



# At a Glance

*Catalyst for Improving the Environment*

## Why We Did This Review

The U.S. Environmental Protection Agency (EPA), Office of Inspector General, initiated this review to determine the process EPA uses to address scientific/research misconduct. Specifically, we sought to determine whether EPA's Office of Research and Development (ORD) has controls to address scientific integrity and research misconduct, and whether those controls are effective.

## Background

Since 2000, a number of federal and EPA policies on ensuring the integrity of government science have been issued. ORD is EPA's lead office for integrating science into environmental protection policies. EPA Order 3120.5 implements the federal policy on research misconduct, and ORD and others formulated the *Principles of Scientific Integrity* and the Principles of Scientific Integrity E-Training to further highlight professional ethics for EPA scientists.

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

The full report is at:  
[www.epa.gov/oig/reports/2011/20110722-11-P-0386.pdf](http://www.epa.gov/oig/reports/2011/20110722-11-P-0386.pdf)

## **Office of Research and Development Should Increase Awareness of Scientific Integrity Policies**

### **What We Found**

ORD has internal controls that include policies, procedures, training, and peer review. However, ORD should improve how it evaluates the effectiveness of its policies and procedures for scientific integrity and research misconduct. Currently, ORD does not test its policies and procedures because ORD asserts that few reported instances of misconduct means that it generally does not occur. However, few identified instances of research misconduct could signal that staff lacks awareness of key criteria and reporting requirements necessary to identify and report misconduct.

We issued an electronic survey to 1,371 ORD science staff and received 488 responses. We found that 65 percent of respondents were unaware of EPA Order 3120.5, and 32 percent were unaware of EPA's *Principles of Scientific Integrity*. We also found that ORD has not updated the Principles of Scientific Integrity E-Training since June 2005. The existing e-training is not mandatory for ORD staff and does not include actual examples to aid understanding by training participants. Those who have not completed the training may be unaware of key criteria regarding scientific integrity. To facilitate reporting of research misconduct, ORD should increase awareness of the process. Without these additional internal control efforts, ORD risks having its science called into question, potentially lessening the credibility of its work.

### **What We Recommend**

We recommend that the Assistant Administrator for Research and Development periodically test the effectiveness of controls in place to address scientific integrity and research misconduct. We also recommend that ORD work with EPA offices to initiate outreach on EPA Order 3120.5 to raise awareness on roles/responsibilities and reporting steps, and to identify EPA staff and managers who should complete the Principles of Scientific Integrity E-Training. Lastly, we recommend that ORD continue to work with unions to update and implement e-training. Such updates should include making the e-training mandatory for all ORD staff, ensuring that the updated course contains actual examples, and creating a system for maintaining current contact information for reporting instances of scientific integrity and research misconduct. ORD agreed with our recommendations and subsequently followed up with its corrective action plan. We have reviewed the corrective action plan and milestone dates, and found them acceptable. As such, we are closing this report upon issuance, and no further response is required.