



Department of Homeland Security Office of Inspector General

FEMA's Oversight and Management of Debris Removal Operations





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Preface

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was established by the *Homeland Security Act of 2002* (Public Law 107-296) by amendment to the *Inspector General Act of 1978*. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the department.

This report addresses the strengths and weaknesses of FEMA's management and oversight of debris removal operations. It is based on interviews with employees and officials of relevant federal, state, and local agencies and institutions, direct observations, and a review of applicable documents.

The recommendations herein have been developed to the best knowledge available to our office, and have been discussed in draft with those responsible for implementation. We trust this report will result in more effective, efficient, and economical operations. We express our appreciation to all of those who contributed to the preparation of this report.


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Acronyms

DAE	Disaster Assistance Employee
DHS	Department of Homeland Security
DR	Disaster Declaration Number
EMI	Emergency Management Institute
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
GAO	Government Accountability Office
IMAT	Incident Management Assistance Team
OIG	Office of Inspector General
PA	Public Assistance
TAC	Technical Assistance Contractor

OIG

*Department of Homeland Security
Office of Inspector General*

Executive Summary

The Federal Emergency Management Agency's Public Assistance program has expended more than \$8 billion over the past 11 years reimbursing applicants, primarily cities and counties, for removing debris resulting from natural disasters. In general, this has been a successful effort. Vast amounts of debris have been removed and disposed of, allowing communities to proceed toward recovery unencumbered by piles of debris. Better planning, contracting, and oversight of debris operations, however, could enable these operations to be conducted in a more cost-effective manner.

Debris planning can allow communities to be better prepared for a disaster by identifying debris collection and disposal sites, identifying potential debris contractors, and preparing debris removal contracts in advance of a disaster. Only a minority of states and local governments currently have such plans in place. A pilot program that operated in 2007–2008 was successful in encouraging the development of debris plans, but momentum has been lost since the Congressional authority for the pilot program expired.

Decisions made in the first few days after a disaster are critical in determining the success of a debris removal operation. Despite improved federal and state efforts to ensure that local governments are prepared for debris removal operations, they are often unprepared. Qualified Federal Emergency Management Agency staff, advising on debris removal, can help local governments determine what needs to be done, but they are not always available when needed. Debris removal operations are frequently more expensive than necessary and would benefit from improved monitoring.

The quality of management and oversight remains a key element in success or failure of the program. While the Federal Emergency Management Agency has made significant strides in this area, opportunities remain for further improvement. Federal disaster response teams need to address debris expertise. Debris removal guidance is often unclear and ambiguous. Finally, an integrated performance measurement system would provide federal and state officials and stakeholders with the data and tools to measure, analyze, and improve debris operations.

Background

One of the key challenges following a major natural disaster is the proper and timely management and disposal of disaster debris. Debris can include waste soils and sediment, vegetation, construction materials, and personal property, and can be commingled with a variety of hazardous wastes. This debris can overwhelm existing landfills and present daunting logistical challenges. The ability of residents to return and live in a safe and healthy environment depends on the quality of the debris response.

The Federal Emergency Management Agency (FEMA), through its Public Assistance (PA) program,¹ provides funding and technical assistance for debris removal, implementation of emergency protective measures, and permanent restoration of eligible facilities and infrastructure. Detailed requirements exist to determine eligibility of debris removal work for federal reimbursement, but, in general, eligible activities must (1) be the direct result of a presidentially declared disaster, (2) occur within the designated disaster area, (3) be the legal responsibility of the applicant at the time of the disaster, and (4) be in the public interest.

The primary responsibility for post disaster debris removal, including the management of debris removal and monitoring operations, rests with the affected states and communities. The capability to achieve this mission varies greatly across the Nation and is largely a function of experience, resources, and leadership at all levels. The state serves as the grantee for PA grants while the county or city receives funds as a subgrantee. A number of other entities, including federal agencies, private-sector contractors, nonprofit and voluntary organizations, and the citizenry at large all play key roles in removing disaster debris. Local governments manage the debris collection process. They can either perform debris collection work with local employees or use debris collection contractors. If contractors are used, their work and charges should be monitored to ensure the contract costs are eligible for FEMA funding and to reduce the likelihood of waste, fraud, and abuse. Monitors can be local government employees or can be provided by a monitoring contractor.

Any debris removal operation has three primary phases: planning, initiation, and implementation. This report describes the major activities

¹ The *Robert T. Stafford Disaster Relief and Emergency Assistance Act*, P.L. 93-288, as amended, 42 U.S.C. § 5121 et seq. (Stafford Act) authorizes the FEMA Public Assistance Program to award federal funding to state and local governments, federally recognized tribes, and eligible private nonprofit organizations to assist them in their disaster response and recovery activities.

occurring in each phase, along with our observations regarding FEMA's performance in the management and oversight of each phase.

Debris planning consists of actions conducted by a state or locality in advance of a disaster to prepare for an effective and efficient debris removal effort. Elements of a sound debris plan include a clear definition of roles and responsibilities of the major participants, an identification of debris staging and final disposal sites, a process for handling various types of vegetative and non-vegetative debris, a process for handling hazardous waste, and at least two prequalified contractors to remove debris. Plans should also address the roles of state, county, and municipal employees who may be engaged to provide direct labor support.

Debris project initiation consists of activities conducted after the disaster to start debris removal. These activities, which have significant financial implications, may occur in a compressed and stressful period when search and rescue operations are under way and the community is struggling to provide basic services to citizens. Key activities in the initiation phase include:

- Organizing government and contractor resources and personnel;
- Conducting preliminary damage assessments and estimates;
- Preparing and executing competitively bid contracts for debris removal and monitoring; and
- Developing management and operational protocols and processes.

The implementation phase consists of two primary work streams: debris removal and debris monitoring. Debris removal is generally performed by a combination of contractor and government personnel and equipment, and consists of removing and disposing of vegetative and non-vegetative debris in accordance with eligibility and procedural guidelines developed by FEMA. Debris monitoring may be likewise performed by some combination of contractor and government personnel and consists of verifying the eligibility, volume, and basis for cost of debris removal and disposal activities.

Removing debris is expensive; as table 1 shows, FEMA has expended or obligated more than \$8 billion to reimburse applicants for eligible debris removal activities for fiscal years (FYs) 2000–2010. The costs of debris removal are greater than represented in the table since this is the federal share. Most disasters require a 25% non-federal (state and applicant) share toward the full cost of debris removal. However, under the Stafford Act there is flexibility when the severity of the disaster overwhelms the state, the applicant cost-share can, with Presidential authorization, be adjusted downward and in some cases can even be eliminated.

Table 1. FEMA expenditures or obligations for debris removal

Fiscal Year	Total Expended or Obligated for Debris Removal(\$ millions)
2000	\$206.9
2001	\$376.3
2002	\$617.2
2003	\$212.6
2004	\$233.3
2005	\$1,316.3
2006	\$2,461.2
2007	\$753.9
2008	\$266.7
2009	\$1,347.3
2010	\$209.6
Total	\$8,001.3

The *Post-Katrina Emergency Management Reform Act of 2006*² directed FEMA to conduct a pilot PA program to reduce the overall cost of federal public assistance to state and local governments, increase grant flexibility, and expedite assistance to eligible state and local governments. Participation by state and local governments in the program was voluntary. The pilot program included four key debris-related provisions:

- Provide grants on the basis of estimates for large projects up to \$500,000;
- Provide an additional 5% federal cost share for applicants with FEMA-approved debris management plans in place;
- Allow applicants to retain the salvage value of recyclable debris; and
- Reimburse regular time salaries and benefits of permanently employed staff performing debris-related activities.

FEMA operated the pilot program from June 1, 2007, through December 31, 2008 when Congressional authority for the pilot program expired.

² The *Post-Katrina Emergency Management Reform Act of 2006* (P. L. 109-295), Title VI—National Emergency Management, *Department of Homeland Security Appropriations Act of 2007*.

Results of Audit

Debris Planning

State and local governments are encouraged to plan for, and are expected to manage, their own debris removal operations following an emergency or major disaster, with eligible costs being reimbursable under the PA program. As part of debris planning, state and local governments are encouraged to prequalify local or regional debris removal contractors to ensure the immediate availability of coordinated debris removal support following a debris-producing event. Federal, state, and local officials agreed that another important element of debris planning and preparation is identifying debris disposal sites in advance. By developing a debris management plan, communities will be better prepared to address disaster-related debris in a time-efficient manner, thereby expediting the recovery process. Additionally, a sound and properly executed debris management plan should enhance an applicant's ability to document its costs and reduce the time and administrative burden of applying for PA grant assistance.



