November 2005

ENVIRONMENTAL PROTECTION

More Complete Data and Continued Emphasis on Leak Prevention Could Improve EPA's Underground Storage Tank Program

GAO Accountability · Integrity · Reliability

Highlights

Highlights of GAO-06-45, a report to congressional requesters

Why GAO Did This Study

Leaking underground storage tanks that contain hazardous products, primarily gasoline, can contaminate soil and groundwater. To address this problem, the Environmental Protection Agency (EPA), under its Underground Storage Tank (UST) Program, required tank owners to install leak detection equipment and take measures to prevent leaks. In 1986, the Congress created a federal trust fund to assist states with cleanups. Cleanup progress has been made, but, as of early 2005, cleanup efforts had not yet begun for over 32,000 tanks, many of which may require state and/or federal resources to address.

GAO identified (1) data on the number and cleanup status of leaking tanks, (2) funding sources for tank cleanups, and (3) processes used by five states with large numbers of leaking tanks—California, Maryland, Michigan, North Carolina, and Pennsylvania—to identify, assess, and clean up sites.

What GAO Recommends

GAO recommends that EPA require states to report to the agency information on all known abandoned tanks. EPA agreed that the UST program could benefit from more specific data on abandoned tanks, but had concerns about the potential burden on states. GAO clarified its recommendation to indicate that EPA should obtain data that states currently compile.

www.gao.gov/cgi-bin/getrpt?GAO-06-45.

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.

What GAO Found

Data submitted to EPA by the states show that, as of March 31, 2005, more than 660,000 tanks were in use and about 1.6 million were no longer in use. In addition, states identified about 449,000 tank releases (leaks) and about 416,000 initiated cleanups, with almost 324,000 of those cleanups completed. States also compile limited data on abandoned tanks—tanks whose owners are unknown, or unwilling or unable to pay for their cleanup—but EPA does not require states to provide separate data on all of their known abandoned tanks. Without this separate data, EPA cannot effectively determine the number and cleanup status of these tanks, or how to most efficiently and effectively allocate federal cleanup funds to the states.

Tank owners and operators are primarily responsible for paying to clean up their own sites, but abandoned tanks are cleaned up using state resources, that may be limited, and federal trust funds. EPA estimates that the average remediation costs per site have been about $125,000, but costs sometimes have exceeded $1 million. Officials from two of the five states we contacted reported that their state funds may be inadequate to address contamination at abandoned tank sites. In this regard, Michigan and North Carolina officials told GAO that, because of resource constraints, they let contamination at abandoned tank sites attenuate (diminish) naturally once immediate threats are addressed. Furthermore, due to limited resources, states must sometimes find other options for cleaning up sites. For example, Pennsylvania officials asked EPA to take over the cleanup work at the abandoned Tranguch site in 1996 because the owner was bankrupt and the state could not pay the expected cleanup costs.

The five states that GAO contacted identify, assess, and clean up leaking tank sites using similar processes. Generally, owners and operators are responsible for conducting these activities under state oversight. Leaking tanks are identified when tank owners report leaks; land redevelopment activities uncover unknown tanks; or state agencies investigate contamination complaints or inspect tanks for regulatory compliance. While regular tank inspections can detect new leaks and potentially prevent future ones, as of early 2005, only two of the five states GAO contacted—California and Maryland—consistently inspected all the state's tanks at least once every 3 years, the minimum rate of inspection that EPA considers adequate. The Energy Policy Act, enacted in August 2005, among other things, requires inspections at least once every 3 years and provides federal trust funds for this and other leak prevention purposes. EPA and some state officials told GAO that increasing inspection frequency could require additional resources. Being able to use trust fund allocations for this purpose will help in this regard. The five states GAO contacted, once they become aware of leaking tanks, identify responsible parties and require them to hire consultants to conduct site assessments and plan and implement cleanup work. The states generally prioritize sites for cleanup according to the immediate threat they pose to human health, safety, and/or the environment.