



Highlights of [GAO-05-252](#), a report to congressional requesters

Why GAO Did This Study

Mercury is a toxic element that can cause neurological disorders in children. In January 2004, the Environmental Protection Agency (EPA) proposed two options for limiting mercury from power plants, and plans to finalize a rule in March 2005. The first would require each plant to meet emissions standards reflecting the application of control technology (the technology-based option), while the second would enable plants to either reduce emissions or buy excess credits from other plants (the cap-and-trade option). EPA received over 680,000 written comments on the proposal. EPA is directed by statute and executive order to analyze the costs and benefits of proposed rules, and the agency summarized its analysis underlying the two options in the proposal. In this context, GAO was asked to assess the usefulness of EPA's economic analysis for decision making. In doing so, GAO neither independently estimated the options' costs and benefits nor evaluated the process for developing the options or their consistency with the Clean Air Act, as amended.

What GAO Recommends

GAO recommends that, prior to finalizing a rule, EPA take steps to address shortcomings in its cost-benefit analysis to increase the usefulness of the analysis for decision making. In commenting on the report, EPA said that it plans to largely address GAO's recommendations.

www.gao.gov/cgi-bin/getrpt?GAO-05-252.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John Stephenson at (202) 512-3841 or stephensonj@gao.gov.

CLEAN AIR ACT

Observations on EPA's Cost-Benefit Analysis of Its Mercury Control Options

What GAO Found

GAO identified four major shortcomings in the economic analysis underlying EPA's proposed mercury control options that limit its usefulness for informing decision makers about the economic trade-offs of the different policy options. First, while Office of Management and Budget (OMB) guidance directs agencies to identify a policy that produces the greatest net benefits, EPA's analysis is of limited use in doing so because the agency did not consistently analyze the options or provide an estimate of the total costs and benefits of each option. For example, as seen in the table, EPA analyzed the effects of the technology-based option by itself, but analyzed the effects of the cap-and-trade option alongside those of another proposed rule affecting power plants, the Clean Air Interstate Rule (the interstate rule), without separately identifying the effects of the cap-and-trade option. As a result, EPA's estimates are not comparable and are of limited use for assessing economic trade-offs. EPA officials said they analyzed the cap-and-trade option alongside the interstate rule because the agency views the two proposed rules as complementary. Nonetheless, to provide comparable estimates, EPA would have to analyze each option alone and in combination with the interstate rule.

Estimated Annual Economic Impacts of EPA's Proposed Mercury Policy Options in 2010 (1999 dollars, in billions)

Policy option	Annual costs	Annual benefits	Annual net benefits
Technology-based option	2	15 or more	13 or more
Cap-and-trade option	Not estimated	Not estimated	Not estimated
Technology-based option and the interstate rule	Not estimated	Not estimated	Not estimated
Cap-and-trade option and the interstate rule	3 to 5 or more	58 to 73 or more	55 to 68 or more

Source: EPA.

Second, EPA did not document some of its analysis or provide information on how changes in the proposed level of mercury control would affect the cost-and-benefit estimates for the technology-based option, as it did for the cap-and-trade option. Third, EPA did not estimate the value of the health benefits directly related to decreased mercury emissions and instead estimated only some secondary benefits, such as decreased exposure to harmful fine particles. However, EPA has asked for comments on a methodology to estimate the benefits directly related to mercury. Fourth, EPA did not analyze some of the key uncertainties underlying its cost-and-benefit estimates.