Figure 1. Nashville flooding, FEMA Disaster No. DR 1909 TN (Source: FEMA)

To assist state and local governments in developing a debris management plan, FEMA provides training to state and local officials. Only a minority of states, most of them in hurricane-prone locations, currently have a plan in place. Most local governments also do not have such plans in place. FEMA does not determine whether a plan is approved or disapproved, as it did during the pilot program. However, FEMA continues to review

debris plans that are submitted to the regional offices. Regional and state officials said that confusion exists regarding FEMA's role in approving plans, perhaps as a result of these changes.

Pilot Program Impact on Planning

FEMA's pilot PA program included the provision of an additional 5% federal cost share, not to exceed a total of 100%, to applicants having a FEMA-approved debris management plan and at least two prequalified debris and wreckage removal contractors identified prior to a disaster. To assist state and local governments, FEMA provided a debris management plan outline and the checklist that FEMA would use for plan approval. FEMA requirements did not include identifying disposal sites as part of the management plan's content. Further, FEMA trained 3,409 state and local officials in 21 states and three territories on the development of debris management plans in FY 2008 under the pilot program.

Participating states said that having a debris management plan and prequalified debris contractors facilitated better-organized and managed debris removal operations. FEMA received feedback on the pilot program from regional, state, and local stakeholders, who said that the pilot program encouraged debris planning. The debris workshops and the increase in federal cost share provided incentives for states and localities to develop and maintain debris plans. One FEMA regional PA official described the mandated expiration of the pilot program as "the worst thing FEMA could have done," noting that local jurisdictions were active in developing debris plans but lost interest when the program was terminated, and financial incentives and resources were withdrawn.

A comprehensive debris management plan takes a significant amount of time to develop and implement at the local level. The planning provision of the pilot program was not widely used until later in the implementation phase; 180 of the total 234 project worksheets for planning were prepared during the last 4 months of the pilot program. Local officials said some FEMA regions were slow to process and approve the plans and many plans were, therefore, not approved during the pilot program. FEMA headquarters officials said that delays in approval were often due to the necessity for FEMA to work with some applicants to assist them in compiling a plan that would meet the criteria for approval. Additionally, many state and local officials said that they did not

have a major debris-generating event during the program, so they did not participate.

Contractor Management Challenges

Disaster planning and preparedness are essential in addressing disaster-related debris in a time-efficient manner. Also, prequalifying local or regional debris removal contractors ensures the immediate availability of coordinated debris removal support. These two elements assist communities not only in preparing for debris operations, but also in handling the large influx of potential debris contractors. These contractors arrive almost immediately after an event, often days or weeks before FEMA debris specialists. Without planning and FEMA debris policy knowledge, communities are not well prepared to control the contracting process.

Certain contractors with experience in multiple disasters have learned how to “beat the system,” allegedly using FEMA logos on their personal items, making it appear that they are FEMA employees, and claiming to be “FEMA certified.” According to FEMA policy, FEMA does not recommend, pre-approve, or certify any debris contractor.

Some contractors are adept at exploiting flaws in the system. Contractors were reported to “lowball” their bids and compensate by collecting ineligible debris, including debris well beyond the right-of-way, and even clear-cutting on public lands. Some contractors were reported to coordinate bids between companies. Others promote monitoring firms that are related to, or even owned by, their company.

FEMA reimburses direct administrative costs incurred by grantees and subgrantees that are properly documented and directly chargeable for a specific project. This means that local governments can contract out the management of a debris removal project and be reimbursed at the cost-share rate established for the disaster declaration. Contractors promise local governments that they will maximize the money obtainable from FEMA and that all of the local government’s costs will be reimbursed if they are hired to handle all aspects of the debris operations. This presents an enticing arrangement for local governments because it is simple, and many local governments do not have the staff or funding to handle the operations on their own. As a result, administrative

costs can be disproportionately high as a percentage of total project cost. Several officials told us that administrative costs were “getting out of control.”

The Impact of Debris Planning

Tennessee was struck by severe storms, flooding, straight-line winds, and tornadoes beginning on April 30, 2010, and continuing until May 18, 2010. DR 1909 was declared on May 4, 2010.



Figure 2. Nashville flooding, FEMA Disaster No. DR 1909 TN (Source: FEMA)

The Metro Nashville Office of Emergency Management had rewritten its local debris management plan, which included locations of staging and landfill sites, in 2009. A draft contract had already been prepared when the May 2–3, 2010, flooding struck. The city sent the contract and plans to FEMA and the Army Corps of Engineers and received comments within hours. As a result, a contractor was in place within 3 days and debris removal started within 7 days after the event. The result of their efforts was effective and efficient debris removal at a reasonable cost.

Conclusion

Debris management plans help communities prepare for disaster-related debris removal and ultimately enhance the recovery process. To be effective, however, these plans need to identify critical elements of the debris removal process, including the prequalification of contractors and the identification of disposal sites. Such plans need to be reviewed and approved in a timely manner. FEMA regional offices have not been clearly in charge of this role and some did not approve plans in a timely manner under

the pilot program. Since the states are the grantees for FEMA debris funding, which is sub-granted to counties and cities, it would be appropriate for the states rather than FEMA to approve local government debris management plans. It is also likely that the states could do so in a timelier manner.

Recommendation

We recommend that the Associate Administrator, Response and Recovery:

Recommendation #1:

- Provide a provision of an additional 5% federal cost share, not to exceed 100%, to applicants with a FEMA-approved debris management plan and at least two prequalified debris and wreckage removal contractors identified prior to a disaster.
- Require disposal site identification to be part of the debris management plan.
- Allow qualified states that have completed their own plan to approve local jurisdictions' debris disposal plans.

Management Comments and OIG Analysis

FEMA concurs with the first and second parts of the recommendation. The agency is considering revisions to its regulations that would incorporate an increased federal share initiative and would require PA applicants to identify debris management sites and final disposal sites in their debris management plans in order to qualify for the increased federal share. FEMA is still considering the third part of the recommendation and will evaluate a significant role for states in the review and approval of debris management plans.

We agree with the initiatives FEMA is considering to improve the debris planning process. We will determine the status of this

recommendation once we receive the detailed corrective action plan in FEMA's 90 day letter.

Initiating Debris Operations

The decisions made in the first few days after a disaster are critical in determining how successful a debris removal operation will be. However, such decisions are made at a time when decision makers, primarily county and city officials, are fully occupied, if not overwhelmed, by more immediate problems such as assisting endangered residents, clearing access to hospitals and other vital routes, and restoring electricity, water, and other critical services. FEMA regulations allow for reimbursement of less restrictive time and materials procedures during the first 70 hours after a disaster. FEMA strongly encourages applicants to limit time and materials contracts to the first 70 hours, because after that initial period applicants should have enough data to competitively procure unit price or lump sum debris removal contracts. Applicants that choose to use time and materials contracts beyond 70 hours may jeopardize their funding from FEMA. In order to be eligible for reimbursement, applicants must satisfy PA eligibility criteria throughout the entirety of the debris removal operation.

While local government officials repeatedly said how critical such reimbursement is to their often cash-strapped governments, many are not well prepared to comply with FEMA debris removal regulations. Poor preparedness could lead to decisions that waste significant amounts of funds, make part of debris removal operations ineligible for FEMA reimbursement, or delay debris removal.



Figure 3. Missouri ice storm, FEMA Disaster No. DR 1403 MO (Source: FEMA)

Despite significantly improved FEMA and state efforts to ensure that local governments are prepared for debris removal operations, many local governments are not well informed concerning the procedures they need to follow to establish economical and regulation-compliant debris removal operations. Their contracts with debris removal firms are critical to determine whether operations will be efficient, economical, and compliant with regulations. However, local governments can not obtain FEMA-approved contracts to use as a model because FEMA policy does not provide for approved debris removal contracts. Debris estimates, which are important to obtain lowest-possible-cost contracts, are sometimes not reliable. Qualified FEMA staff to advise on debris removal are often not onsite early in the project when they are needed to advise on initiating operations. Local officials said the debris removal program regulations are lengthy, complex, and difficult to master, and FEMA staff does not always provide a consistent interpretation of debris removal regulations. For example, this can be a problem when FEMA staff turnover results in local officials being told that the procedures that had already been approved are no longer acceptable. As a result, local governments often conduct debris removal operations that are not as economical as they could be and do not comply with regulations. Consequently, local funds and FEMA program funds are wasted on unnecessary or inappropriate debris removal expenditures, and local governments do not receive, or are directed

to return, FEMA funds to which they believed they would be entitled.

Educating Applicants Concerning Debris Removal Operations

FEMA and state officials emphasized that a key to effective debris removal operations is providing information and training to state and local governments prior to disasters. FEMA offers debris management courses at the Emergency Management Institute (EMI), and FEMA regional officials have conducted regional training for those unable to attend EMI courses. Local officials said these courses were helpful. Others said they had been able to attend FEMA regional disaster conferences, which were responsive to their needs.

