



Highlights of [GAO-05-163](#), a report to congressional requesters

## Why GAO Did This Study

The Environmental Protection Agency's (EPA) Superfund and Resource Conservation and Recovery Act (RCRA) programs were established to clean up hazardous waste sites. Because some sites cannot be cleaned up to allow unrestricted use, institutional controls—legal or administrative restrictions on land or resource use to protect against exposure to the residual contamination—are placed on them. GAO was asked to review the extent to which (1) institutional controls are used at Superfund and RCRA sites and (2) EPA ensures that these controls are implemented, monitored, and enforced. GAO also reviewed EPA's challenges in implementing control tracking systems. To address these issues, GAO examined the use, implementation, monitoring, and enforcement of controls at a sample of 268 sites.

## What GAO Recommends

To ensure the long-term effectiveness of institutional controls, GAO recommends that EPA (1) clarify its guidance on when controls should be used; (2) demonstrate that, in selecting controls, sufficient consideration was given to all key factors; (3) ensure that the frequency and scope of monitoring efforts are sufficient to maintain the effectiveness of controls; and (4) ensure that the information on controls reported in new tracking systems accurately reflects actual conditions. EPA generally agreed with GAO's recommendations.

[www.gao.gov/cgi-bin/getrpt?GAO-05-163](http://www.gao.gov/cgi-bin/getrpt?GAO-05-163).

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](mailto:stephensonj@gao.gov).

# HAZARDOUS WASTE SITES

## Improved Effectiveness of Controls at Sites Could Better Protect the Public

### What GAO Found

Institutional controls were applied at most of the Superfund and RCRA sites GAO examined where waste was left in place after cleanup, but documentation of remedy decisions often did not discuss key factors called for in EPA's guidance. For example, while documents usually discussed the controls' objectives, in many cases, they did not adequately address when the controls should be implemented, how long they would be needed, or who would be responsible for monitoring or enforcing them. According to EPA, the documents' incomplete discussion of the key factors suggests that site managers may not have given them adequate consideration. Relying on institutional controls as a major component of a site's remedy without carefully considering all of the key factors—particularly whether they can be implemented in a reliable and enforceable manner—could jeopardize the effectiveness of the remedy.

EPA faces challenges in ensuring that institutional controls are adequately implemented, monitored, and enforced. Institutional controls at the Superfund sites GAO reviewed, for example, were often not implemented before the cleanup was completed, as EPA requires. EPA officials indicated that this may have occurred because, over time, site managers may have inadvertently overlooked the need to implement the controls. EPA's monitoring of Superfund sites where cleanup has been completed but residual contamination remains often does not include verification that institutional controls are in place. Moreover, the RCRA corrective action program does not include a requirement to monitor sites after cleanups have been completed. In addition, EPA may have difficulties ensuring that the terms of institutional controls can be enforced at some Superfund and RCRA sites: that is, some controls are informational in nature and do not legally limit or restrict use of the property, and, in some cases, state laws may limit the options available to enforce institutional controls.

To improve its ability to ensure the long-term effectiveness of institutional controls, EPA has recently begun implementing institutional control tracking systems for its Superfund and RCRA corrective action programs. The agency, however, faces significant obstacles in implementing such systems. The institutional control tracking systems being implemented track only minimal information on the institutional controls. Moreover, as currently configured, the systems do not include information on long-term monitoring or enforcement of the controls. In addition, the tracking systems include data essentially derived from file reviews, which may or may not reflect institutional controls as actually implemented. While EPA has plans to improve the data quality for the Superfund tracking system—ensuring that the data accurately reflects institutional controls as implemented and adding information on monitoring and enforcement—the first step, data verification, could take 5 years to complete. Regarding the RCRA tracking system, the agency has no current plans to verify the accuracy of the data or expand on the data being tracked.