

City of New York

OFFICE OF THE COMPTROLLER

Scott M. Stringer COMPTROLLER



AUDITS AND SPECIAL REPORTS

Marjorie Landa

Deputy Comptroller for Audit

Audit Report on the New York City Housing Authority's Emergency Preparedness

SR14-113A

December 14, 2015

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THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER 1 CENTRE STREET NEW YORK, NY 10007

SCOTT M. STRINGER COMPTROLLER

December 14, 2015

To the Residents of the City of New York:

My office has audited the New York City Housing Authority's (NYCHA) emergency preparedness to determine whether NYCHA has developed and implemented an emergency preparedness plan in the event of significant service interruptions or natural disasters. We audit entities such as NYCHA to ensure that they properly prepare for emergencies, restore the agency to a normal level of operation, and provide residents with essential services and assistance during major emergencies.

This audit found that NYCHA's efforts to prepare for emergencies contain significant deficiencies that increase the risk that NYCHA will not be able to effectively handle emergency situations and restore the agency to a normal level of operation in an expeditious manner. Specifically, we found that NYCHA's Emergency Procedures Manual does not properly define the emergency management leadership; does not adequately identify a distinct hierarchy of who would be in charge in the event of an emergency; does not have a communication plan that specifies how critical information will be disseminated to NYCHA's employees, residents, and other stakeholders; and does not incorporate an overall view of NYCHA's capabilities and potential hazards during major emergencies, including identification of its resources, critical services and operations, and community groups that could potentially assist with the emergency response.

We also found that to the extent that NYCHA's Emergency Procedures Manual does set out procedures to follow in cases of different types of emergencies, NYCHA has not complied with certain key provisions. Further, we found that NYCHA does not maintain accurate information on its tenants with disabilities in its Tenant Data System (TDS) and that NYCHA's Property Managers do not maintain complete lists of tenants with physical disabilities. Finally, we found that NYCHA has poor controls over its inventory of generators.

This audit made a total of 19 recommendations, including that NYCHA develop and implement an emergency preparedness plan to include an overall view of NYCHA's capabilities and potential hazards for major emergencies. We also recommend that NYCHA require each development to adhere to the Emergency Procedures Manual and develop, maintain, and continually update a staffing plan. Further, we recommend that NYCHA ensure that information on all disabled occupants is current and consistently and accurately recorded and reported in each of the relevant systems, files, and lists; and that NYCHA develop a plan to ensure that all emergency contact information for the disabled tenants is accurate and is being properly updated in NYCHA's TDS.

The results of the audit have been discussed with NYCHA officials, and their comments have been considered in preparing this report. Their complete written response is attached to this report. If you have any questions concerning this report, please e-mail my Audit Bureau at audit@comoptroller.nyc.gov.

Sincerely,

Scott M Stringer

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THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER AUDITS AND SPECIAL REPORT

Audit Report on the New York City Housing Authority's Emergency Preparedness

SR14-113A

EXECUTIVE SUMMARY

The New York City Housing Authority ("NYCHA") was chartered in 1934 under the New York State Public Housing Law as a public benefit corporation, three years before the enactment of a national federal housing program. Its mission "is to increase opportunities for low- and moderate-income New Yorkers by providing safe, affordable housing and facilitating access to social and community services." Pursuant to its charter and its status as a federal Public Housing Agency ("PHA"), NYCHA develops, constructs, and manages affordable housing in New York City. Currently there are more than 400,000 residents in 328 public housing developments comprised of 177,666 apartments in 2,553 residential buildings throughout the five boroughs.

On October 29, 2012, Hurricane Sandy ("Sandy") hit New York City, causing massive flooding and other damage in all five boroughs. The storm directly affected many NYCHA residents, and resulted in damage to 402 NYCHA buildings that contained over 35,000 apartments. Approximately 80,000 residents lost essential services including electricity, elevator service, heat, and hot water because their heating and electrical systems were located in basements that flooded.

Audit Findings and Conclusions

Our audit found that NYCHA's efforts to prepare for emergencies contain significant deficiencies that increase the risk that NYCHA will not be able to effectively handle emergency situations and restore the agency to a normal level of operation in an expeditious manner. Specifically, we found that NYCHA's Emergency Procedures Manual does not properly define the emergency management leadership; does not adequately identify a distinct hierarchy of who would be in charge in the event of an emergency situation; does not have a communication plan that specifies how critical information will be disseminated to NYCHA's employees, residents, and other stakeholders; and does not incorporate an overall view of NYCHA's capabilities and potential hazards during major emergencies, including identification of its resources, critical services and operations, and community groups that could potentially assist with the emergency response.

We also found that to the extent that NYCHA's Emergency Procedures Manual does set out procedures to follow in cases of different types of emergencies, NYCHA has not complied with certain key provisions. Further, we found that NYCHA does not maintain accurate information on its disabled tenants in its Tenant Data System ("TDS") and that NYCHA's Property Managers do not maintain complete lists of tenants with physical disabilities. Finally, we found that NYCHA has poor controls over its inventory of generators.

At the exit conference, NYCHA officials stated that NYCHA has made strides in its emergency preparedness and is addressing many of the issues identified in this audit report. The Director of Emergency Preparedness also stated that NYCHA is in the process of rolling out a new emergency plan. This rollout is expected to take five years. The Emergency Procedures Manual will continue to be a guide for emergency preparedness during the rollout process.