Many of the state disaster officials we interviewed said they also provide training at the state level in debris removal operations, and that FEMA is willing to participate in such training upon request. Several local government officials said their funding and staffing have been reduced in recent years and it is difficult for them to attend training conferences. Some said they had studied FEMA manuals concerning debris removal practices and FEMA policy; however, others are not prepared for the decisions they must make in the immediate aftermath of a disaster.

Initiating a Debris Removal Contract

While some local governments can conduct their own debris monitoring and debris removal efforts, many must rely on contractors, especially for larger disasters. In general, to be eligible for FEMA assistance, operations must be conducted under a contract that complies with FEMA requirements. To accomplish this, some states have initiated statewide contracts for debris removal and monitoring, others provide local governments with model contracts and have authorized pre-disaster contracting, and others provide local governments with a list of state-recommended contractors.

In some states, however, local governments have none of these advantages when faced with initiating debris removal. Many have not developed a debris removal plan, do not have a contract ready to offer to bidders, and have had no prior contact with possible contractors.



Figure 4. Dangerous debris situation (Source: FEMA)

Local officials said they have had up to 90 contractors contact them in the immediate aftermath of a disaster. Some contractors travel to the disaster site and repeatedly contact local officials, encouraging officials to immediately contract with their firm. Others falsely claim to be FEMA certified or even FEMA related. Many offer to manage the entire disaster response operation and claim to be able to obtain the maximum amount of FEMA funding for disaster operations. Some not only offer to remove debris but also provide monitors to oversee their own efforts. In the face of such efforts, local governments need quick advice and assistance.

In spite of these obstacles, most of the local officials we interviewed were able to get satisfactory contractors through a contracting process they considered acceptable. However, many have asked for a FEMA-approved standard contract to assist them in ensuring that their contracting was in full compliance with FEMA requirements. FEMA officials responded that it is not appropriate for FEMA to provide a preapproved contract. The local governments, not FEMA, are contracting with the debris removal and monitoring firms, and FEMA is not a party to the contract. However, FEMA will review contracts that local governments develop, and the Army Corps of Engineers (Corps) has several sample contracts available on its website. A city that used the contract review process said that both FEMA and the Corps provided comments on its proposed contract within hours of receiving it.

Debris estimating—assessing the total volume of debris that has to be dealt with before it is actually collected—is an art and science that is still developing. Results have been mixed, however. Officials in one county said while they had received an estimate of 100 tons of vegetative debris that they used as the basis for soliciting proposals, the actual amount collected turned out to be 450 tons. Had the competing contractors known that there would be so much volume, they might have submitted lower bids per ton, and both FEMA and the community would have realized significant savings.

The rules governing debris removal and monitoring are lengthy and complex. The FEMA Debris Management Guide, FEMA P-325, covers all the major aspects of debris removal. The guide is 149 pages long plus 92 pages of appendices. Some of the rules, such as those governing the eligibility of damaged trees (leaning trees and hanging branches), are complex and even confusing. A local government official faced with initiating debris removal operations in the wake of a disaster does not have the time to master all of these rules. And even those who have studied the guidelines find that some of their questions are not addressed.



Figure 5. Leaning trees from FEMA Disaster No. DR 1682 WA (Source: FEMA)

State and local officials described debris removal as a “gray area” in contracting and said some of the debris policies are ambiguous. Some unclear areas concerned the eligibility of tree removal or saving operations; assisting the elderly and disabled in getting their debris out to the curbside; what the allowable preference for local contractors can include; whether gated communities and areas without public roads, such as trailer parks, can be made eligible; and whether funding new landfills for dump sites is an eligible expense.



Figure 6. Removing an eligible hanging branch (Source: FEMA)

State officials said that FEMA needs to do a better job of keeping all involved informed concerning new and evolving FEMA policies concerning debris removal. FEMA does provide a three-page fact sheet, “Debris Removal Applicant’s Contracting Checklist,” that can offer timely assistance in initiating a quick response, but it cannot cover all of the debris removal program’s rules and requirements.

Qualified FEMA debris removal staff can be of great assistance in informing local officials of the FEMA rules and requirements and interpreting the more ambiguous requirements. In some cases, however, FEMA debris management specialists were not onsite until 3 or more weeks after the disaster, when contracts had already been awarded and contractors were hauling away debris. While some FEMA staff had arrived earlier, they did not have the necessary debris specialist skills. FEMA officials conceded that the FEMA staff who respond early to disasters, such as the Incident Management Assistance Teams, do not necessarily have adequate knowledge of debris removal rules, regulations, and procedures.

Because the rules governing debris removal are lengthy, complex, and sometimes ambiguous especially when determining vegetative debris eligibility, different FEMA officials sometimes give local officials different interpretations of these rules. This can lead to debris removal actions that some FEMA officials had considered appropriate later being ruled inappropriate, and even to a partial loss of FEMA funding. Local officials reported that sometimes FEMA employees onsite cannot agree on the eligibility of a

procedure, such as removing a tree, and have to halt operations until a supervisor can be called to the site.

In other cases, FEMA staff turnover at a disaster site, combined with the ambiguity of some of the rules, has resulted in a community being told that the procedures that had been approved were no longer acceptable and had to be changed. Perhaps of most concern to local officials, since it can lead to denial or return of funds, is when procedures that FEMA onsite officials have approved are later ruled unacceptable by FEMA regional officials, or by state or federal auditors.

The Results of Problems in Initiating Debris Collection Operations

Problems in initiating debris collection operations can lead to significant and costly problems during collection efforts, including the ineligibility of claimed costs and subsequent demands for repayment of federal funds. State and local officials said that some requests for proposals were issued that could have resulted in contracts allowing contractors to monitor their own performance. In one case, a debris collection contractor was allowed to hire its own subsidiary company as a debris monitoring contractor. In some cases, tree removal actions were either unnecessarily expensive or later found to be ineligible. In another case, state prisoners were used to help the elderly and disabled to get their debris out to curbside, and the cost of this assistance was disqualified.

A review of 36 recent OIG audits of debris removal subgrantees, generally counties and cities, showed the wide range of adverse effects and possible requirements for repayment that can result from problems during the initiation of debris removal operations:

- In eight cases, contracts were awarded without having been properly competed, or had major changes without the required competition.
- In seven cases, tree removal operations (primarily leaning trees and hanging branches) were improperly conducted or accounted for.
- In five cases, ineligible debris, such as from private or ineligible property, was charged under FEMA accounts.

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- In five cases, ineligible contracts, such as time and materials contracts, were used after the first 70-hour eligibility period.
 - In four cases, local governments charged ineligible local employee expenses (regular or straight time as opposed to the eligible overtime expenses) to FEMA.
 - In two cases, accounting was inadequate and/or contractors had overbilled local governments, which had passed the excessive charges on to FEMA.

Conclusion

Local governments need clear and consistent guidance governing the initiation of debris removal operations. Without such guidance, contracts can be awarded that result in higher costs to both the local government and FEMA, or can even result in communities having to return funds to FEMA. Debris collection rules and regulations need to be clear enough that state and local stakeholders can understand them readily and obtain consistent interpretations from FEMA officials. FEMA needs to continue to enhance ongoing training and outreach concerning debris collection rules and procedures, highlighting changes and new developments.

Recommendations

We recommend that the Associate Administrator, Response and Recovery:

Recommendation #2: To the greatest extent possible, provide applicants, FEMA employees, and other appropriate officials clear and unambiguous rules, guidance, and procedures for debris operations, including checklists and sample contracts.

Recommendation #3: Work with the states to provide a variety of readily accessible training concerning rules, guidance, procedures, and recent developments in debris removal, contracting, and cost containment.

Management Comments and OIG Analysis

FEMA generally concurs with both of these recommendations, but does not agree that providing sample contracts is appropriate. FEMA officials fear that doing so may create a false expectation of reimbursement of costs even if applicants fail to follow competitive bidding procedures, the work performed is ineligible, or the contract is not monitored effectively. In addition, FEMA officials note that they are not able to account for the varying procurement requirements among states and localities. FEMA is committed to continue providing guidance for debris operations; the debris estimating and monitoring guides have just been issued, and the *Debris Management Guide* is being revised. FEMA is continuing to make training available and is currently developing a computer-based training course on debris management plan development.

We agree with the steps FEMA has taken and is taking to provide guidance and training concerning debris operations. We acknowledge FEMA's concern with providing sample contracts and, in light of the new guidance that has been issued, we will reevaluate this portion of our recommendation. We will determine the status of these recommendations once we review the detailed corrective action plan in FEMA's 90 day letter.

