



Highlights of [GAO-12-845](#), a report to the Ranking Member, Subcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

Under the Clean Water Act, EPA has made significant progress in reducing wastewater pollution from industrial facilities. EPA currently regulates 58 industrial categories, such as petroleum refining, fertilizer manufacturing, and coal mining, with technology-based regulations called effluent guidelines. Such guidelines are applied in permits to limit the pollutants that facilities may discharge. The Clean Water Act also calls for EPA to revise the guidelines when appropriate. EPA has done so, for example, to reflect advances in treatment technology or changes in industries.

GAO was asked to examine (1) the process EPA follows to screen and review industrial categories potentially needing new or revised guidelines and the results of that process from 2003 through 2010; (2) limitations to this process, if any, that could hinder EPA's effectiveness in advancing the goals of the Clean Water Act; and (3) EPA's actions to address any such limitations.

GAO analyzed the results of EPA's screening and review process from 2003 through 2010, surveyed state officials, and interviewed EPA officials and experts to obtain their views on EPA's process and its results.

What GAO Recommends

GAO is making recommendations to improve the effectiveness of EPA's effluent guidelines program by expanding its screening phase to better assess hazards and advances in treatment technology. EPA agreed with two recommendations in principle and said it is making progress on them, but said that one is not workable given current agency resources. GAO believes improvements can be made.

View [GAO-12-845](#). For more information, contact David Trimble at (202) 512-3841 or trimbled@gao.gov

WATER POLLUTION

EPA Has Improved Its Review of Effluent Guidelines but Could Benefit from More Information on Treatment Technologies

What GAO Found

The Environmental Protection Agency (EPA) uses a two-phase process to identify industrial categories potentially needing new or revised effluent guidelines to help reduce their pollutant discharges. EPA's 2002 draft *Strategy for National Clean Water Industrial Regulations* was the foundation for EPA's process. In the first, or "screening," phase, EPA uses data from two EPA databases to rank industrial categories according to the total toxicity of their wastewater. Using this ranking, public comments, and other considerations, EPA has identified relatively few industrial categories posing the highest hazard for the next, or "further review," phase. In this further review phase, EPA evaluates the categories to identify those that are appropriate for new or revised guidelines because treatment technologies are available to reduce pollutant discharges. Since 2003, EPA has regularly screened the 58 categories for which it has issued effluent guidelines, as well as some potential new industrial categories, and it has identified 12 categories for its further review phase. Of these 12 categories, EPA selected 3 for updated or new effluent guidelines. EPA chose not to set new guidelines for the others.

Limitations in EPA's screening phase may have led it to overlook some industrial categories that warrant further review for new or revised effluent guidelines. Specifically, EPA has relied on limited hazard data that may have affected its ranking of industrial categories. Further, during its screening phase, EPA has not considered the availability of advanced treatment technologies for most industrial categories. Although its 2002 draft strategy recognized the importance of technology data, EPA has stated that such data were too difficult to obtain during the screening phase and, instead, considers them for the few categories that reach further review. Officials responsible for state water quality programs and experts on industrial discharges, however, identified categories they believe EPA should examine for new or updated guidelines to reflect changes in their industrial processes and treatment technology capabilities. According to some experts, consideration of treatment technologies is especially important for older effluent guidelines because changes are more likely to have occurred in either the industrial categories or the treatment technologies, making it possible that new, more advanced treatment technologies are available.

Recognizing the limitations of its hazard data and overall screening approach, EPA has begun revising its process but has not assessed other possible sources of information it could use to improve the screening phase. In 2012, EPA supplemented the hazard data used in screening with four new data sources. EPA is also developing a regulation that, through electronic reporting, will increase the completeness and accuracy of its hazard data. In 2011, EPA also began to obtain recent treatment technology literature. According to EPA, the agency will expand on this work in 2013. Nonetheless, EPA has not thoroughly examined other usable sources of information on treatment technology, nor has it reassessed the role such information should take in its screening process. Without a more thorough and integrated screening approach that both uses improved hazard data and considers information on treatment technology, EPA cannot be certain that the effluent guidelines program reflects advances in the treatment technologies used to reduce pollutants in wastewater.