Audit Recommendations

To address these issues, we recommend among other things that NYCHA:

- Develop and implement an emergency preparedness plan to include an overall view of NYCHA's capabilities and potential hazards for major emergencies, and identify its resources, critical services, and the operations needed before, during, and after an emergency. The plan should include:
 - ❖ Defined roles and responsibilities for emergency management leadership.
 - Distinct hierarchy and levels of command and control for every type of emergency.
 - Clear instructions on when the Incident Command System should be used and for those instances, the instructions for the establishment of an incident commander and a hierarchy of support staff using the ICS.
 - Specific methods of disseminating critical information to NYCHA employees regarding their roles and responsibilities for various types of emergencies.
 - ❖ A communication plan that includes specific methods of dissemination of emergency information to NYCHA employees, residents, relevant City agencies, and community groups.
- Require each development to adhere to the Emergency Procedures Manual and develop, maintain, and continually update a staffing plan for maintaining essential services in the event of an emergency. For each development employee, the staffing plan should include contact information, home location, and means of reporting to work if public transportation is not available. The plan should also include specific guidelines and procedures for the staff to follow.
- Ensure that information on all disabled occupants is current and consistently and accurately recorded and reported in each of the relevant systems, files, and lists. This includes the number of disabled occupants residing at the location, the type of disability, and the emergency contact information.
- Develop a plan that will ensure that all emergency contact information for the disabled tenants is accurate and is being properly updated in NYCHA's TDS.
- Maintain an accurate record of NYCHA staff attempts to contact disabled tenants in the event of an emergency and whether or not contact was made.

Agency Response

In its response, NYCHA stated that it is "committed to protecting the welfare of its residents. . . . We have enhanced our emergency management programs to plan for, manage and recovery [sic] from major disasters. . . . Due to the time period for this audit, we believe the findings and recommendations miss significant improvements NYCHA has made in relation to its emergency preparedness and response." In addition, NYCHA stated that many of the audit's recommendations are "in agreement with NYCHA's current preparedness actions."

We strongly support NYCHA's commitment to protecting the welfare of its residents and are pleased that it has taken concrete steps to improve its capacity to respond to emergencies. We note, however, that many of the programs NYCHA describes in its response have not been completed or tested and that some will take as long as five years to roll out. This is particularly troubling since Hurricane Sandy struck more than three years ago, which means that some of the fixes won't be fully implemented until eight years after the disaster. We also note with concern that NYCHA does not directly respond to any of our findings, including particularly the inaccurate information we found in NYCHA's tenant database concerning tenants with disabilities, the inaccurate information we found in NYCHA's records concerning the number and location of emergency generators, and the differing understandings among staff at every level in the developments regarding their roles and the roles of others in NYCHA in case of different types of emergencies. Absent NYCHA taking into consideration and addressing the findings we have made in this audit, its reformulated emergency response plans are at significant risk of encountering the exact same problems encountered when Hurricane Sandy hit, thereby causing the residents to needlessly suffer yet again. The full text of NYCHA's response is included as an addendum to this report.

AUDIT REPORT

Background

The mission of the New York City Housing Authority "is to increase opportunities for low- and moderate-income New Yorkers by providing safe, affordable housing and facilitating access to social and community services." NYCHA was chartered in 1934 under the New York State Public Housing Law as a public benefit corporation, three years before the enactment of a national federal housing program. Pursuant to its charter and its status as a federal Public Housing Agency ("PHA"), NYCHA develops, constructs, and manages affordable housing in New York City. Currently there are more than 400,000 residents in 328 public housing developments comprised of 177,666 apartments in 2,553 residential buildings throughout the five boroughs.

On October 29, 2012, Hurricane Sandy hit New York City, causing massive flooding and other damage in all five boroughs. The storm directly affected many NYCHA residents, and resulted in damage to 402 NYCHA buildings that contained over 35,000 apartments. In anticipation of the storm's devastating effects, the Mayor ordered the evacuation of 375,000 people living in the most vulnerable flood zones, including 45,000 NYCHA residents. However, according to community groups, most of the NYCHA residents did not leave their apartments for a variety of reasons including poor health, lack of mobility, and uncertainty about where they could go. Approximately 80,000 residents lost essential services including electricity, elevator service, heat, and hot water because their heating and electricity systems were located in basements that flooded.

In the aftermath of Sandy, NYCHA was highly criticized for its handling of the disaster by media outlets, politicians, housing advocates, not-for-profit service providers, and residents. There were numerous reports that NYCHA was unable to address the needs of its tenants and its infrastructure during and after the storm.

The Federal Emergency Management Agency ("FEMA") stresses the importance of developing and implementing an emergency preparedness plan in its publication, *Basic Guidance for Public Information Officers*, where it warns that: "Preparedness is essential for an effective response to an incident or planned event. Public information efforts should begin well in advance of an incident or planned event and may involve a combination of planning, resource gathering, organizing, and training and exercises." The federal Department of Housing and Urban Development ("HUD"), which provides significant funding and oversight of all PHAs like NYCHA, echoing FEMA's warning, has prepared a *Disaster Recovery Information Guide* in which it states that "having a disaster recovery plan is a fundamental responsibility of every organization because disasters . . . can happen at any day, at any time."

NYCHA, the largest public housing authority in North America, has publically recognized its obligation to prepare for emergencies and ensure the safety and well-being of its staff and residents. It has a tab displayed on its website entitled "Emergency Preparedness," which advises in bold: "the best way to be prepared for a weather emergency is to always be prepared, no matter what month it is." The website also provides information to tenants on preparing for emergencies, such as "Pack a Go Bag," "Create a Safety Plan, and "What to do in the Event of a Fire Emergency," and links related to emergency situations. Recently, in response to the threat of Hurricane Joaquin hitting New York City, the NYCHA Chair stated that, "[w]e hope it actually doesn't hit New York. Hope is not a plan. We have a plan."

For emergencies, NYCHA has an Emergency Procedures Manual, which delineates the different procedures NYCHA staff should follow in the event of emergencies, including specific types of emergencies such as hurricanes and fires. However, according to NYCHA, the Emergency Procedures Manual does not constitute an emergency preparedness and recovery plan. An agency official stated that,

the term/language of an "Emergency Preparedness and Recovery Plan" does not apply to NYCHA. No such item exists, nor is there any requirement to create one. The New York City Housing Authority is not an emergency management agency, nor is it subject to any federal or state laws with respect to emergency management.

