



Homeland
Security

September 21, 2006

MEMORANDUM FOR: R. David Paulison
Under Secretary
Federal Emergency Management
Richard L. Skinner

FROM: Richard L. Skinner
Inspector General

SUBJECT: *Review of Hurricane Katrina Activities
FEMA Disaster No. 1603-DR-LA
City of New Orleans, Louisiana
Appeal Process for Residential Damage Assessments
Report Number GC-HQ-06-53*

As requested by Deputy Secretary Jackson, we conducted a review of the City of New Orleans' (City) appeal process for adjusting residential damage assessments following Hurricane Katrina. He asked that we examine whether appropriate objective standards are being applied and whether systematic abuses are occurring. The purpose of the review was to determine whether the appeal process used by the City's Department of Safety and Permits was adequate and appropriate in cases where damage ratings were reduced below 50 percent. A damage rating below 50 percent means the homeowner does not have to rebuild to meet flood protection requirements of the National Flood Insurance Program (NFIP).

The request for an audit and investigation of the City's practices for lowering damage ratings was in response to an article in the New York Times dated February 5, 2006, that raised issues about the City's generosity to the homeowners in the appeal process. The article said the appeal process was in essence undermining a plan by the City's rebuilding commission to suspend building permits in damaged areas until more planning could take place.

We reviewed the City's residential damage assessment process and the appeals process, including a review of documentation maintained by the City, as well as interviews with officials from FEMA, the U.S. Army Corps of Engineers (USACE), the City's Department of Safety and Permits, the primary inspection contractor, and other officials as necessary. In addition, we visited the ten sites that received the largest adjustment in the appeal process and requested a City inspector to re-inspect these houses while we observed.

The nature and brevity of this review precluded the use of our normal audit protocols. Therefore, this review was not conducted according to generally accepted government auditing standards. Had we followed such standards, other matters may have come to our attention.

We conducted this review in conjunction with the President's Council on Integrity and Efficiency (PCIE) as part of its examination of relief efforts provided by the federal government in the aftermath of Hurricanes Katrina and Rita. As such, a copy of the report has been forwarded to the PCIE Homeland Security Working Group that is coordinating Inspectors' General review of this important subject.

Background

The NFIP is a federal program administered by FEMA that enables property owners in participating communities to purchase insurance as a protection against flood losses in exchange for communities implementing and enforcing floodplain management regulations to reduce future flood damages. A key provision of the NFIP floodplain management regulations is the substantial damage rule. It holds communities responsible for ensuring that mitigation takes place whenever the cost of restoring a structure is 50 percent or more of its market value. The objective of the substantial damage rule is to replace existing flood-prone structures with flood resistant-structures by elevating them to levels required for new construction. In many cases, this requirement substantially increases the cost of rebuilding.

As of March 2, 2006, City officials and contractors had completed over 125,000 residential damage assessments. The average damage rating was 34.5 percent, and approximately 56,000 received a damage rating above 50 percent. Of those, about 6,400 filed appeals and City officials lowered damage ratings for the overwhelming majority to less than 50 percent. Those homeowners may rebuild their homes without having to meet NFIP floodplain management regulations.

Results of Review

In conducting its appeal process, the City did not maintain documentation to support the rating changes for about ninety-five percent of the appeals that resulted in damage ratings being reduced from above 50 percent to below 50 percent. Further, the City did not perform site inspections of the damaged homes, and did not have quality control measures for the appeal process. Therefore, it is questionable whether the City's appeal process was adequate to ensure that the damage ratings were accurate. Consequently, the City cannot demonstrate that it complied with floodplain management regulations, and erroneous rating reductions could result in homeowners rebuilding without upgrades needed to prevent damage and loss of lives in future floods.

However, the initial home inspections appear to have been flawed as well. The inspectors did not have access to many of the homes, so they relied on external inspections and a questionable rating methodology. We selected a sample of 10 homes that were each rated above 95 percent damaged in the initial inspection. We asked the City to reinspect those homes, and the city inspector determined that all 10 were less than 56 percent damaged and 8 were below 50 percent damaged.

