



Highlights of [GAO-10-380](#), a report to congressional requesters

Why GAO Did This Study

At the end of fiscal year 2009, the Environmental Protection Agency's (EPA) National Priorities List (NPL) included 1,111 of the most seriously contaminated nonfederal hazardous waste sites. Of these sites, EPA had identified 75 with unacceptable human exposure, 164 with unknown exposure, and 872 with controlled exposure that may need additional cleanup work. EPA may fund remedial actions—long-term cleanup—from its trust fund, and compel responsible parties to perform or reimburse costs of the cleanup. GAO was asked to determine (1) the cleanup and funding status at currently listed nonfederal NPL sites with unacceptable or unknown human exposure; (2) what is known about EPA's future cleanup costs at nonfederal NPL sites; (3) EPA's process for allocating remedial program funding; and (4) how many NPL sites some state and EPA officials expect to be added in the next 5 years, and their expected cleanup costs. GAO analyzed Superfund program data, surveyed and interviewed EPA officials, and interviewed state officials.

What GAO Recommends

To better identify potential NPL sites, GAO recommends that the EPA Administrator determine the extent to which EPA will consider vapor intrusion in listing NPL sites and its effect on the number of sites listed in the future. In commenting on a draft of this report, EPA agreed with GAO's recommendation and noted that the report contains substantial useful information.

View [GAO-10-380](#) or [key components](#). For more information, contact John Stephenson at (202) 512-3841 or Stephensonj@gao.gov.

SUPERFUND

EPA's Estimated Costs to Remediate Existing Sites Exceed Current Funding Levels, and More Sites Are Expected to Be Added to the National Priorities List

What GAO Found

At over 60 percent of the 239 nonfederal NPL sites with unacceptable or unknown human exposure, all or more than half of the work remains to complete the remedial construction phase of cleanup, according to EPA regional officials. By the end of fiscal year 2009, EPA had expended \$3 billion on the 75 sites with unacceptable human exposure and \$1.2 billion on the 164 sites with unknown exposure. Despite the relatively high level of expenditures at sites with unacceptable exposure, EPA officials told GAO that, in managing limited resources, some sites have not received sufficient funding for construction to be conducted in the most time and cost efficient manner.

EPA's future costs to conduct remedial construction at nonfederal NPL sites will likely exceed recent funding levels. EPA officials estimate that EPA's costs will be from \$335 to \$681 million each year for fiscal years 2010 to 2014, which exceed the \$220 to \$267 million EPA allocated annually for remedial actions from fiscal years 2000 to 2009. In addition, these cost estimates are likely understated, since they do not include costs for sites that are early in the cleanup process or for sites where a responsible party is currently funding remedial construction but may be unable to do so in the future. Also, according to EPA officials, EPA's actual costs are often higher than its estimates because contamination is often greater than expected.

EPA allocates funds separately for preconstruction activities—such as remedial investigation and remedial design—and remedial actions. EPA headquarters allocates funds for preconstruction activities to the regions for them to distribute among sites. For remedial actions, headquarters works in consultation with the regions to allocate funds to sites. EPA officials told GAO that EPA prioritized sites to receive the \$582 million in American Recovery and Reinvestment Act funds in a manner similar to the way EPA prioritizes sites for remedial actions. Limited funding has delayed preconstruction activities and remedial actions at some sites, according to EPA officials.

EPA regional officials estimated that from 101 to 125 sites—about 20 to 25 sites per year—will be added to the NPL over the next 5 years, which is higher than the average of about 16 sites per year listed for fiscal years 2005 to 2009. Most of the 10 states' officials GAO interviewed also expect an increase in the number of sites listed from their states. However, neither EPA regional officials nor state officials were able to provide cost estimates for cleaning up many of the sites. In addition, the number of sites eligible for listing could increase if EPA decides to assess the relative risk of vapor intrusion—contaminated air that seeps into buildings from underground sources—a pathway of concern among EPA regional officials and state officials interviewed. Although sites with vapor intrusion can pose considerable human health risks, EPA's Hazard Ranking System—the mechanism used to identify sites that qualify for NPL listing—does not recognize these risks; therefore, unless a site with vapor intrusion is listed on some other basis, EPA cannot clean up the site through its remedial program.