Conducting Debris Operations

Debris removal operations, as categorized by FEMA, occur in two phases: (1) initial debris clearance activities necessary to eliminate life and safety threats and (2) debris removal activities as a means to recovery. The initial debris clearance is an immediate post disaster effort that is frequently conducted by state and local employees and volunteers, but can also be conducted by contractors. The subsequent debris removal operations constitute the bulk of FEMA-funded activities. Extensive FEMA rules and regulations govern these efforts, and millions of FEMA dollars are expended in even the smaller categories of disasters. The vast majority of funds are expended on contracted firms that collect debris, haul it to staging areas, and subsequently remove debris that has been processed and sorted by type to landfills and other sites.

Other debris removal, frequently conducted by the same contractors, includes removing hanging branches and hazardous leaning trees. These operations are customarily reimbursed on a unit price basis (as are “white goods” such as refrigerators) and also constitute a major expense category in debris removal operations. The third major expense is for monitoring. Monitors, either local government employees or employees of a monitoring contractor, oversee a contractor’s collection operations and the volume (and hence eligibility for payment) of the debris that contractors’ trucks haul to collection or disposal sites.

Most of the officials reported that debris is normally collected in a timely manner, enabling communities to proceed with recovery efforts. However, debris collection and monitoring efforts are often costly and many contractors are overpaid. Changes in FEMA policies could improve the cost-effectiveness of the debris removal program and make the program easier for local officials to manage.

Debris Collection



Figure 7. Nashville flooding, FEMA Disaster No. DR 1909 TN (Source: FEMA)

To be eligible for FEMA-funded collection, debris must be the result of a presidentially declared disaster, located within the disaster area on the eligible applicant’s (usually a city or county) improved property or right-of-way, and the legal responsibility of the applicant. FEMA allows applicants to charge FEMA for collecting debris from private residences if debris has been brought to curbside or is otherwise placed on the local government’s right-

of-way. Debris brought to the curbside in gated communities, trailer parks, or other communities where the streets do not have city or county right-of-way status does not qualify for collection except in cases where removal is necessary to provide access for emergency vehicles.



Figure 8. Nashville flooding, FEMA Disaster No. DR 1909 TN (Source: FEMA)

Some contractors, in order to increase their payments under their debris removal contract, will collect ineligible debris, such as debris not located on the right-of-way, and haul it to the collection site for payment. This can happen at any time, but it is more likely to occur as the recovery effort is winding down and eligible debris is less plentiful. We were told of cases where contractors had even gone onto state lands or into neighboring counties or parishes to collect ineligible vegetative debris. Some contractors, who are paid for the mileage their trucks accumulate during the operations, have also been accused of putting on unnecessary miles, and even of driving in circles. Monitors can prevent or report such ineligible debris collecting and mileage, but only if they are present at the time of the collections. It is expensive to have an individual in every one of the contractor's trucks, as some communities have done. Also, FEMA officials have advised that "debris monitors should never be in a debris removal contractor's truck".



Figure 9. Debris-monitoring tower, FEMA Disaster No. DR 1791 TX (Source: FEMA)

Local government officials said that the eligibility rules for collections can appear inequitable to their constituents and difficult to enforce. For example, residents of trailer courts, gated communities, and other less accessible communities may not receive the same level of debris removal services as more accessible locations. Elderly and disabled residents who cannot haul debris to curbside may miss out on FEMA-reimbursed debris removal services.

The rules governing leaning trees and hanging branches are complex and difficult to interpret. We were told that some contractors make unnecessary multiple cuts on a damaged tree to increase their payments. It was also alleged that during one recent disaster, a contractor cut hundreds of ineligible trees and claimed them for reimbursement. Tree operations are frequently a source of disputes between applicants and FEMA, and even FEMA employees may not agree on eligibility.

Debris Volume Assessment at Collection Sites

FEMA officials said most of the excessive costs in the debris program are the result of overstated volumes of collected debris. Most debris collection is paid for on a volume basis. The following occurs at the collection site:

- The contractor's trucks arrive at a collection site.

- A monitor (usually located in a monitoring observation tower at the debris management site) assesses what percentage of the truck's volume is full of debris.
- This percentage is then multiplied by the truck's declared maximum volume (as previously certified and announced on a placard on the side of the truck) to determine the volume of debris to be credited for the load.
- This amount is noted on a load ticket.
- Copies of the load ticket are given to the truck driver and to accounting.



Figure 10. Unloading vegetative debris, FEMA Disaster No. DR 1909 TN (Source: FEMA)

Problems arise because load tickets often go through many hands as they are routed from the debris disposal site to the applicant. A recent DHS investigation determined that four individuals from a debris-monitoring company conspired to falsify debris load tickets, causing FEMA to pay more than \$700,000 in fraudulent costs.

FEMA, state, and local government officials all have monitoring responsibilities, but the applicant has the primary responsibility. Officials from all of these organizations said there are numerous ways to cheat this volume-based system. Some contractors put false bottoms in their trucks after the load capacity has been certified to overstate credited volumes. Contractors switch or alter placards to make it appear that the truck was certified for a larger volume than was actually the case. A former debris contractor employee reported that he had witnessed trucks being issued fraudulent load certificates.

Monitors may overstate the percentage load of trucks entering the staging area or landfill. This can occur because of a need for training or capability on the part of the monitor, intimidation of the monitor by the debris hauler, or collusion between the monitoring company and the hauling company. These factors can overstate volume estimates by 20% or more. That this is occurring can be shown by the fact that the volume percentages assessed are frequently lower whenever the operation is observed by state, local, or federal employees than when only the truck drivers and monitors are at the site.

One experienced state official said when he was working as a temporary employee in an out-of-state disaster, he observed that 237 trucks in succession had been recorded as 100% full prior to his arrival at a busy monitoring tower. While he was personally in the tower, the monitors recorded loads at 60% to 70%; after he left, the load assessments went back to 100%. This official took photos and measurements at the dump sites and landfills and came up with lower percentages than the monitors. He also said that towers sometimes remained unoccupied for up to 45 minutes.

Another official reported he had seen trucks consistently being rated as being 80% or more full when they “were not nearly that full.” He said that two colleagues also witnessed similar incidents. A FEMA after-action report for Hurricanes Gustav and Ike estimated that FEMA may have overpaid \$20 million for debris removal and disposal because qualified monitors were not present at key times and debris load volumes were consequently overestimated.

Federal, state, and local officials reported that options are available for reducing these problems. One state’s officials said they “do not ever” contract for monitoring services; instead they use local employees who are perceived as less vulnerable to intimidation or collusion. In states that use private sector monitoring firms, government officials need to ensure that monitors are competent, properly trained, and aware of their rights and responsibilities.

FEMA, state, and local officials could oversee all aspects of debris operations to minimize fraud and excessive charges. The problem here, of course, is cost. Monitoring costs in operations we reviewed ranged from 20% to 33% of the total cost of debris operations. Other reviews have reported monitoring costs of as

much as 50% of total debris costs. Having enough FEMA, state, or local officials present to monitor the monitors increases the direct cost of oversight even more. In such cases, oversight may cost more than the operations being overseen.



Figure 11. Truck scale in action (Source: FEMA)

Conclusion

Debris removal is generally performed effectively and in a timely manner, but not necessarily at the lowest possible cost. Debris monitoring presents opportunities for improvement, as current methods leave FEMA and its applicants vulnerable to potential waste, fraud, and abuse.

The effectiveness and integrity of monitoring activities could be improved by having local governments perform monitoring, especially if they are sharing in collection costs. This could be funded by authorizing FEMA payment for force account labor as was done under the pilot program. Paying for local government employees to address leaning trees and hanging branches could also provide a more secure, lower cost approach to handling these potentially complicated and difficult-to-control efforts.

If contracted monitors are used, local officials must ensure that the monitoring company does not have an inappropriate relationship with the debris collection contractor, and that monitors are qualified, trained, and accurate. FEMA should ensure that in cases where the federal government is reimbursing 100% of all debris

costs, additional federal oversight is in place, since the incentives for local oversight have been diminished.

One option for reducing collection and monitoring costs is to pay contractors based on the weight of debris collected rather than volume. Trucks could be weighed on truck scales when they arrive at the collection site and again when they depart, with the difference being an accurate measure of the weight of the debris. Local officials reported that this system worked well and that truck scales could be rented easily and at a reasonable cost for the period that collection centers were operating. No system is totally foolproof. Drivers could still inflate debris weights by wetting down the debris prior to taking it to the collection site or even by adding gravel, but these actions should be apparent at the collection site.

Making weighing systems the basis of an automated load ticket accounting system could further reduce the possibility of fraud and result in improved and better controlled accounting systems for debris collection costs.