Nonetheless, NYCHA's "Emergency Procedures Manual" is the document provided to the auditors in response to our request for "the Emergency Preparedness and Recovery Plan." The Emergency Procedures Manual describes the Incident Command System ("ICS"), which is "intended to provide a standardize chain of command and management organization for any type of emergency incident."

In addition to the Emergency Procedures Manual, NYCHA has other mechanisms in place to address emergencies, such as the Emergency Reporting System ("ERS") (created to manage emergency events), and the Continuity of Operations Plan ("COOP") (mandated by Mayor's Executive Order 107 of 2007 that requires City agencies to develop standardized COOP plans by December 2009). The COOP is supposed to "document[] critical procedures and resources necessary for an agency to carry out its essential services in the face of an emergency or disruption."

On August 12, 2013, the New York City Council enacted Chapter 1 § 30-111, of the New York City Administrative Code (Local Law 60), which directed the New York City Office of Emergency Management ("OEM") to create a plan for outreach and recovery for disabled and homebound individuals before, during, and after certain emergencies. Pursuant to this local law, OEM is required to obtain "existing lists" from NYCHA, among other agencies, of "homebound and vulnerable individuals." NYCHA officials have identified their responsibility under Local Law 60, as follows: "NYCHA does not have any obligation other than to provide the information to OEM at its request. Accordingly, if OEM requested and NYCHA shared its list of vulnerable residents who have requested third-party assistance in the event of emergency, then NYCHA has complied with this local law."

Objectives

The objective of this audit was to determine whether NYCHA has developed and implemented an emergency preparedness and recovery plan in the event of any service interruptions or natural disasters. Specifically, our objective was to determine whether this plan addresses:

- Emergency leadership roles and the identification of key personnel to implement its emergency preparedness and recovery plan in case of service disruptions;
- The identification of elderly, disabled, and other tenants who might need special assistance; and
- Dissemination of the plan to all essential personnel and residents.

Scope and Methodology Statement

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope of this audit covers the period July 1, 2013, through February 28, 2015. Please refer to the Detailed Scope and Methodology at the end of this report for the specific procedures and tests that were conducted.

Discussion of Audit Results

The matters covered in this report were discussed with NYCHA officials during and at the conclusion of this audit. A preliminary draft report was provided to NYCHA officials and discussed at an exit conference held on November 16, 2015. On November 20, 2015, we submitted a draft report to NYCHA officials with a request for written comments. We received a written response from NYCHA officials on December 7, 2015.

In its response, NYCHA stated that it is "committed to protecting the welfare of its residents. Superstorm Sandy tested the preparedness and response capabilities of the entire City. We've incorporated the lessons learned from this catastrophic event over the past three years into fundamental changes to NYCHA's emergency preparedness and operational resiliency. We have enhanced our emergency management programs to plan for, manage and recovery [sic] from major disasters. Even with the great strides NYCHA has made since Sandy, we know there is still more work to do. Due to the time period for this audit, we believe the findings and recommendations miss significant improvements NYCHA has made in relation to its emergency preparedness and response. . . . NYCHA understands we must be more prepared than we were three years ago." In addition, NYCHA stated that many of the audit's recommendations are "in agreement with NYCHA's current preparedness actions."

We strongly support NYCHA's commitment to protecting the welfare of its residents and are pleased that it has taken concrete steps to improve its capacity to respond to emergencies. We note, however, that many of the programs NYCHA describes in its response have not been completed or tested and that some will take as long as five years to roll out. This is particularly troubling since Hurricane Sandy struck more than three years ago, which means that some of the fixes won't be fully implemented until eight years after the disaster. We also note with concern that NYCHA does not directly respond to any of our findings, including particularly the inaccurate information we found in NYCHA's tenant database concerning tenants with disabilities, the inaccurate information we found in NYCHA's records concerning the number and location of emergency generators, and the differing understandings among staff at every level in the developments regarding their roles and the roles of others in NYCHA in case of different types of emergencies. Absent NYCHA taking into consideration and addressing the findings we have made in this audit, its reformulated emergency response plans are at significant risk of encountering the exact same problems encountered when Hurricane Sandy hit, thereby causing the residents to needlessly suffer yet again.

The full text of NYCHA's response is included as an addendum to this report.	

FINDINGS AND RECOMMENDATIONS

Our audit found that NYCHA's efforts to prepare for emergencies contain significant deficiencies that increase the risk that NYCHA will not be able to effectively handle emergency situations and restore the agency to a normal level of operation in an expeditious manner. Specifically, we found that NYCHA's Emergency Procedures Manual does not properly define the emergency management leadership; does not have a communication plan that specifies how critical information will be disseminated to NYCHA's employees, residents, and other stakeholders; and does not incorporate an overall view of NYCHA's capabilities and potential hazards during major emergencies, including identification of its resources, critical services and operations, and community groups that could potentially assist with the emergency response. We also found that NYCHA has not complied with procedures as outlined in the Emergency Procedures Manual.

In addition, we found deficiencies in other areas of NYCHA's emergency preparedness. Specifically, we found that:

- The ICS is either not utilized at all or is not utilized as prescribed in the Emergency Procedures Manual:
- Disabled tenant information maintained in NYCHA's computer system is not accurate;
- NYCHA does not have a systematic plan to conduct drills and training events at all of its developments;
- Recommendations from After Action Reports ("AAR") have not been implemented; and
- There are no controls over the inventory of generators.

While we observed that NYCHA has made considerable effort to prepare for emergencies, the weaknesses we identified through the audit, particularly in areas of implementation and the accuracy of NYCHA's data, increase the risk that NYCHA will be less effective in handling emergency situations, in addressing the needs of its residents, and in restoring the agency to a normal level of operation in an expeditious manner.

At the exit conference, NYCHA officials stated that NYCHA has made significant improvements in its emergency preparedness and is in the process of addressing many of the issues identified in this audit report. The Director of Emergency Preparedness also stated that NYCHA is in the process of rolling out a new emergency plan. This rollout is expected to take five years. The Emergency Procedures Manual will continue to be a guide for emergency preparedness during the rollout process.

