) lead in household items; (3) lead in food storage and cooking containers, serving containers, and utensils; (4) lead in toys and jewelry; (5) lead in food and water; (6) lead in soil to which children have access; and, (7) lead in ambient air.

The appropriate procedure would be for the EPA to determine the level of the primary lead NAAQS as part of a comprehensive review of governmental programs to prevent toxic exposures to lead in the most sensitive population, young children. Since the EPA is now planning its review of the lead NAAQS, now is the time to take the opportunity to conduct an integrated review of programs to protect sensitive members of the public, i.e. children, effectively from the health hazards of lead.

Scope of Review for All Routes of Exposure

The TCEQ suggests that review of the actual contributing causes of measured excessive levels of lead in children's blood be used to set the priorities for the effective use of limited government resources in programs that effectively reduce the hazards of environmental exposure to lead. We also suggest that actual, measured links between lead exposure through different routes be used as a basis for refining the exposure modeling and risk assessment in reviewing the NAAQS for lead.

Additional Comments

According to the EPA Staff Paper¹, prepared in development of the 2008 lead NAAQS, lead remains a major public health problem. Support for that assertion includes "increased frequency of ADHD" (attention deficit hyperactivity disorder) in children. The TCEQ suggests that the EPA carefully reexamine how the dramatic decreases in ambient air lead and children's blood lead are consistent with the suggestion that lead is a causal factor in the increased frequency of ADHD.

The EPA Staff Paper¹ for the 2008 revision of the lead NAAQS discusses the Lanphear, et al. (2005) pooled analysis of seven epidemiologic studies. Given the gross differences in IQ level across these studies compared to the much smaller differences shown within the studies, additional discussion is necessary to demonstrate the ability of these studies to accurately identify and quantify adverse effects and to control issues related to the potential for confounding of study effects/responses by non-lead-exposure-related factors or variables (e.g. socioeconomic status).

¹EPA-450/R-07-013, available at http://www.epa.gov/ttn/naaqs/standards/pb/data/20071101_pb_staff.pdf