Recommendations

We recommend that the Associate Administrator, Response and Recovery:

Recommendation #4: Provide force account labor reimbursement to cover local governments' costs of employing workers to monitor debris collections and to remove leaning trees and hanging branches, and encourage them to undertake such responsibilities.

Recommendation #5: Strengthen the requirements involved in monitoring contracts to ensure that no relationships exist between debris collection contractors and monitoring contractors, and that monitors are properly trained and capable of independent and accurate performance.

Recommendation #6: Explore advanced technologies to supplement monitoring staff such as GPS in trucks or surveillance cameras.

Recommendation #7: Assess weight-based rather than volume-based payment for debris collection and investigate whether such

systems could be efficiently linked to debris payment accounting systems.

Management Comments and OIG Analysis

FEMA generally concurs with all of these recommendations, but notes that the Agency is not a party to contracts between applicants and contractors. Therefore, the Agency cannot require the use of advance technology as monitoring tools. FEMA acknowledges that weight-based monitoring and payment systems have some advantages over volume-based systems, but said these are not immune from potential waste, fraud, and abuse and still require proper monitoring and oversight to be effective. FEMA is considering revisions to its regulations that would incorporate the force account straight time labor reimbursement component of the PA Pilot Program. FEMA is updating its guidance in both the *Debris Contracting Guidance Fact Sheet* and the *Debris Monitoring Guide* to stress that debris monitors should not have a relationship with debris removal contractors. FEMA stays abreast of current technologies in order to provide appropriate technical assistance to applicants when they are considering technology applications as part of their monitoring operations. FEMA also can provide appropriate funding, such as for the rental of temporary scales, during debris operations.

We agree with the steps that FEMA is taking to improve the conduct of debris operations. We understand that FEMA is not a party to contracts between applicants and contractors and cannot require the use of advance technology as monitoring tools. However, FEMA can encourage the use of cost-effective advance technology for monitoring, such as weight-based monitoring and payment systems, by publicizing and encouraging the use of these systems including offering financial incentives. We will determine the status of these recommendations when we receive the detailed corrective action plan in FEMA's 90 day letter.

FEMA Management and Oversight

FEMA's management and oversight of debris operations is subject to many of the overall challenges associated with managing the complex and geographically diverse Public Assistance program. For example, our December 2009 report³ concluded that the implementation of FEMA's PA program was hindered by untimely funding determinations, deficiencies in program management, and poorly designed performance measures. The report identified opportunities for improvement in a number of areas relevant to debris removal operations:

- Inconsistent and tardy eligibility determinations
- Inaccurate costs and scopes of work in initial project worksheets
- Undue delays and deferrals in making decisions regarding cost overruns and scope changes prior to closeout
- Insufficient detail regarding scopes of work
- Inappropriate negotiations with subgrantees on eligibility
- Failure to accept subgrantees' supporting documentation
- Repetitive documentation requests
- Unreasonable cost estimates

The report concluded that these program management deficiencies are caused principally by turnover, inexperience, and lack of training within FEMA's disaster workforce. We reported that these capability gaps are exacerbated by the need for a clear and consolidated body of PA guidance, and highlighted debris issues specifically in the following summary:

FEMA's policy on debris removal is unclear and thus open to interpretation. As a result, some communities have been denied eligibility for debris removal costs, while others have received reimbursements for identical costs. About \$180 million in debris removal costs after the 2004–2005 disasters in Florida demonstrate the significance of clarifying the debris removal policy.

³ Assessment of FEMA's Public Assistance Program Policies and Procedures, OIG-10-26, December 2009.

Our current review confirmed some of these earlier observations but also identified additional opportunities for improvement in management and oversight of the debris program.

Since large-scale debris events are fortunately rare, plans, systems, and processes cannot be easily tested in a “real-time” environment. Many of our observations and findings regarding FEMA’s management and oversight of debris operations reflect the perceptions of frontline personnel and have not been validated in an actual debris-generating event.

Management and Oversight Structure and Approach

FEMA manages and oversees debris operations through multiple components, including a headquarters policy office, 10 regional offices, and disaster-specific field command organizations.

FEMA’s Public Assistance Division, Policy and Regulations Branch, in Washington, DC, develops and oversees the implementation of the full range of policies and regulations. Two employees in this branch work exclusively on debris removal policies and regulations. Branch employees also develop training materials for use nationally to create awareness and understanding of current and emerging debris management issues. Headquarters staff occasionally deliver this training in person or in coordination with FEMA regional staff.

A Debris Task Force is appointed for each major disaster. The Task Force is based at the Joint Field Office and comprises a Debris Team Leader, one or more Debris Technical Specialists, and one or more Debris Monitoring Specialists. The Task Force often includes personnel from other federal and state agencies. It is charged with establishing a framework for FEMA assistance for debris operations and creating a historical record. It also creates a specific debris strategy for major events. We reviewed the strategy documents for Hurricane Ike and the 2010 central Tennessee floods, and they were comprehensive and actionable.

Although FEMA regions normally send one or two permanent, full-time employees to an event (who may include debris specialists from another FEMA region), most of the Debris Task Force is comprised of FEMA disaster assistance employees (DAEs). As one FEMA regional official told us, “The DAEs do the heavy lifting.” Problems arise since DAEs are not always debris specialists, whereas applicants depend almost solely on their advice. Regional officials said the DAE debris expertise is thinning due to turnover and burnout.

Surge Capacity Is Crucial

As discussed earlier, decisions made in the first few days after a disaster are critical in determining the success of a debris removal operation. This decision making takes place at a time, however, when state and local officials, the primary decision makers, are overwhelmed by more immediate problems such as assisting endangered residents, clearing access to hospitals and other vital routes, and restoring electricity, water, and other critical services.

The consensus among regional, state, and local officials interviewed is that FEMA must do a better job of providing rapid and sufficient surge resources with the capability, skills, and authority to drive key initiation and early implementation decisions. As the entity that funds from 75% to 100% of eligible debris removal costs, FEMA has a vested interest in ensuring optimal decision making and project control. Further, given the complex web of organizations that have a role in a typical disaster—state and local government agencies, other federal agencies, private sector contractors, nonprofit organizations, and voluntary organizations—there is no substitute for clear, focused leadership.

If FEMA cannot deliver the needed technical expertise, the odds increase that costs and eligibility of debris removal will become problematic during the recovery phase of the disaster. Communities may be forced to evaluate and select debris removal and monitoring contractors without possessing the necessary expertise or familiarity with FEMA contracting guidance and requirements.

An effective surge can help mitigate the impact of a lack of pre-disaster debris planning. Cedar Rapids, IA, for example, did not have a debris plan in place prior to major spring flooding in 2008, but the debris removal operations went well. A key was the direct technical consulting support for the grantee and subgrantees before contracts were awarded. A joint team of FEMA and Iowa Homeland Security debris specialists assisted in this effort. FEMA Region VII staff said “getting in early” is the key to helping communities determine whether contractors are providing reasonable cost estimates.

Unclear and Ambiguous Guidance

Many officials expressed frustration over unclear and ambiguous debris regulations and policies, which hinder effective debris removal and disposal, and create misunderstanding and distrust between FEMA and state and local governments.

This ambiguity stems not from a lack of effort by FEMA—in fact, the current Public Assistance Debris Management Guide⁴ is over 200 pages including appendices, and covers eligibility, planning, and operations in some depth—but rather from the complexity and inherent uncertainty of debris removal and disposal. The interpretation of how to apply a particular regulation for a specific debris occurrence varies greatly depending on who is doing the interpreting. The consequences for FEMA and the grantees can be profound, with audits disallowing millions of dollars of costs that FEMA personnel authorized earlier.

⁴ FEMA Public Assistance Debris Management Guide, FEMA-325, July 2007.