Agency Response: NYCHA stated "Due to the time period for this audit, we believe the findings and recommendations miss significant improvements NYCHA has made in relation to its emergency preparedness and response. . . . In June 2014, NYCHA created its first Office of Emergency Preparedness (OEP) to develop and implement an all-hazards approach to minimizing disruptions to agency operations and services in the event of disasters or emergency events. OEP directs NYCHA's large-scale emergency preparedness response, and continuity programs through the development of NYCA's first-ever master emergency plan—the Comprehensive Emergency Management plan (CEMP). The CEMP is the overarching planning document that specifies emergency management leadership and supporting roles, the organization and responsibilities of staff dedicated to managing incidents, and the

internal and external resources required in the mitigation of, preparation for, response to, and recovery from emergencies and disasters. OEP is also overseeing the adoption of the National Incident Management System (NIMS), a flexible, but standardized set of incident management practices that are intended to improve the effectiveness of emergency management and response personnel across the full spectrum of potential threats and hazards."

Auditors' Comments: The newly established Office of Emergency Preparedness has been charged with the responsibility of ensuring that NYCHA has proper management leadership for emergency situations and for planning and disseminating information regarding emergencies. We understand that although NYCHA told us during the audit that "the term/language of an 'Emergency Preparedness and Recovery Plan' does not apply to NYCHA" and that "no such items exists, nor is there any requirement to create one," NYCHA is, in fact, in the midst of creating the "first-ever master emergency plan—the Comprehensive Emergency Management plan."

In its response, NYCHA submitted documentation to establish that it had created new plans and procedures for emergencies, e.g., NYCHA's Comprehensive Emergency Management Plan (CEMP), its Emergency Public Information Plan, and its Standardized Incident Action Plans. Although we requested copies of all emergency plans and procedures during the audit process, NYCHA only shared this new documentation with us at meetings held on October 30, 2015, and November 16, 2015, after formal audit testing had been completed. Given that none of these plans were ever mentioned in response to our multiple requests for any updated information regarding emergency preparedness, we are concerned that NYCHA's coordination and information flow is inadequate and that the audit liaison was unaware of these pertinent documents and therefore did not share them with us. Alternatively, we are concerned that these plans and procedures were only very recently created and therefore they may not have the depth and consideration necessary to be effective.

Moreover, we are concerned that NYCHA in its audit response has not directly addressed many of the fundamental operational deficiencies we identified in the audit. Among other issues, during our visits to 13 sampled developments, we found there was a lack of communication between the central office and the developments. This resulted in the staff at each development describing different views of their roles during an emergency and disregarding established emergency procedures. However, we note that in order for any new emergency response plan to be effective, NYCHA has to ensure that information is fully and consistently disseminated to the staff, that staff are fully aware of their responsibilities, and that there is adequate oversight to ensure compliance with established policies and procedures.

Further, NYCHA did not explain the inaccuracies that we found in the Tenant Data System related to tenants with disabilities or the missing Occupant's Affidavits of Income, which are critical sources of updated information on tenants with disabilities. Rather, NYCHA only reiterated its requirements to have staff "input this information if it is provided," but did not suggest any measures it will take to ensure that information is accurately input into the Tenant Data System. Absent NYCHA adequately addressing these findings, its creation of new policies and procedures is insufficient to ensure that it will be able to effectively address the needs of its residents with disabilities in emergency situations. NYCHA must not simply create new plans; it must

also communicate, oversee, and ensure compliance with its plans, policies, and procedures.

Deficiencies in NYCHA's Emergency Preparedness

Our audit found deficiencies in NYCHA's emergency preparedness and several areas of non-compliance with its own procedures that increase the risk that it will not be able to effectively address major emergencies. In response to our request for NYCHA's emergency preparedness and recovery plan, NYCHA provided us with its Emergency Procedures Manual, which outlines emergency procedures for staff to follow in the case of emergencies. It provides specific directions related to individual types of emergency situations, such as blackouts, droughts, and hurricanes. It also requires the use of the ICS to provide a standardized chain of command system.

However, we found that the Emergency Procedure Manual does not adequately define NYCHA's leadership structure in the case of emergencies. In addition, it does not include the hierarchy and levels of command and control and it does not specify how critical information will be disseminated to NYCHA employees, residents, other City agencies, and community groups. While the Emergency Procedures Manual delineates different procedures NYCHA staff should follow in case of specific types of emergencies, it does not establish adequate controls to ensure that the procedures are actually followed or that other emergency initiatives are implemented and functioning properly.

In the aftermath of Hurricane Sandy, NYCHA, through an interdepartmental task force, assessed its emergency preparedness and response in an effort to improve NYCHA's and its residents' preparedness for future crises. A number of the observations and recommendations reported in NYCHA's Post-Tropical Cyclone Sandy After Action Report mirror procedures already in place in the Emergency Procedures Manual. During our audit, we observed that NYCHA still does not comply with many of these procedures. The deficiencies identified by the audit expose the staff and residents of NYCHA developments to increased risks in the event of an emergency.

At the end of the audit and at the exit conference, the Director of Emergency Preparedness informed us that NYCHA has made significant improvements in its emergency preparedness and that the Emergency Preparedness unit is addressing many of the issues identified in this audit. She also stated that NYCHA is in the process of rolling out a five-year plan to address emergencies. However, during this process, the Emergency Procedures Manual will continue to be the guide for emergency preparedness.

NYCHA's Emergency Preparedness Manual Does Not Provide An Adequate Emergency Preparedness and Recovery Plan

While NYCHA officials informed us that its Emergency Procedures Manual does not constitute an "emergency preparedness plan," the officials also acknowledged that the Emergency Procedures Manual contains the procedures NYCHA has put in place for responding to emergencies. As such, the Emergency Procedures Manual contains NYCHA's guidance to staff on what they should do if specific types of emergencies occur.