The incomplete initial inspection process, combined with the flawed appeals process, calls into question the accuracy of both processes.

Appeal Process Deficiencies.

The City did not provide any documentation to support adjustments for about 95 percent of the appeals and little support for the remaining 5 percent. Of the 6,416 appeals, the City had limited records for a few hundred, mostly pictures of the damaged property. The Chief Building Inspector said that the City did not require inspectors to keep supporting documentation when they made changes to the initial damage assessments. Also, the process was not subject to a higher-level review or other form of quality control. The inspectors reviewed any photographic or engineering support provided by the homeowner, made whatever rating changes they believed were justified, and returned the documentation to the homeowner. The City's on-line database shows only the final rating, not what the inspectors reviewed or changes they made to ratings. Therefore, we could not verify that the appeal process used by the city inspectors was adequate to ensure accurate substantial damage determinations. Subsequent to our work, City officials said that they began retaining documentation to support changes to home damage assessments.

Incomplete Initial Inspections.

Initially, the City conducted site inspections of damaged property, but soon concluded it could not inspect all of the properties due to limited staff. Therefore, it hired contractors to perform the inspections. The contract inspectors frequently did not have access to the interiors of the homes, so they conducted damage assessments based on the water lines on the homes' exterior. This was an imprecise method, at best, considering that FEMA guidance says that 51 percent of a damage assessment should rely on an examination of the interior of the home, including testing appliances and the electrical grid. Both the primary contractor and city officials said they did not enter most homes because the owners were not present and they did not have authorization to enter without the owners being present. The contractor said their average assessment time was about six to eight minutes per residence.

To overcome the problem of not having access to the homes, the USACE¹ developed standardized guidesheets from a FEMA software program – Residential Substantial Damage Estimator (RSDE) – designed for inspecting damaged homes. However, the guidelines used flood depth ranges that may have been too broad to produce accurate ratings. The guidelines estimated damage in 16 housing categories, but they included only three ranges for water damage: 0-1 feet, 2-7 feet, and 8 feet and greater. A home with two feet of flooding would generally receive the same damage rating as one with seven feet of flooding, although in some cases inspectors changed the damage percentage for individual building components. Also, if a home sustained flooding of between two to seven feet, and the inspector did not make adjustments to the guidelines, eleven of the housing categories would be rated 100 percent damaged, resulting in an overall damage rating of over 50 percent. City and

¹ The USACE provided training to contractor's inspectors and performed a quality control role.

USACE officials both said the ranges could result in estimates on the high side, but said this was preferable to underestimating the damage.

The table below shows the rating criteria for each of the 16 housing categories, based on water level, and the weight given to each category.

**USACE Guidesheets
Rating Criteria for Single Story Residence**

		Percent of Damage	Percent of Damage	Percent of Damage	Weighting Damage Percentage
	Depth of Flooding	0-1 Ft.	2-7 Ft.	8 Ft+.	
	Building Components:				
1.	Foundations/Basements	0	0	0	16.9%
2.	Superstructure (Framing/Masonry)	0	0	0	18.5%
3.	Roofing	0	0	100	3.9%
4.	Insulation and Weather Stripping	25	100	100	3.2%
5.	Exterior Finish	2	10	12	6.2%
6.	Interior Finish (inside home)	25	100	100	8.7%
7.	Doors/Windows/Shutters (inside home)	50	100	100	4.1%
8.	Lumber Finished (inside home)	70	100	100	4.1%
9.	Hardware (inside home)	100	100	100	1.2%
10.	Cabinets/Countertops (inside home)	100	100	100	5.2%
11.	Floor Covering (inside home)	100	100	100	4.5%
12.	Plumbing (inside home)	10	50	50	8.0%
13.	Electrical (inside home)	0	100	100	5.4%
14.	Built-in Appliances (inside home)	50	100	100	2.5%
15.	Heating – Cooling (inside home)	45	100	100	4.2%
16.	Painting (inside home)	100	100	100	3.4%
Total					100%
Overall Bldg. Damage Percent		26%	51%	55%	

