

U.S. Department of Homeland Security
Central Regional Office
Office of Emergency Management Oversight
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Homeland
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May 29, 2009

MEMORANDUM FOR: Tony Russell, Acting Director
FEMA Louisiana Transitional Recovery Office
Tonda L. Hadley

FROM: Tonda L. Hadley, Director
Central Regional Office

SUBJECT: *St Bernard Parish, Louisiana*
FEMA Disaster Number 1603-DR-LA
Public Assistance Identification Number 087-99087-00
Audit Report Number DD-09-10

We audited public assistance funds awarded to St. Bernard Parish, Louisiana (Parish) for emergency pumping and hauling of wastewater following Hurricane Katrina. Our objective was to determine whether the Parish accounted for and expended Federal Emergency Management Agency (FEMA) funds awarded under Project Worksheet (PW) 11532 according to federal regulations and FEMA guidelines.

As of April 25, 2008, for PW 11532, the Parish had incurred \$42.37 million in expenses and had received \$31.66 million from the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), a FEMA grantee. The scope of PW 11532 was for contractual services to pump and haul wastewater for the period July 1, 2006, through June 30, 2007.

We conducted this performance audit under the authority of the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We interviewed FEMA, GOHSEP, and Parish officials, and selected engineering representatives hired by the Parish; reviewed disaster cost documentation; and performed other procedures considered necessary under the circumstances.

To determine whether contract invoices were properly supported we selected and reviewed a sample of 400 load ticket data entries and compared the tonnage submitted by the Parish for reimbursement

to the tonnage invoiced by the contractor. We did not assess the adequacy of the Parish's internal controls applicable to its grant activities because it was not necessary to accomplish our audit objective. We did, however, gain an understanding of the Parish's method of accounting for disaster-related costs and its procurement policies and procedures.

BACKGROUND

On August 29, 2005, Hurricane Katrina struck the southern coast of Louisiana and caused catastrophic damage in the Parish. Category 4 winds resulted in a storm surge that breached levees and flooded the Parish to depths up to 25 feet. Floodwaters submerged the Parish's sewage collection and disposal system resulting in damage or destruction to 7 wastewater treatment plants and 92 lift stations.

In the following weeks, the Parish restored operability to two wastewater treatment plants. However, the Parish faced a major challenge in moving the wastewater from the underground collection systems to the operable treatment plants. The lift stations that normally pumped the material from the origination points to the treatment plants were inoperable. As evacuated residents returned, the Parish resorted to emergency measures to prevent wastewater from overflowing into the streets. In September 2005, the Parish used a time-and-materials contract awarded under exigent conditions to procure trucking services to pump and haul wastewater from collection points to the two operable treatment plants.

In 2005 and 2006, the Parish undertook various measures to assess overall damages to its sewage collection and disposal system and to restore partial operability to segments of the system. The Parish issued contracts for assessments of damages to the lift stations and treatment plants. Interim measures to restore operability included awarding contracts for debris removal, cleanup, and temporary electrical repairs at two treatment plants, and for clean up and repairs at lift stations. These actions facilitated the installation of temporary pumps during 2006 and 2007 to bypass non-functioning lift stations and reduce the volume of wastewater being hauled.

While the assessments and interim measures were ongoing in 2006, most of the sewage system continued to be inoperable, which required the Parish to continue wastewater pumping and hauling operations. The Parish advertised for and awarded a new contract, effective July 1, 2006, to replace the previous contract awarded in September 2005. The Parish awarded a separate contract to monitor the pumping and hauling operations and to review the invoices. The Parish subsequently awarded another contract to a new contractor effective June 30, 2007, to continue wastewater hauling operations through the remainder of 2007.

RESULTS OF AUDIT

The Parish accounted for and expended FEMA funds according to federal regulations and FEMA guidelines. We initiated this audit because FEMA Public Assistance (PA) personnel were concerned that the amount of wastewater hauled and the costs incurred greatly exceeded the original contract estimates. As a result of these and other concerns, FEMA disallowed \$10.65 million of the \$42.37 million expended by the Parish for the period July 1, 2006, through June 30, 2007, under PW 11532. The Parish appealed this action to GOHSEP on July 6, 2007. GOHSEP agreed with the Parish and transmitted the Parish's appeal to FEMA on September 5, 2007.