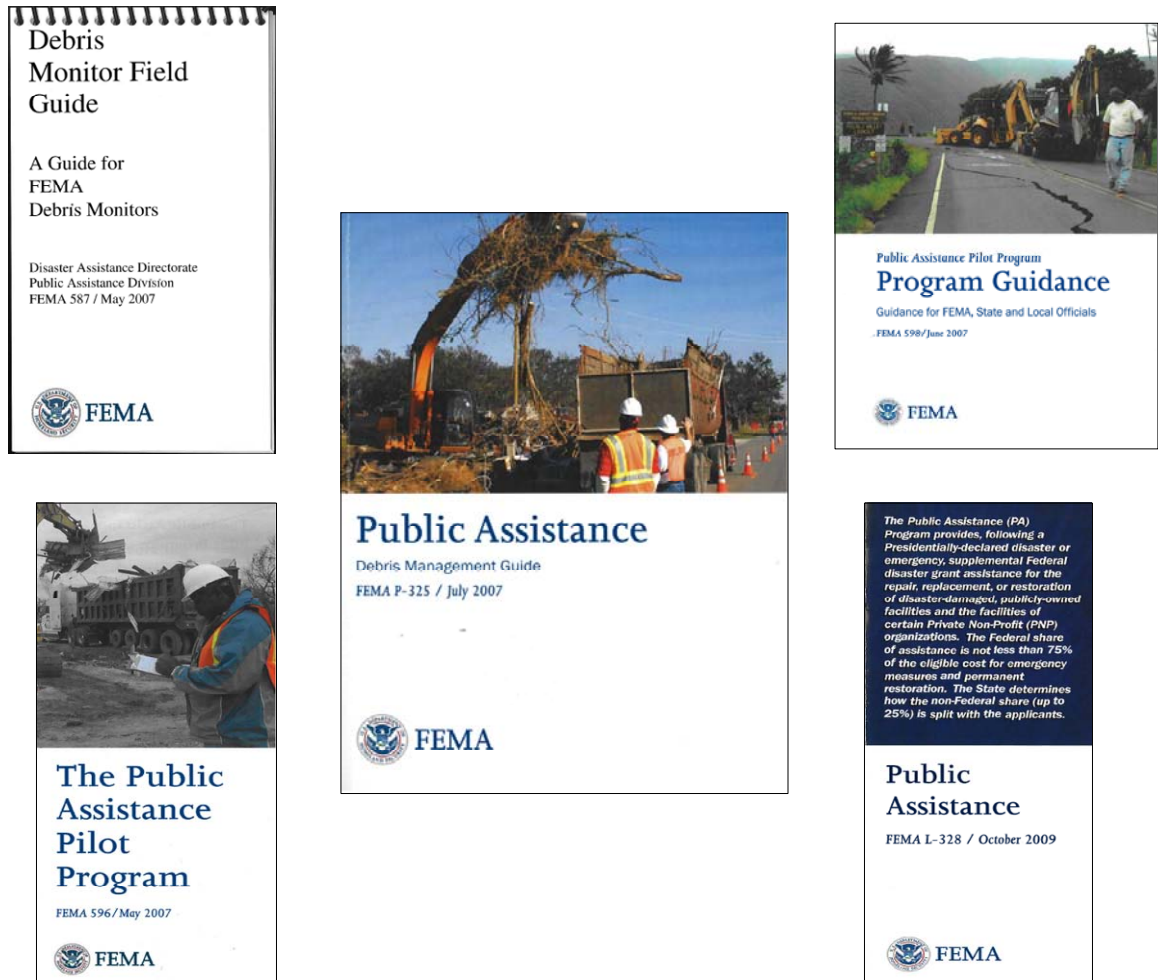


Figure 12. Examples of recent debris-related FEMA publications

One state emergency management office we interviewed was in the process of responding to a request to repay millions of dollars for debris removal costs from a 2002 ice storm. This office, with a PA staff of three, said debris removal was “the biggest gray area in contracting” and “the toughest nut to crack—a constant source of headaches for us.” This office reported that its applicants had “passed every decision through layers of FEMA approvals” at the time the original disaster cleanup was under way, and it was only informed years later that certain vegetative debris removal was ineligible for reimbursement.

Several applicants have encountered problems with tipping fees.⁵ FEMA reimburses tipping fees to compensate applicants for the

⁵ Tipping fees are fees that landfills charge to cover their operating and maintenance costs.

diminished capacity of a landfill resulting from the disposal of disaster-generated debris. FEMA disallowed \$7.7 million in tipping fee charges in an Alabama county based on the argument that the applicant based tipping fees on the volume of raw vegetative debris instead of the diminished volume of burned debris. FEMA challenged tipping fees in a Tennessee county because different rates had been applied for in-county and out-of-county debris removal contractors per the county's customary practice. We reviewed the latest FEMA guidance and found only two limited references to tipping fees; neither addressed the above issues.

Recent controversies in Kentucky and New York have centered on the appropriateness of debris removal costs; in both cases FEMA disputed the costs paid to contractors for debris removal even though the costs were arrived at through competitive bidding. While competitive procurement usually establishes that the debris removal rates are reasonable, it does not establish that a contractor removed only eligible debris. Nor does it ensure that proper documentation exists to substantiate an applicant's claim.

No Substitute for FEMA "Boots on the Ground"

There is widespread agreement among state and local officials that a visible FEMA presence at a disaster site has a direct impact on reducing fraud and abuse. A commonly cited example involves load calls from debris monitors in towers. Debris specialists and public assistance officials said when no FEMA employee is present, incoming trucks are virtually all recorded at or near 100% capacity, but as soon as a FEMA employee or official representative is in the tower, the load calls drop to 60% to 70%. These anecdotal observations were supported by findings from a FEMA after-action report:

During the early stages of this disaster, the limited availability of DAEs and TACs [Technical Assistance Contractors] prevented FEMA from manning the debris towers. Due to this applicant monitors made higher calls. This resulted in a 15 to 20% increase in debris costs statewide. Most of the calls were between 90 to 100%. If available personnel could be quickly deployed FEMA would have saved \$20 million on this disaster alone.⁶

⁶ FEMA Remedial Action Issue 1791-I-47, Event # 1781-DR-TX, Texas Hurricane Ike, March 31, 2010.

Delayed Project Closeouts Exacerbate Problems

A key debris management and oversight issue is the need to estimate, scope, and close out projects appropriately and timely. Numerous officials reported that waste, fraud, and abuse tend to multiply toward the end of debris projects, when the debris mission starts winding down and contractors become “more creative in filling their trucks.” This is a theme that cuts across all PA program areas and has been addressed by us, the Government Accountability Office (GAO), and others. Our recent report⁷ identified a number of recommendations for closing out disasters more promptly and efficiently.

Developing a Performance Measurement Framework

Although FEMA spends hundreds of millions of dollars a year to support, plan, and implement debris removal programs across the country, there is no integrated performance measurement framework to manage and provide oversight over this complex activity. A contractor has been hired to develop an improved tracking system. Ideally, program managers would have access to information to measure, analyze, and improve program performance. An integrated performance measurement system would enable managers to compare performance in different regions, under different scenarios, to provide fact-based information to partners and stakeholders regarding costs, contractor and partner performance, effectiveness, efficiency, and other factors determined to be important to future decision making.

The need for a performance measurement framework surfaced at a number of states and localities. Officials said it would be helpful to have historical and comparative cost data to assist in the evaluation and selection of debris removal and monitoring contractors. FEMA is working with a contractor to develop a cost model database that states and communities can use to compare prices of specific items, which will make the market for debris removal and monitoring services more open and transparent.

Another area where better data is needed involves comparing the use of local government employees with the use of contractors to perform various activities. Many officials believe that the overall cost of debris removal and monitoring would be reduced by using

⁷ Opportunities to Improve FEMA’s Disaster Closeout Process, OIG-10-49, January 2010.

local government employees and reimbursing municipalities for this direct labor cost for a limited period.

Conclusion

The quality of FEMA's management and oversight, especially following major disasters that overwhelm local capacity, is perhaps the key element in the success or failure of debris operations. Debris events are complex and involve multiple private and public sector entities working together in an often chaotic post disaster environment. FEMA has made significant strides toward improving its management and oversight capacity, but opportunities remain for further improvement. These opportunities involve the staffing, structure, and design of key management and oversight activities. Debris expertise is not always clearly evident in FEMA's early response teams assigned to a disaster. FEMA personnel may not always be positioned in locations to optimize their oversight and control functions. Debris guidance is at times incomplete, unclear, or ambiguous despite FEMA's attempts to address all aspects of debris removal. A more principles-based rather than rules-based regulatory framework that allowed for increased local decision making could be an improvement over the present system. Finally, an integrated performance measurement framework would give FEMA and its stakeholders data and tools to measure, analyze, and improve debris operations.

Recommendations

We recommend that the Associate Administrator, Response and Recovery:

Recommendation #8: Modify disaster assistance employee deployment processes to ensure that Incident Management Assistance Teams and other FEMA first responders include one or more debris specialists with the experience and management skills to assist communities in the crucial early stages of planning and implementing debris removal activities.

Recommendation #9: Continue to refine cost data to determine whether having qualified FEMA or local personnel present in all debris towers, major staging areas, and on the ground as roving monitors during significant debris-generating events would be cost-effective.

Recommendation #10: Develop a performance measurement that FEMA headquarters and regional personnel can use to measure, analyze, and improve debris program performance. This should be designed for easy analysis of cost and performance data across regions, disasters, and contractors.