Testing a Sample of Damaged Homes

To test the reliability of the initial inspections and the appeals process, we selected the 10 homes that had the highest damage assessments that the City reduced to below 50 percent during the appeal process. The initial inspections rated four of the homes 100 percent damaged and the other six homes over 95 percent damaged. Before visiting these sites, we reviewed the city’s on-line building permit system to identify possible explanations for the reductions in original assessments on appeal, but the database contained no specific information as to why the ratings changed.

At our request, the City agreed to reinspect the 10 homes while we observed. The inspector explained the reasons for changing the ratings and we found the reasons to be plausible. For eight of the homes the inspector determined that the damage was less than 50 percent. For the remaining two homes, the inspector determined that the damage was more than 50 percent: one was 55.5 percent

and the other was 53.9 percent. For this small sample, it appears that the appeals process produced more accurate results than the original inspections. Some homeowners did repair work between the time of the initial inspection and the reinspection, but the inspector took that into account in estimating the amount of disaster damage. The following table shows, for the homes in our sample, the original ratings, the revised ratings based on appeals, and the results of the reinspections.

Property	Zip Code	Neighborhood	Original Rating	Revised Rating	Reinspection Rating
1	70117	Lower Ninth Ward	100	49.69	55.47
2	70117	Lower Ninth Ward	100	47.68	53.88
3	70126	Desire Development	100	45.28	47.77
4	70112	Tulane/Gravier	100	03.34	02.72
5	70115	Central City	96.88	35.70	21.15
6	70119	Bayou St John	95.34	38.16	20.19
7	70119	Bayou St John	95.34	31.69	28.51
8	70119	Bayou St John	95.34	28.17	19.26
9	70119	Bayou St John	95.34	26.69	15.00
10	70119	Bayou St John	95.34	26.69	26.86

Conclusions and Recommendations

We concluded that the City could not demonstrate that its appeals process resulted in accurate damage ratings. It did not retain documentation, did not perform site inspections of the damaged homes, and did not have quality control measures in place. There was no assurance that damage ratings changed from substantially damaged, above 50 percent, to below 50 percent were justified. On the other hand, when we reviewed a small sample of damaged homes, we found reason to question whether the original inspections resulted in accurate damage ratings because they relied on external inspections and a questionable rating methodology. Having no assurance that either the original inspection ratings or the appeal ratings were reliable, we could not determine whether the City, in its appeal process, was applying objective standards or whether systemic abuses were occurring.

We recommend that FEMA require the City to:

1. Retain all supporting evidence used in the residential substantial damage appeal process.
2. Consider, in consultation with FEMA and NFIP representatives, reinspecting a representative sample of all substantially damaged residences to determine whether the initial inspections were accurate within acceptable tolerances. If they were not, the feasibility of requiring reinspections of all homes determined to be substantially damaged should be considered.
3. Reevaluate formulas used for residential inspections to ensure that they produce accurate results.

Discussion with Management and Audit Follow-up

We discussed the results of our review with City officials on April 27, 2006, and they concurred with our findings. The City officials requested that we include a comment that the audit results should be considered in the context of this unprecedented disaster. They cited a FEMA official's opinion that the City did well, considering the workload, the urgency, and possibly the country's largest ever single-justification assessment of substantial damage. Please advise my office within 30 days of the actions taken to implement our recommendations. Should you have any questions concerning this report, please call me, or your staff may contact Matt Jadacki, Special Inspector General for Gulf Coast Hurricane Recovery, at 202-254-4100.

cc: Secretary
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Deputy Chief of Staff
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Acting Under Secretary for Management
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