



At a Glance

Why We Did This Project

We conducted this audit to determine the effectiveness of U.S. Environmental Protection Agency (EPA) oversight in assuring that emission stack tests are conducted in accordance with EPA regulation, policy and guidance.

The EPA estimates that there are approximately 14,700 major stationary sources of air emissions in the United States, such as refineries and power plants that typically release emissions via tall chimneys called *smokestacks* or *stacks*. Most of these facilities are subject to emission limits set by state-issued construction or operating permits. If there are no other means to demonstrate compliance with permit limits, as is typically the case with particulate matter emissions, stack emissions must be determined using EPA-approved test methods. If stack testers do not follow applicable EPA methods, test results are subject to greater variability and uncertainty. Accurate stack tests and reports are needed to verify that excess emissions do not negatively impact human health and the environment.

This report addresses the following:

- *Improving air quality.*

Address inquiries to our public affairs office at (202) 566-2391 or OIG_WEBCOMMENTS@epa.oig.

List of [OIG reports](#).

More Effective EPA Oversight Is Needed for Particulate Matter Emissions Compliance Testing

What We Found

Our audit of 30 stack test reports from state and local agencies in Washington state found numerous examples of nonadherence to EPA test methods and inadequate supporting documentation to assess data quality. These problems were not identified by state and local regulatory agencies responsible for implementing Clean Air Act permitting programs in Washington state.

Effective EPA oversight of stack testing improves data quality for compliance determinations and other uses.

We also found that some state and local agencies rarely observe stack tests to verify that EPA methods are properly followed. Several agencies told us that they needed additional training and tools from the EPA to help them conduct oversight of stack testing and reporting.

Some stack testing problems that we identified could impact the reliability of stack test results and the resulting determination of whether a facility complies with its permit limits. Effective reviews of stack test reports to identify any errors in the implementation of stack test methods are particularly important when a facility's emissions are near or at the permit limit. Errors in such instances have a higher likelihood of affecting the reliability of the final compliance determination.

While state and local agencies have been delegated responsibility for implementing Clean Air Act programs in Washington state, EPA Region 10 maintains responsibility and accountability for program compliance with federal statutes and regulations. Region 10 should improve its oversight activities to provide reasonable assurance that stack testing programs conducted in Washington state meet federal requirements. Although we only reviewed stack test reports from Washington state in EPA Region 10, EPA managers and staff responsible for overseeing the Clean Air Act program at the national level told us that they had observed similar problems in other states and EPA regions.

Recommendations and Planned Agency Corrective Actions

We made four recommendations to the Assistant Administrator for Air and Radiation and the Assistant Administrator for Enforcement and Compliance Assurance, including to develop and implement a plan for improving the consistency of stack test reviews across EPA regions and delegated agencies, as well as to provide additional training and tools to improve stack test report reviews. We made two recommendations to the Regional Administrator of Region 10 to communicate the EPA's requirements and guidance for stack testing oversight to delegated agencies and to develop internal controls to verify that delegated agencies are performing effective oversight of stack testing and reporting. The agency agreed with our recommendations and provided acceptable corrective actions.