



Highlights of [GAO-09-773T](#), a testimony before the Committee on Environment and Public Works, U.S. Senate

## Why GAO Did This Study

The Environmental Protection Agency's (EPA) ability to effectively implement its mission of protecting public health and the environment relies largely on the integrity and transparency of (1) its assessments of the potential human health effects of exposure to chemicals and (2) its federal advisory committees, which are to provide independent, expert reviews of EPA's scientific work, among other functions. EPA's Integrated Risk Information System (IRIS) program is critical in developing the agency's scientific positions on the potential health effects of exposure to toxic chemicals. These positions, used as a basis for environmental risk management decisions by EPA and others, are maintained in IRIS' database of more than 540 chemical assessments. Since 2001, GAO has issued a number of reports addressing the importance of integrity and transparency to EPA's chemical assessments and to EPA's federal advisory committees. GAO work on EPA's advisory committees has focused on its Science Advisory Board—1 of 24 EPA federal advisory committees—which convenes panels to review many of the agency's scientific assessments and proposals.

This testimony highlights scientific integrity and transparency issues GAO has reported on and relevant EPA reform efforts regarding (1) the IRIS assessment process and (2) federal advisory committee policies and procedures and appointment mechanisms. GAO has supplemented information from its prior reports with a preliminary review of the IRIS assessment process EPA issued on May 21, 2009, and the current appointment mechanisms for members of EPA's federal advisory committees.

View [GAO-09-773T](#) or [key components](#). For more information, contact John B. Stephenson at (202) 512-3841 or [stephensonj@gao.gov](mailto:stephensonj@gao.gov).

## SCIENTIFIC INTEGRITY

### EPA's Efforts to Enhance the Credibility and Transparency of Its Scientific Processes

#### What GAO Found

In March 2008, GAO reported that the database of chemicals assessed under the IRIS program was at serious risk of becoming obsolete because EPA had not been able to complete timely, transparent, and credible assessments or decrease its backlog of ongoing assessments. A revised IRIS assessment process EPA issued in April 2008 did not respond to GAO's recommendations; rather, it made changes likely to further exacerbate concerns GAO had identified. Largely as a result of EPA's lack of responsiveness, GAO added EPA's processes for assessing and controlling toxic chemicals as a high-risk area in its January 2009 biennial status report on governmentwide high-risk areas requiring increased attention by executive agencies and Congress. Taking positive action, EPA issued a new IRIS assessment process on May 21, 2009. In announcing these reforms, EPA echoed GAO's findings that the April 2008 assessment changes reduced the transparency, timeliness, and scientific integrity of the IRIS process. The IRIS reforms, if implemented effectively, will represent significant improvements. Among other things, they restore EPA's control of the process and increase its transparency. For example, under the prior process, interagency reviews were required and managed by the Office of Management and Budget (OMB) and EPA was not allowed to proceed with assessments at various stages until OMB notified EPA that it had sufficiently responded to comments from OMB and other agencies. In contrast, under the recently announced process, EPA is to manage the entire IRIS assessment process, including what are now called interagency consultations.

In 2001, GAO reported on limitations in the policies and procedures developed by EPA's Science Advisory Board to ensure that its panels' peer reviewers are independent and that a balance of viewpoints is represented on each panel. These limitations could have reduced the effectiveness of the Board by contributing to its being perceived as biased and could have inadvertently exposed panelists to violations of federal conflict-of-interest laws. EPA revised the Board's policies and procedures, as GAO had recommended. In a broader 2004 report on federal advisory committees, GAO highlighted the Board's revised policies and procedures, and those of the National Academies, which can—if implemented effectively—provide an assurance that relevant conflicts of interest are identified and addressed and that the committees are balanced in terms of points of view. However, EPA currently appoints members to 16 of its federal advisory committees using an appointment mechanism reserved for cases in which members are to speak as representatives of identified entities and are not subject to conflict-of-interest reviews, rather than as individuals speaking on behalf of the government on the basis of their best judgment. While EPA may be appropriately seeking stakeholder advice from some of its advisory committees, a number of these committees focus on scientific and technical questions for which EPA is likely to be seeking advice on behalf of the government. As EPA works to enhance scientific integrity, a review of advisory committee appointments could help ensure that committee work is not jeopardized by allegations of conflicts of interest or bias.