We determined that the Parish properly awarded the unit price contract for pumping and hauling services and maintained documentation sufficient to support the amount of wastewater hauled and the \$42.37 million expended. During our fieldwork, FEMA re-assessed the Parish's claim and, in a letter dated April 11, 2008, provided its decision to allow \$10.55 million of the \$10.65 million previously disallowed—a difference of \$102,809.

Parish Properly Awarded and Modified Contracts

The Parish followed federal procurement standards and FEMA guidelines in awarding a unit price contract, effective July 1, 2006, for pumping and hauling services. The contracted services were necessary in 2006 because most of the lift stations were still inoperable. FEMA's *Public Assistance Debris Management Guide* (FEMA 325, April 1999) states that a unit price contract should be used when "the scope of work is difficult to define and is based on estimated quantities." According to a Parish official, the Parish used estimated quantities in the contract because it could not realistically determine exact wastewater quantities that would be generated.

At FEMA's urging, Parish officials advertised for competitive bids in April 2006 to replace the existing time-and-materials contract with a unit price contract. To prepare the bid package, a Parish engineering contractor estimated future tonnage based on wastewater volume being hauled at the time of the estimate. The engineer calculated tonnage based on total truck capacities because the contractor, at that time, did not generate records of weights or volumes. The engineer estimated that 500,000 tons would be hauled during the 6-month period from July 1, to December 31, 2006. The Parish solicited and received sealed bids from two responsible bidders and selected the lowest bid of \$11.79 per ton.

Events following the preparation of the estimate and the contract award affected the accuracy of the estimate. According to the engineer and a Parish official, evacuated residents returned in great numbers much sooner than they expected after the hurricane. One local organization reported that the Parish population grew almost five times between January 1, 2006, and July 1, 2006.¹ Rainfall was greater than expected during the same period, which also impacted the wastewater volume. According to a Parish official, the deteriorated condition of the underground system allowed rainwater to infiltrate the system. During the period in which the estimate was made, the average monthly rainfall was lower than normal. However, the average monthly rainfall in the first 6 months of the new contract period was more than double the previous 6-month average.²

¹ Source: March 2007 website for the Greater New Orleans Community Data Center, a non-profit organization established to provide sources of data to support nonprofit planning in a post-catastrophe environment.

²Source: U.S. National Weather Service.

The greater wastewater volumes resulted in the Parish exercising a contract provision allowing modifications through mutual agreement with the contractor. The contract specifications stated that “estimates stipulated in the Form of Proposal are . . . to be used as an estimate of the probable cost of the work . . . and for comparing the bids.” On August 23, 2006, the Parish and the contractor executed a change order to increase the estimated volume from 500,000 to 1,500,000 tons and increase the estimated costs from \$6.19 million to \$17.98 million. As volume continued to grow and the need for the services continued, the Parish executed two additional change orders. In December 2006, the Parish increased the estimated volume and costs to 3.7 million tons and \$43 million, respectively, and extended the contract period to March 31, 2007. In March 2007, the Parish executed a third change order that increased the estimated tonnage and costs to 4.5 million tons and \$53.8 million, respectively, and extended the ending date to June 30, 2007.

FEMA initially concluded that, once the estimated 500,000 tons of wastewater was hauled, the Parish should have awarded a new contract, rather than modify the existing contract to increase the tonnage and resulting costs. Therefore, FEMA reduced the contracted rate per ton to one it believed to be more reasonable and applied the lower rate of \$10.19 per ton to all tonnage greater than the 500,000 tons. As a result, FEMA disallowed \$4.92 million of costs claimed for hauling the 3.58 million tons of wastewater.

We disagree with FEMA’s initial conclusion and subsequent reduction in the rate per ton because the Parish’s contract allowed for fluctuations in the estimates of tonnage to be hauled and fair and open competition set the rate per ton. In its April 2008 appeal decision, FEMA stated that the \$11.79 per ton rate was “within a reasonable range of the revised FEMA estimated cost” and would be “used in determining reimbursement of the sewage quantities.”