Our audit found that this Emergency Procedures Manual does not, however, adequately address NYCHA's emergency preparedness needs; it does not identify NYCHA's available resources or its critical services and operations, and does not provide guidance to staff about communicating

and coordinating with community groups that could assist in various ways. Although much of this information may be available in NYCHA's central office, we found that it had not been disseminated to staff in the developments that we visited. Moreover, the staff lacks an understanding of resources, services, and operations available throughout NYCHA. Thus, we found that the Emergency Procedures Manual lacks sufficient operational plans to ensure that staff is fully engaged and understand their role in ensuring the safety and protection of NYCHA's tenants and infrastructure.

The Manual Does Not Adequately Define Emergency Leadership Responsibilities

NYCHA's Emergency Preparedness Manual does not specifically define emergency management leadership roles and does not adequately identify a distinct hierarchy of who would be in charge in the event of an emergency situation. In addition, it does not set forth how information about responsibilities should be disseminated to its employees and other stakeholders. NYCHA recognizes the importance of having such leadership as is reflected in its appointment of its first Director of Emergency Preparedness in June, 2014. The posted job description for this position stated that one of the primary responsibilities would be to "plan, organize, evaluate, and direct the implementation of NYCHA's portfolio of emergency preparedness and disaster recovery programs and procedures." However, beyond creating and staffing this new position, we found that NYCHA had not yet ensured that its emergency management leadership is in place and that it will be effective.

No individual employees or titles of employees are designated to be in charge of the different types of emergency responses described in the Emergency Procedures Manual. When asked about emergency leadership, NYCHA officials informed us that outside of a City-wide event where OEM and the Mayor's Office would provide direction, NYCHA's general manager is in charge overall and determines whether emergency procedures should be employed. According to NYCHA officials, the type of emergency would then dictate who would be in charge and that it would depend on the availability, knowledge, and experience of the staff.

However, NYCHA officials were unable to tell us who would be in charge of any particular type of event. They instead described an instance where a child was killed in a NYCHA building, and an official took it upon himself to "lead" the event. In addition, during our visits to 13 developments, we found that staff at each development had different views of their roles during emergencies. In one development, the property manager said that the superintendent would take the lead because he has more knowledge of the resources available at the development. In other instances, property managers said they were responsible and described their efforts after Sandy, including one property manager who returned to the development before she was authorized to do so to assess the damage, expedite the clean-up, and assist the tenants. In another development, an assistant property manager stated that she had her own difficulties after Sandy and did not return to the development for two weeks.

While it is commendable that individual employees are willing and able to be in charge of emergency situations, a comprehensive and effective plan cannot rely on the fortuitousness of a particular individual being able to assume leadership responsibilities in the case of an emergency. Emergency management leadership should be well defined in advance to the greatest extent possible to ensure that the effects of an emergency will be mitigated. It is for this reason that the HUD Office of Fair Housing and Equal Opportunity noted in its *Disaster Toolkit* that the roles for emergency personnel are "often outlined within the emergency plans before the disaster occurs."

NYCHA has itself noted the importance of clarifying its command structure to ensure efficient decision making and communication. In its Post-Tropical Cyclone Sandy After Action Report, NYCHA highlighted specific steps it should take to improve its response to emergencies, including "restructuring NYCHA's incident command structure and better defining the roles and responsibilities of each position, [to] improve NYCHA's efficiency in managing all emergencies." However, at the time of our visits, we were unable to identify the key personnel in NYCHA who would be responsible in the event of any type of emergency. Defining the roles and responsibilities of each position with as much specificity as possible will improve NYCHA's efficiency in managing all emergencies.

NYCHA Lacks Readily Available Staffing Plans at Its Developments

NYCHA's utilization and deployment of staff in an emergency is done on an *ad hoc* basis and is not documented. Appendix G of the Emergency Procedures Manual requires that "[e]ach Property Manager prepare[] and continually update[] a plan for maintaining essential services" in the event of an emergency and that the plan include a survey of the development's employees to determine each employee's home location and means of reporting to work if public transportation is not available.

The lack of adequate advance planning for staffing and operations can have a negative impact on NYCHA's ability to respond to emergencies as was evidenced during Hurricane Sandy and in its aftermath. NYCHA's Post-Tropical Cyclone Sandy After Action Report noted that "many employees were unable to report to their work location."

We found that none of the 13 sampled developments visited had staffing plans for maintaining essential services in case of an emergency. Neither the property managers nor the superintendents in the developments prepared, maintained, or routinely updated plans to staff the development to ensure that essential services would be maintained during an emergency.

Ten of the 13 developments maintained hard copies of their employees' contact information. Further, all of the property managers and superintendents stated that any other employee data is easily accessible since it is maintained in personnel files and in the computer system. However, they acknowledged that there are some emergencies that may not allow time for reviewing individual files to retrieve information. They also acknowledged the possibility that the computer system may not be available because there is no electricity.

At a meeting with NYCHA officials on July 30, 2015, when asked about documentation on the availability of staff in the event of an emergency, one NYCHA official stated that the central office has readily available information regarding the staff. Although the information maintained by the central office could certainly be helpful to the managers at the individual developments, the fact that the central office has the information available is not sufficient to substitute for staffing plans being put in place at each of the developments. If such plans are in place when an emergency strikes, the staff at the developments would have specific guidelines and procedures to follow, which would minimize the chance of confusion over individual responsibilities at times of high stress. The required development-level plans would also increase operational efficiency and the likelihood that normal operations would be resumed as expeditiously as possible.

Incident Command System Is Not Being Properly Utilized

NYCHA is not utilizing the Incident Command System as required by its Emergency Procedures Manual, notwithstanding its intended function as a uniform chain of command system in case of emergencies. Based on a national program implemented by the OEM, the Mayor required that the ICS be utilized by all City agencies through an Executive Order. However, most of the property managers and superintendents at the developments we visited stated that the ICS had never actually been put to use at the developments. Two NYCHA borough office directors separately explained that most emergencies are considered part of day-to-day business and they believe the paperwork for the ICS is too cumbersome for most of these situations.

