



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

The objective of this review was to collect successful practices from Federal agencies similar to the U.S. Environmental Protection Agency's (EPA's) Office of Enforcement and Compliance Assurance (OECA) that extensively use statistical methods, including random sampling, to measure and ensure compliance and to monitor regulatory programs.

Background

OECA faces many obstacles in measuring compliance across its regulated universe. These include limited knowledge of its large universe, limited resources, and difficulties in collecting data from States through random inspections and other means. These obstacles have prevented OECA from calculating compliance rates for the populations within its regulated universe and from demonstrating changes in compliance and trends.

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/2007/20070620-2007-P-00027.pdf

Overcoming Obstacles to Measuring Compliance: Practices in Selected Federal Agencies

What We Found

Federal regulatory agencies with missions and obstacles similar to EPA use statistical methods to generate compliance information. They use this information to monitor their enforcement and compliance programs and demonstrate program results. These Federal programs extensively use statistical methods to identify and analyze risk, set goals, develop strategies to manage the most significant risks, and report their accomplishments. While the programs we reviewed face similar obstacles as OECA, they use practical approaches to overcome these obstacles that OECA could potentially apply to its programs.

Other programs apply statistical methods, such as selective random inspections, to develop and publish compliance and other rates for their regulated populations. Some programs collect data through national surveys, while others require States to submit data as a condition of grant agreements. Programs leverage resources by working with statisticians from other offices within their agencies, as well as with statisticians from universities and external research centers. Programs found that having a champion in senior management within their agency is essential to overcome resistance to change and to adopt new methods.

Programs do not use statistical methods solely for reporting compliance rates. Programs reported that other benefits include identifying previously unknown risks, quantifying results, verifying the effectiveness of targeting schemes, and maximizing limited resources.

What We Recommend

We recommend that the Assistant Administrator for Enforcement and Compliance Assurance establish a plan of action, with milestones, to incorporate using statistical methods to demonstrate the results of EPA's enforcement and compliance strategies. In addition, OECA can coordinate with the in-house statistical expertise available in EPA's Office of Research and Development and Office of Environmental Information to help develop statistical models and evaluate external proposals. The Agency accepted our recommendations.