Documentation Supported the Amount of Wastewater Hauled and Payment Requests

The Parish maintained documentation to support reimbursement requests totaling \$42.37 million for pumping and hauling 3.58 million tons of wastewater. The documentation supporting the requests included invoices, spreadsheet listings, and load tickets. The pump and haul contractor submitted weekly invoices to the monitoring contractor with spreadsheet listings of load ticket data. The monitoring contractor received and reviewed invoices, spreadsheets, and load tickets supported by machine-printed scale tickets, and recommended approval for payment. This process complied with FEMA’s *Public Assistance Debris Management Guide* (FEMA 325, April 1999), which states that when a contract unit of measurement is based on weight, provisions should be made for weighing trucks as they enter the site.

We performed two tests to determine whether proper documentation supported the quantities in the Parish reimbursement requests. First, we compared the tonnage submitted by the Parish for reimbursement to the tonnage invoiced by the contractor. We determined that the contractor’s data supported the tonnage in the Parish’s requests. Second, to validate the contractor’s data, we used a judgmental sample to determine whether the required load and scale tickets supported the invoiced data. We selected 400 load ticket numbers from a universe of 93,703 load ticket records used by the contractor for invoicing for the period July 1, through December 24, 2006. We then obtained and reviewed the numbered load and scale tickets to determine whether they supported the contractor’s data entries. The table below presents our test results.

Test Results for Sample of 400 Load Tickets	
Load tickets and scale tickets matched data entries	380
Load tickets matched data entries but no scale tickets attached	7
No load tickets or scale tickets	11
Load tickets and scale tickets with data entry errors	<u>2</u>
Total	<u>400</u>

As shown above, load and scale tickets supported the majority of the contractor's load ticket data entries in our sample. According to a monitoring contractor official, the 11 missing tickets were included in a number of tickets lost in the early stages of the operation. The 380 matching entries accounted for 95% of the load tickets in our sample. Therefore, we considered the sample results sufficient to conclude that the load tickets supported the Parish's claim for hauling 3.58 million tons of wastewater.

Of the \$10.65 million initially disallowed by FEMA, \$5.3 million was for tonnage that FEMA determined was in excess of the trucks' capacity, as stated in the truck manufacturers' gross vehicle weight rating. The gross vehicle weight rating is the maximum total vehicle weight (truck's weight and its cargo) that the manufacturer believes is a safe vehicle operating weight, and not necessarily the actual carrying capacity. However, the pump and haul contractor used scales certified and inspected in 2006 and 2007 by the scale manufacturer and the Louisiana Department of Agriculture and Forestry to document weights in support of the load tickets.

In its April 2008 appeal decision, FEMA approved all of the Parish's claimed expenses except for \$102,809 for 8,720 tons of wastewater that FEMA determined was "ineligible due to duplication." The 8,720 tons not approved represents 0.24% of the 3,577,850 tons claimed by the Parish. FEMA advised that the Parish could submit a second appeal according to 44 CFR 206.206.

Conclusion

We concluded that the Parish accounted for and expended FEMA funds according to federal regulations and FEMA guidelines. The Parish followed federal procurement standards in awarding the unit price contract for pumping and hauling services and maintained documentation sufficient to support the amount of wastewater hauled and the associated costs claim. Therefore, we are not making any recommendations.

DISCUSSION WITH MANAGEMENT AND AUDIT FOLLOW-UP

We discussed the results of our audit with Parish, GOHSEP, and FEMA officials on April 17, 2009, April 17, 2009, and March 03, 2009, respectively. These officials agreed with our audit results and no response was required.

Because there are no recommendations in this report, no further action is necessary. Should you have any questions, please contact me at (940) 891-8900, or your staff may contact Judy Martinez, Audit Manager, at (504) 739-7730.

cc: Acting Regional Administrator, FEMA Region VI
Audit Liaison, FEMA Louisiana Transitional Recovery Office
Audit Liaison, FEMA (Job Code DG7C01)
Audit Liaison, FEMA Region VI