According to NYCHA's Emergency Procedures Manual, a Mayoral Executive Order was signed in 2005 that "formally mandated the implementation of the Incident Command System for New York City agencies." The first section of the Emergency Procedures Manual, entitled Organization for Emergencies – Incident Command System, revised in July 2013, describes the ICS in length, stating, among other things, that:

This Incident Command System standard procedure is intended to provide a standardized "chain of command" and management organization for any type of emergency incident. The Incident Command System is designed to enable effective and efficient emergency incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure.

In its Disaster Toolkit, HUD also emphasizes the importance of using the ICS, stating,

Using principles of communication, coordination, collaboration, and cooperation, all emergency personnel immediately know their roles and responsibilities in the hierarchy and to whom they are to report. These roles are often outlined within the emergency plans before the disaster occurs.

According to NYCHA officials and the Emergency Procedures Manual, the ICS should be used by NYCHA for "any type of emergency incident." The Emergency Procedures Manual outlines eight preprinted forms and worksheets that should be populated for each incident. The ICS forms and worksheets are described in the Emergency Preparedness Manual as a "tool for implementing the Incident Command System, organizing personnel to manage all emergency responders, and to aid in maintaining safety and accountability." NYCHA personnel assigned to supervisory positions, first responders, and other emergency personnel within the ICS system are required to be trained on the duties and responsibilities of that position.

However, we found no evidence that the ICS was ever actually put to use at the developments. Some NYCHA officials stated that the ICS has been used in response to certain emergency situations. However, they added that no documentation was created and/or maintained for those events. While we were provided with documentation for three instances in which the ICS was used, NYCHA stated that "[t]he ICS forms used during the three events were for practice and to familiarize staff with the forms, and were not used for any other purposes." Therefore, we were unable to obtain any evidence of NYCHA's purported use of the ICS in actual emergency situations. Absent documentation, we were not able to see if NYCHA has correctly used the system and whether its personnel got the full benefit of the ICS training.

NYCHA's Emergency Procedures Manual mandates the use of the ICS "when an incident arises." As written, NYCHA intended it to be utilized for every emergency incident. No provisions are made for determining when and if it should be utilized. However, we found that although it has been in effect since 2005, the ICS has largely not been utilized.

NYCHA Does Not Have a Systematic Plan to Conduct Drills and Training Events

NYCHA does not have a policy or systematic plan in place for conducting emergency preparedness drills, exercises, and other training events throughout all the developments. As noted above, HUD and other oversight agencies have cautioned that preparedness is essential for an effective response to an emergency and is a critical means of identifying potential issues that may arise during a real emergency. In addition, it provides an opportunity for staff and residents to practice the steps necessary in the event of a real emergency, and reinforces proper behavior before an actual emergency occurs.

According to NYCHA's Director of Emergency Preparedness and its Director of the Emergency Services Department, NYCHA performs various types of training, including drills, functional exercises, workshops, and seminars for its personnel and, at times, for the residents of the NYCHA developments. However, we found that drills, exercises, and other training events appear to have been conducted sporadically. Moreover, there is no established method for how developments are chosen as the site for a training event.

During Fiscal Year 2014, NYCHA conducted training events at 74 (22 percent) of the 334 NYCHA developments. These training events included 34 drills and functional exercises and 54 workshops and seminars such as fire drills, rapid deployment structure setup drills, and fire safety exercises. In response to our request for a list of any scheduled training events, a NYCHA official stated that "[f]rom time to time NYCHA may schedule emergency preparedness seminars, workshops, tabletop exercises, games, drills, functional exercises and/or full-scale exercises." She added that "Emergency Preparedness currently has none scheduled between the present [October 2014] and December 31, 2015."

Emergency preparedness and response training is an essential way to test emergency preparedness plans and procedures, identify weaknesses, and correct those weaknesses. By conducting such drills and training, NYCHA could reduce the risk of failures during an actual emergency. A scheduled plan would allow the staff in all the developments to become familiar with the emergency procedure process. Without a scheduled plan, NYCHA may lose an opportunity to effectively train its personnel and to test its emergency plans and procedures before an emergency. This could have an adverse impact on the effectiveness of NYCHA's response to an emergency.

Recommendations in After Action Reports Not Implemented

NYCHA informed us that after emergencies, drills, and exercises, it generates After Action Reports, which are used to review NYCHA's response to emergencies in order to identify strengths and weaknesses in its emergency management and responses. An AAR should contain a report on the actions taken, identify personnel and equipment shortcomings, and make recommendations to improve operational readiness, if needed. Based on the AAR assessment, NYCHA has the opportunity to make changes to its plans or procedures, acquire new or replace outdated resources, or retain additional personnel.

However, although NYCHA conducted 175 drills and exercises during Fiscal Year 2014 and 13 in July and August of Fiscal Year 2015, NYCHA generated only 12 (AARs (7 percent) in Fiscal Year 2014. Some of the problems highlighted in these AARs are as follows:

- poor communication between employees and residents, sometimes resulting in inaccurate and untimely information;
- residents who have medical conditions not identified by NYCHA;
- insufficient staffing at the Emergency Operations Center;
- a lack of understanding of roles and responsibilities of senior management teams during a recent snow storm;
- staff without clear assignments and/or responsibilities; and
- difficulties in initial outreach communication and top level supervision at some locations.

In NYCHA's Post-Tropical Cyclone Sandy After Action Report, NYCHA states "[t]he primary goal of recovery projects and other recommendations is to strengthen and poise NYCHA to be better prepared and equipped to respond to emergencies." Although it appears that NYCHA recognizes the value of conducting various types of training and evaluating the results of the training exercises, by not implementing the recommendations made in the AARs, NYCHA is put in a vulnerable position if a disaster strikes. If drills and exercises are performed efficiently and in a systematic manner, and if AARs are generated and used to change or enhance emergency procedures, the agency's response in the event of an emergency could be enhanced.

At the exit conference, the Director of Emergency Preparedness said that many areas of concern noted in the AARs have been or will be corrected with the rollout of various aspects of the new emergency plan.