Management Comments and OIG Analysis

FEMA generally concurs with Recommendations #8 and #10 but does not concur with Recommendation #9. FEMA supports the intent of Recommendation #8 but believes the way to address this issue is to ensure that there are adequate numbers of experienced employees in the disaster workforce, rather than modifying the deployment process. FEMA will continue its efforts to increase the size of its resource pool and speed the deployment of technical expertise to support applicants during the early stages of planning and implementation of debris removal operations.

With regard to Recommendation #9, FEMA considers its current monitoring program to be the most prudent use of FEMA's resources and taxpayer dollars and believes it avoids unnecessary duplication of effort. Due to applicants using different monitoring strategies, FEMA believes it is difficult to determine the cost savings and would likely prevent the performance of a conclusive analysis of the cost-effectiveness of an increased monitoring presence as compared to FEMA's current approach.

For Recommendation #10, FEMA agrees with the need to develop a performance measurement system, with cost and performance data, to measure, analyze and improve debris program performance. FEMA is currently developing a Quality Assurance/Quality Control tool that provides a framework to measure quality and performance throughout the entire PA program. In addition, FEMA has worked to improve debris estimating and to develop automated or digital systems that will improve the collection of debris data in the field. FEMA is currently working to develop a cost database of unit price debris

removal costs to assist PA staff and applicants when determining whether or not a cost is reasonable.

We agree with the actions FEMA has taken and is taking to develop performance measurement systems including usable cost and performance data as recommended in Recommendation #10. We believe such a refinement of cost data should eventually result in systems that allow enhanced decision-making such as the assessment of whether increased monitors would be cost-effective as recommended in Recommendation #9. FEMA officials would then have a sound basis for asserting that their current monitoring practice is the most prudent use of FEMA's resources and taxpayer dollars or whether increased (or reduced) monitoring might be more fiscally sound. While we agree that FEMA should continue efforts to have adequate numbers of skilled and experienced employees in the disaster workforce, we believe there is a clear need for the deployment process to be adjusted to ensure that FEMA early responders include individuals with adequate experience and management skills to assist communities in the crucial early stages of planning and implementing debris removal activities, as is recommended in Recommendation #8. We will determine the status of these recommendations once we receive the detailed corrective action plan in FEMA's 90 day letter.

Appendix A

Purpose, Scope, and Methodology

The purpose of this review was to determine whether opportunities exist to improve FEMA's management and oversight of debris removal operations following major disasters. Specific areas we examined included regional, state, and local debris planning; contractor selection, utilization, and management; debris removal and disposal operations; debris-monitoring operations; and general program management and reporting functions.

We interviewed officials from FEMA headquarters, 10 FEMA regions, 10 states and 5 municipalities that had recently experienced a major debris-generating event, other federal organizations, public policy organizations, and academia. We reviewed all GAO and OIG reports issued in the past 5 years for audits and reviews that included debris management within their scopes of work.

We conducted fieldwork in the District of Columbia and Tennessee. We judgmentally selected Tennessee to review debris activities related to flooding in Nashville and other areas in central and western Tennessee. The May 3–5, 2010, Nashville flooding (FEMA DR-1909 TN) was the largest debris event during the time we were conducting fieldwork.

We researched federal laws, regulations, policies, guidance, published reports, and other information related to FEMA's Public Assistance program with an emphasis on Category A debris removal eligibility and costs.

We conducted our review under the authority of the *Inspector General Act of 1978*, as amended, and according to the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency (now the Council of the Inspectors General on Integrity and Efficiency).

Appendix B Management Comments on the Draft Report

U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472



FEMA

DEC 23 2010

Mr. Matt Jadacki
Assistant Inspector General
Office of Emergency Management Oversight
Office of Inspector General
U.S. Department of Homeland Security
Washington, DC 20528

Re: Office of Inspector General Draft Report: *FEMA's Oversight and Management of Debris Removal Operations*

Dear Mr. Jadacki:

The Department of Homeland Security's Federal Emergency Management Agency (FEMA) appreciates the opportunity to review and respond to the Office of Inspector General (OIG) draft report, *FEMA's Oversight and Management of Debris Removal Operations*. FEMA is actively resolving the issues identified in the audit.

It should be noted that various sections of the draft report do not accurately characterize FEMA's responsibilities in relation to debris removal operations. The draft report often implies that FEMA controls and manages debris removal operations. However, the management of debris removal and monitoring operations is the primary responsibility of state, tribal and local governments (applicants). The PA Program is a supplemental assistance grant program, through which FEMA reimburses applicants for their eligible debris expenses. FEMA also provides applicants with operational and eligibility guidance and technical assistance with respect to debris removal activities.

In recent years, FEMA has provided additional guidance to PA applicants on debris removal operations and stressed the importance of debris management planning. From June 1, 2007 through December 31, 2008, FEMA implemented the PA Pilot Program, authorized by Congress, which included incentives for the development of debris management plans, debris recycling, and the use of local government staff (force account labor) to perform debris removal and monitoring operations. In 2007, FEMA issued the *Debris Management Guide* (FEMA-325), which is currently being updated. FEMA also updated its debris contracting guidance with the September 27, 2010, issuance of Recovery Fact Sheet 9580.201, *Debris Contracting Guidance*, which includes a sample bid sheet. FEMA issued the *Debris Monitoring Guide* (FEMA 327) electronically in December 2010 to provide applicants with additional guidance. Hard copies of the Guide will be available for distribution in January 2011. It should be noted that FEMA encourages participation from its stakeholders by issuing drafts of its debris policies and publications for public comment prior to finalization. FEMA is also developing a computer based course on debris management planning in order to make this training more accessible and to reach more PA applicants.

Appendix B

Management Comments to the Draft Report

The OIG makes 11 recommendations in its draft report. FEMA's responses to those recommendations follow:

Recommendation #1:

- **Provide a provision of an additional 5% federal cost share, not to exceed 100%, to applicants with a FEMA-approved debris management plan and at least two prequalified debris and wreckage removal contractors identified prior to a disaster.**

FEMA concurs with this part of the recommendation. However, current FEMA regulations do not authorize the PA Program to provide applicants with an increased federal share above the established cost share for each disaster declaration. FEMA is considering revisions to its regulations that would incorporate the increased federal share initiative implemented as part of the PA Pilot Program.

- **Require disposal site identification to be part of the debris management plan.**

FEMA concurs with this part of the recommendation. FEMA's *Debris Management Guide* (FEMA 325), and its debris training courses stress the importance of disposal site selection as part of debris management planning. During the PA Pilot Program, FEMA required PA applicants to identify debris management sites (DMS) and final disposal sites in order to receive the increased federal share. FEMA did not approve debris plans that did not identify a DMS or disposal site. As mentioned previously, FEMA is considering revisions to its regulations to incorporate the increased federal share component of the PA Pilot Program, which would require PA applicants to identify DMS and final disposal sites in their debris management plans.

- **Allow qualified states that have completed their own plan to approve local jurisdictions' debris disposal plans.**

FEMA is considering this part of the recommendation. FEMA encourages states to promote the development and maintenance of local debris management plans. As part of our considerations to revise FEMA regulations to incorporate the increased federal share component of the PA Pilot Program, FEMA will consider a significant role for states in the review and approval of debris management plans.

Recommendation #2: To the greatest extent possible, provide applicants, FEMA employees, and other appropriate officials clear and unambiguous rules, guidance, and procedures for debris operations, including checklists and sample contracts.

FEMA concurs with this recommendation with the caveat below. FEMA has provided, and will continue to provide, debris operations guidance to FEMA PA staff, to Grantees, to applicants, and to the general public. This includes the *Debris Management Guide* (FEMA 325), which is currently under review to ensure that this guidance remains current, comprehensive, and incorporates lessons learned. FEMA is providing additional guidance on debris estimating and

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monitoring in the *Debris Estimating Field Guide* (FEMA 329) and the *Debris Monitoring Guide* (FEMA 327) both of which were issued in December 2010. FEMA also performs regular periodic reviews of all PA policies and guidance to ensure that they are up to date, accurate, and appropriately address current policy issues.

FEMA does not agree, however, that providing sample contracts is appropriate. Applicants are responsible for procuring debris contracts and FEMA is not a party to those contracts. By providing sample contracts, FEMA may create a false expectation of reimbursement of costs even if applicants fail to follow competitive bidding procedures, the work performed is ineligible, or the contract is not monitored effectively. In addition, FEMA cannot account for the varying procurement requirements among states and localities. FEMA provides PA applicants guidance on contract procurement in Recovery Fact Sheet 9580.201, *Debris Contracting Guidance*. This Fact Sheet includes recommended provisions for debris removal and debris monitoring contracts, includes a standard bid sheet, and includes guidance on evaluating proposed equipment and labor rates. Additionally, FEMA reviews proposed debris contracts for PA applicants, upon request.

