



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

We performed this review to evaluate EPA's progress in establishing a national network and determine the status of ambient air toxics monitoring nationwide. A viable ambient monitoring program to detect areas of unhealthy air toxics concentrations and to measure national and local trends in those concentrations is key to assessing progress in reducing air toxics-related health risks.

Background

The Clean Air Act (CAA) identifies 188 air toxics. EPA defines air toxics as "those pollutants that are known or suspected to cause cancer or other serious health effects or adverse environmental effects." EPA's goal is to reduce unacceptable health risks from air toxics for 95 percent of the population by 2020. Ambient monitoring is important to assess progress towards meeting this goal.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link:

www.epa.gov/oig/reports/2005/20050302-2005-P-00008.pdf

Progress Made in Monitoring Ambient Air Toxics, But Further Improvements Can Increase Effectiveness

What We Found

The CAA does not require a national air toxics monitoring network, but EPA and State and local agencies have recognized such a network is needed. Since 2000, EPA has significantly increased its ambient air toxics monitoring efforts and funding to establish a national network and support State and local agencies' monitoring activities. EPA recently established 23 national sites to assess ambient air toxics trends, and State and local agencies have established over 300 fixed ambient air toxics monitoring stations nationwide. Further, in 2004 EPA began awarding grants to State and local agencies to conduct short-term, local-scale monitoring projects.

Still, additional effort and improvement is needed to ensure that sufficient ambient air toxics data is available to identify areas of unhealthy ambient air toxics concentrations, identify national air toxics trends, and assess the effectiveness of air toxics reduction strategies. For example, there was little association between the location of State and local air toxics monitors and areas estimated to have high health risks from air toxics exposure. Also, we identified inconsistencies in the sampling frequencies and quality assurance measures for the national trends sites. Key barriers to ambient air toxics monitoring included adequacy of funding and lack of methods to monitor certain air toxics.

What We Recommend

We recommend a number of actions to improve the effectiveness of ambient air toxics monitoring. For example, with respect to monitoring conducted on a local-scale (i.e., certain State and local network monitors and EPA's local project grant program), EPA should develop a strategy – in coordination with its State, local, and tribal partners – for siting monitors in locations that are estimated to present the greatest health risks from exposure to air toxics. We also recommend several actions for improving the programmatic aspects of the national trends sites, particularly with respect to quality assurance, quality control, and data completeness. In addition, we recommend that EPA's Office of Research and Development place greater emphasis on methods development for analyzing ambient air toxics concentrations. The Agency generally agreed with our draft report's recommendations.