Recommendations

NYCHA should:

- 1. Develop and implement an emergency preparedness plan to include an overall view of NYCHA's capabilities and potential hazards for major emergencies, and identify its resources, critical services, and the operations needed before, during, and after an emergency. The plan should include:
 - a) Defined roles and responsibilities for emergency management leadership.
 - b) Distinct hierarchy and levels of command and control for every type of emergency.
 - Specific methods of disseminating critical information to NYCHA employees regarding their roles and responsibilities for various types of emergencies.
 - d) A communication plan that includes specific methods for the dissemination of emergency information to NYCHA employees, residents, relevant City agencies, and community groups.

NYCHA Response: "NYCHA created the Office of Emergency Preparedness to help NYCHA better prepare for significant emergencies.

The actions of the Office to-date align with and exceed the recommendations."

Auditors' Comments: In its response to this recommendation, NYCHA outlines the various aspects to its emergency plan that addresses our findings. NYCHA states that its "Office of Emergency Preparedness has routinely and consistently disseminated information on emergencies, preparedness action, and the response and recovery progress agencywide to managers," and "field staff." However, as discussed in this report, there is a disconnect between the central office and the staff in the developments. NYCHA must recognize that without creating oversight procedures that ensure compliance with its policies and procedures, it will not be able to achieve its desired results and will not effectively be able to ensure that NYCHA is prepared for emergency situations.

2. Require each development to adhere to the Emergency Procedures Manual and develop, maintain, and continually update a staffing plan for maintaining essential services in the event of an emergency. For each development employee, the staffing plan should include contact information, home location, and means of reporting to work if public transportation is not available. The plan should also include specific guidelines and procedures for the staff to follow.

NYCHA Response: "All developments have access to all current procedures and are expected to keep supervisors and staff up to date with them. Each development maintains contact information and home location for every employee. We make arrangements for alternate transportation during periods when travel has been significantly impacted, as per our public transportation strike procedure. Each emergency may require a different response and we create an appropriate staffing plan based on the circumstances. All preparations and plans are made based on available information, and are shared with the affected developments as decisions are made."

Auditors' Comment: As discussed in the report, during our visit to 13 sampled developments, we found that development staff are not adhering to Appendix G of the Emergency Procedures Manual, which requires each property manager to prepare and update a plan for maintaining essential services. Again, NYCHA should ensure that staff comply with the required procedures.

 Utilize the Incident Command System structure for all emergencies as prescribed in the Manual. However, if NYCHA determines that it will institute a scalable ICS structure, then NYCHA should set up procedures that specifically state how and under what emergency circumstances the ICS and the ICS forms should be utilized.

NYCHA Response: NYCHA generally agreed with this recommendation, and specifically noted that "[t]he Comptroller's recommendation is in agreement with NYCHA's current use of the ICS structure, which we have instituted to manage several large-scale incidents since Superstorm Sandy.

NYCHA's Incident Command System (ICS) organizational charts, forms and Incident Action Plans for Ebola, Winter Storm Juno, the Papal Visit, Melrose Houses Legionella, and Hurricane Joaquin were created and shared with the Comptroller's office. NYCHA will review the scalability and flexibility of its existing ICS procedures."

4. Implement a training and testing plan to ensure that staff is fully prepared to use the ICS.

NYCHA Response: NYCHA generally agreed with this recommendation. In its response it stated that "[a] multi-year training and exercise schedule that includes ICS training and emergency plans evaluation will be part of the finalized NYCHA CEMP. In the meantime, NYCHA will continue to conduct various evaluations of its emergency preparedness, response, recovery and mitigation efforts."

Develop and implement a plan to systematically conduct drills, exercises, and other training events at all the developments to enhance the effectiveness of emergency response.

NYCHA Response: NYCHA generally agreed with this recommendation. In its response it reported that "[a] multi-year training and exercise schedule will be part of the finalized NYCHA CEMP. In the meantime, NYCHA conducts and participates in numerous drills, exercises and training events to determine additional means to enhance its emergency response, as well as participating in the city's tabletop exercises."

6. Generate After Action Reports after each emergency, drill, and exercise to identify strengths and weaknesses in its emergency response.

NYCHA Response: "For major emergencies, in addition to After-Action reports, NYCHA utilizes a variety of means recognized by the emergency management industry to identify strengths and weakness. These methods include conducting post event "hotwash" (an immediate discussion of the performance or response with participating staff), post event surveys, afteraction conferences (post event in person discussion of the event performance or response), and/or the creation of improvement plans to capture feedback and evaluate drills, exercises and training, as outlined in the CEMP."

7. Effectively use the AARs to change, enhance, and correct weaknesses to its emergency procedures. The changes should be included in NYCHA's Emergency Procedures Manual.

NYCHA Response: "NYCHA will continue to address areas identified for improvement. Emergency procedures and plans will continue to be reviewed, revised and updated as appropriate."

Emergency Reporting System Has Not Been Properly Utilized

In our visits to 13 developments in different parts of the City, we found that the Emergency Reporting System was not uniformly available throughout NYCHA. The ERS is a computer system developed by NYCHA in 2011 after Hurricane Irene. It was intended to be a vehicle for communication during emergencies. NYCHA pointed to it in response to our questions about what procedures NYCHA has to manage and ensure proper leadership during emergencies. However, based on our interviews with NYCHA personnel, it appears that the ERS has had only nominal use, is available to some personnel at the borough offices, and is entirely unavailable at the developments.

As designed, the ERS has multiple functions to help NYCHA manage emergency events, including issuing notifications to those who would be in charge of an event and gathering data on the disabled tenants to enable appropriate actions to be taken. According to NYCHA, when an emergency occurs, a NYCHA official in an executive-level role will request that an "event" be created in the ERS. After the event has been created in the system, an email notification of the emergency event is sent to the NYCHA staff members who are supposed to be in charge of the event.

