



Highlights of [GAO-08-288](#), a report to the Chairman, Ad Hoc Subcommittee on Disaster Recovery, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

Hurricane Katrina caused several breaches in the floodwalls along three drainage canals in New Orleans, contributing to catastrophic flooding. To restore the pre-Katrina level of hurricane-related flood protection, the Army Corps of Engineers (Corps) decided to acquire several large-capacity pumping systems. During the process of acquiring, testing, and installing the pumping systems, issues with the pump contract and operation of the pumping systems came to light, including several identified in a Corps Independent Team Report (ITR).

GAO was asked to evaluate the Corps' efforts to (1) develop contract specifications and award the contract, (2) address pumping system performance issues, (3) document contract modifications, and (4) reconcile contract payments. GAO reviewed contract and testing documents, observed the operation of the pumping system, and interviewed officials from the Corps, its consultants and contractors, and the ITR team.

What GAO Recommends

GAO recommends actions to ensure that future contracts adhere to sound acquisition practices, even for expedited procurements, and to ensure that any required contract documentation is completed and filed in a timely manner.

The Department of Defense agreed with GAO's recommendations.

To view the full product, including the scope and methodology, click on [GAO-08-288](#). For more information, contact Anu Mittal at (202) 512-3841 or mittala@gao.gov.

ARMY CORPS OF ENGINEERS

Known Performance Issues with New Orleans Drainage Canal Pumps Have Been Addressed, but Guidance on Future Contracts Is Needed

What GAO Found

Schedule concerns drove the Corps' decisions in developing specifications for the pumping systems and awarding the contract, but the rush to award the contract resulted in deficiencies in key contract provisions. Specifically, the original factory test requirements were ambiguous, there were only limited provisions for on-site testing, and there were no criteria for acceptance of the pumping systems by the government. The Corps conducted an expedited competition to contract for the pumping systems and selected a supplier for contract award based largely on its ability to deliver the pumping systems by the June 1 start of the 2006 Atlantic hurricane season.

The Corps and the contractors have addressed and corrected known performance issues with the pumping systems. Concerns included hydraulic motor vibrations, the design of the hydraulic intake line, suspect pipe welds, and lower than expected pumping capacity. The pumping systems were installed prior to correcting these issues because the Corps believed it was better to have some pumping capacity along the drainage canals during the 2006 hurricane season rather than none, despite uncertainty over how much of the pumping system capacity would be available, and for how long, if needed. Between November 2006 and September 2007, the Corps and the contractors completed all of the repairs and reinstalled the pumping systems. Documents that GAO reviewed indicate that, as of September 2007, each pumping system had been successfully tested on site for at least 2 hours, thus providing greater assurance that they will perform as designed.

The contract files for the pumping systems contained the required documentation for the type and value of the contract and associated modifications, though, in a number of cases, documentation was inserted in the contract files several months after modifications were issued and only after the ITR reported its findings. While the ITR correctly noted the absence of some required documentation, GAO found that much of the specific documentation cited as missing was not required for the modifications in question because of the nature and value of these modifications. In addition, while the ITR found that it appeared as though the contractor developed the scope of work and pricing for some of the modifications without a subsequent analysis by the Corps, GAO found no instance of this occurring.

As of October 31, 2007, the Corps had paid the contractor about \$30.5 million of the \$33 million contract amount. In a few instances, the Corps made duplicate payments to the contractor. GAO found that these payments were due to Corps mistakes, not inappropriate billing by the contractor. GAO found no other cases of duplicate payments. The Corps plans to adjust for the duplicate payments by deducting the balance from remaining funds, including any incentive payments, owed to the contractor. According to Corps officials, final payment and reconciliation of the contract is expected by early 2008; however, it is unknown to what extent contract or pump performance issues will affect the final amount paid for the contract during the close-out process.