Recommendation #3: Work with the states to provide a variety of readily accessible training concerning rules, guidance, procedures, and recent developments in debris removal, contracting, and cost containment.

FEMA concurs with this recommendation. FEMA currently has, and will continue to make, debris training available through the Emergency Management Institute (EMI), FEMA Regional Offices, and online. Current debris courses include the week long “Debris Management” (E202) course at EMI, a one-day Debris Management Plan Development course conducted throughout the Nation upon request, and the Independent Study Course “Introduction to Debris Operations in FEMA's Public Assistance Program” (IS-632) available on CD-ROM. FEMA is currently developing a computer-based training course on debris management plan development. States may request additional training through their respective FEMA Regional Offices.

Recommendation #4: Provide force account labor reimbursement to cover local governments' costs of employing workers to monitor debris collections and to remove leaning trees and hanging branches, and encourage them to undertake such responsibilities.

FEMA concurs with this recommendation. FEMA encourages PA applicants to use force account labor to conduct their debris removal operations. FEMA currently reimburses PA applicants for force account overtime hours. FEMA also reimburses applicants for the use of “applicant-owned” equipment. Current FEMA regulations do not authorize the PA Program to reimburse force account straight time hours. Under the PA Pilot Program, FEMA had the authority to fund an applicant's force account straight time for debris removal operations. FEMA is considering revisions to its regulations that would incorporate the force account straight time reimbursement component of the PA Pilot Program.

Recommendation #5: Strengthen the requirements involved in monitoring contracts to ensure that no relationships exist between debris collection contactors and monitoring

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contractors, and that monitors are properly trained and capable of independent and accurate performance.

FEMA concurs with this recommendation. FEMA updated its debris contracting guidance in the September 27, 2010 Recovery Fact Sheet 9580.201, *Debris Contracting Guidance*. The *Debris Monitoring Guide* (FEMA 327) also provides applicants with monitoring guidance. Both documents stress that debris monitors should not have a relationship with debris removal contractors. Upon request from states, FEMA will provide debris monitoring training as part of the technical assistance that FEMA offers to PA applicants.

Recommendation #6: Explore advanced technologies to supplement monitoring staff such as GPS in trucks or surveillance cameras.

FEMA concurs with the recommendation in that FEMA supports applicants' use of relevant technology to improve their monitoring operations and may provide reimbursement for utilizing such technologies. However, debris monitoring is the primary responsibility of PA applicants. FEMA does not concur with the recommendation to the extent that FEMA is not a party to contracts between applicants and contractors, and cannot require the use of advance technology as monitoring tools. FEMA stays abreast of current technologies in order to provide appropriate technical assistance to applicants when they are considering technology applications as a part of their monitoring operation.

Recommendation #7: Assess weight-based rather than volume-based payment for debris collection and investigate whether such systems could be efficiently linked to debris payment accounting systems.

FEMA generally concurs with the recommendation, as FEMA currently accepts the use of weight-based systems as a basis for reimbursement. FEMA acknowledges that weight-based monitoring and payment systems have some advantages over volume-based systems. However, as stated in the draft report, weight-based systems are not immune from potential waste, fraud, or abuse and both weight-based and volume-based systems require proper monitoring and oversight to be effective. FEMA can provide funding for the use of temporary scales during debris operations and encourages applicants to utilize such systems where appropriate.

Recommendation #8: Modify disaster assistance employee deployment processes to ensure that Incident Management Assistance Teams and other FEMA first responders include one or more debris specialists with the experience and management skills to assist communities in the crucial early stages of planning and implementing debris removal activities.

FEMA concurs with the objective of the recommendation. Shortly after an emergency or disaster declaration, and in some cases in advance, FEMA deploys Debris Task Force Leaders and establishes debris task forces to coordinate FEMA's debris operations. FEMA debris specialists and monitors are also deployed to disaster areas in advance or shortly after a declaration. FEMA also augments its field staff with debris contracting and monitoring specialists from the U.S. Army Corps of Engineers. Each of these individuals works closely with impacted states and local applicants to provide them with technical assistance. However, from

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FEMA's perspective, the best way to address this issue is to ensure that there are adequate numbers of skilled and experienced employees in the disaster workforce, rather than modifying deployment processes. FEMA will continue its efforts to increase the size of its resource pool and speed the deployment of technical expertise to support applicants during the early stages of planning and implementing debris removal operations.

Recommendation #9: Continue to refine cost data to determine whether having qualified FEMA or local personnel present in all debris towers, major staging areas, and on the ground as roving monitors during significant debris-generating events would be cost-effective.

While FEMA fully supports appropriate and adequate monitoring as part of debris removal operations, FEMA does not concur with this recommendation. FEMA advises PA applicants that the size of the monitoring operation should be commensurate with the size and needs of the debris removal operations. Applicants utilize different monitoring strategies based on the type of contract, the geographic area and the types and quantity of debris. When using unit price contracts for example, applicants should have monitors present at the pick-up, staging, and disposal sites. FEMA employs a roving debris monitor methodology wherein debris monitors make regular, repeated and random checks of debris operations. FEMA then focuses additional attention and effort on debris operations with identified non-compliance issues. FEMA also uses additional debris monitors for special debris operations, such as the removal of contaminated debris or debris removal from private property or waterways. This is the most prudent use of FEMA's resources and taxpayer dollars and avoids unnecessary duplication of effort.

FEMA does not intend to station monitors at all pick up, staging, or disposal sites as a standard operating procedure. In addition, due to the difficulty in determining cost savings from that approach, it is unlikely that FEMA can perform a conclusive analysis to determine if that approach is more cost effective than FEMA's current practice.

Recommendation #10: Establish clear requirements for prompt and efficient project closeouts.

FEMA responded to this recommendation in "*Opportunities to Improve FEMA's Disaster Closeout Process, OIG-10-49, January 2010.*" FEMA has since developed a Project Closeout Standard Operating Procedure (SOP) for use by PA staff at Joint Field Offices. However, the draft report on debris confuses the completion of a debris removal operation with project closeout. These are two discrete actions. Project closeout refers to the reconciliation of project estimates, data, documentation and invoices with the approved scope of work. It is an administrative function that does not impede the completion of an applicant's debris removal operation. In accordance with Title 44, Code of Federal Regulations 206.204, "Project Performance", debris removal must be completed within six months of the emergency or disaster declaration unless there are extenuating circumstances for which the impacted state or FEMA grant an extension. The draft report suggests that delayed project closeout encourages debris removal contractors to remove ineligible debris. However, this is not the case and adequate debris monitoring by the applicant prevents the removal of ineligible debris. Additionally, FEMA encourages the use of unit price and lump sum contracts that pay contractors based on the

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amount of debris removed rather than the use of time and materials contracts which pay contractors based on the number of hours worked. The use of unit price or lump sum contracts along with debris monitors reduces the amount of ineligible debris collected. Time and materials contracts that do not have “termination for cause” or “not to exceed” clauses encourage debris removal contractors to work slower or to remove ineligible debris.

Recommendation #11: Develop a performance measurement that FEMA headquarters and regional personnel can use to measure, analyze, and improve debris program performance. This should be designed for easy analysis of cost and performance data across regions, disasters, and contractors.

FEMA agrees with this approach in general. FEMA is currently developing a Quality Assurance/Quality Control (QA/QC) tool that provides a framework to measure quality and performance throughout the entire PA Program, not just individual categories of work. The QA/QC tool is based on ten quantitative performance metrics and one qualitative peer review process, designed to measure key aspects of PA performance against certain goals or benchmarks. These metrics, which are standardized across the program, are intended to provide a consistent method of measuring quality and performance across the program, and to align efforts at all levels with the PA mission and needs of PA stakeholders. This tool will be applied to FEMA’s PA Program, including for projects that reimburse applicants for the cost of their debris operations, across all FEMA Regions and disasters.

In addition, FEMA is continually working to improve PA Program performance. For example, FEMA has developed a *Debris Estimating Field Guide* to promote consistent debris estimating. FEMA is also working with the U.S. Army Corps of Engineers to enhance its hurricane debris estimating modules. Additionally, FEMA is developing internal software to improve its debris estimating capacity. Since 2005, FEMA has worked to develop automated or digital systems that will improve the collection of debris data in the field. FEMA is currently working to develop a cost database of unit price debris removal costs to assist PA staff and applicants when determining whether or not a cost is reasonable. All of these efforts are aimed at improving, streamlining and expediting the PA process with regard to debris removal operations.

Once again, thank you for the opportunity to comment on the draft report. I look forward to working with you on future homeland security and emergency management engagements.

Sincerely,



David J. Kaufman
Director
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Appendix C
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Appendix D

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