NYCHA officials explained that, depending on the severity of the emergency, a list of the disabled tenants in the affected developments will be created using the ERS and utilized by officials in NYCHA's Family Services unit to assist in contacting those tenants. The ERS pulls tenant information from NYCHA's Data Warehouse, which generates reports from information contained in the Tenant Data System on residents with disabilities, including those that are wheelchair bound, dependent on life-sustaining equipment, visually impaired, mobility impaired, deaf, and elderly. As is discussed in more detail below, the audit found discrepancies in the TDS information related to the identification of tenants with disabilities, which calls into question the accuracy of the data gathered in ERS.

Although the ERS has been in operation since 2011, as of July 28, 2014, NYCHA has used it for only two snow storms, both in January 2014. NYCHA stated that proper personnel receive email notifications during these type of events charging them with the leadership of an emergency event. However, we were not able to verify this claim because NYCHA was unable to produce documentation to substantiate it, including even a list of the email recipients. Instead, NYCHA eventually provided us with a hard copy of a document listing its employees, but no additional information was provided. Further, although, NYCHA demonstrated that the ERS has the capability of listing the disabled tenants in specific developments, NYCHA did not produce any evidence that it has utilized this function during an actual emergency.

At the exit conference, the Vice President of Research and Management Analysis stated that, in fact, the ERS was used for seven events not two: two events noted above, three events in Fiscal Year 2013, and two events in Fiscal Year 2016 (after the scope period of this audit). Moreover, she stated that although the ERS has the capability of notifying personnel that they are in charge of an emergency event, that function is not used. She further stated that the ERS is used as a "central planning tool" to summarize data regarding disabled residents in specific locations in NYCHA housing. This data, depending on the emergency circumstance, would then be shared with the Emergency Preparedness unit or other NYCHA officials.

While we understand that NYCHA has the discretion to utilize the ERS in the manner it deems appropriate, based on the inconsistent information we received from NYCHA officials, we are concerned that NYCHA has not clearly determined or communicated its use. At a demonstration

of the ERS conducted by NYCHA, we were informed that this system is a tool to ensure notification to those who would be in charge in the event of an emergency. Members of NYCHA's Information Technology unit were present at the demonstration specifically to explain how they use the "cloud" to store the information to ensure that even when the computers are down, NYCHA will still have access to the information. Moreover, NYCHA officials, when we specifically asked, said that the ERS had only been used two times.

Continuity of Operations Plan

NYCHA has a Continuity of Operations Plan that is supposed to document critical procedures and resources necessary to continue essential services in the event an emergency. However, NYCHA's COOP was not readily available upon our request and does not appear to be available to NYCHA's staff. When asked, most of the property managers at the developments we visited stated that they were not aware of the COOP. We requested a copy of the plan in connection with this audit, and NYCHA officials stated that it was available on NYCHA's intranet and accessible to the employees. However, neither NYCHA's Assistant Director of Audit nor the auditors were able to locate the plan on the intranet. After we unsuccessfully attempted to locate the COOP on NYCHA's intranet, NYCHA confirmed that access to the plan was restricted to the members of the "COOP Planning Team Group."

At the exit conference, the Director of Emergency Preparedness stated that the COOP is available to NYCHA's "decision makers." She further stated that going forward the COOP, which will be revised, will be available to a greater number of staff in specific management roles.

While it is within NYCHA's discretion to determine who has access to this information, we are concerned that such determinations may not have been clearly made and communicated as illustrated by the misinformation we received regarding the COOP during this audit. In response to our specific requests for information, we were informed that the COOP was readily available to all staff that has access to the intranet and on the Living Disaster Recovery Planning System, a web-based tool provided to New York City agencies. We believe that NYCHA should ensure that information throughout the agency should be consistent and properly disseminated to its employees.

NYCHA Does Not Have Readily Available Deployment Plans

NYCHA's Continuity of Operations Plan, Reporting and Deployment Operations, states that:

To mitigate the confusion that may arise when employees report to alternative facilities, reporting and deployment procedures should be in place and documented. This includes, when, where, and how employees report to work and/or deploy to an alternate location.

The lack of advance planning for staffing and deployment can have a negative impact on NYCHA's ability to respond to the aftermath of emergencies as was evidenced during Hurricane Sandy. NYCHA's Post-Tropical Cyclone Sandy After Action Report noted that "many employees were unable to report to their work location. . . . [T]hose employees who did report to alternative work sites did not always have the skills needed." The recommendation was made to "establish alternative work locations for employees" and to "[p]rovide cross-training to staff to enable them to assist in work activities at alternative work sites." However, we were informed by NYCHA officials that there is no deployment plan.

At each of the 13 developments visited, we inquired whether NYCHA had a deployment plan in place in case of emergencies. Officials at each development stated that they do not have any written emergency procedures regarding their deployment. They explained that in the event of an emergency, they receive instructions from the borough management office. The borough directors and the assistant borough director we interviewed confirmed their roles and further stated that the borough offices would decide on any type of deployment at the time of an emergency.

As discussed earlier in the report regarding lack of staffing plans at the developments, maintaining information in the central office concerning the whereabouts of NYCHA employees could certainly be helpful to the borough management office and managers at the individual developments, but is not sufficient to substitute for deployment plans being put in place at each of the developments and at the borough offices. Deployment plans would minimize the chance of confusion over individual responsibilities and deployment procedures during emergencies and increase the likelihood that normal operations would be resumed as expeditiously as possible.

Recommendations

NYCHA should:

8. Make a determination on how the Emergency Reporting System will be utilized going forward and ensure this information is clearly disseminated to NYCHA employees.

NYCHA Response: "Executive and Emergency Services Department (ESD) staff uses this system for quickly compiling data on NYCHA's residents for planning purposes. The system is not used for communications."

9. Determine and clearly communicate which employees will have access to the Continuity of Operations Plan.

NYCHA Response: "For the 2015 COOP update, the Authority adopted a department-level approach to the annual update of NYCHA's Continuity of Operations Plan. This approach includes the completion of a five, step by step survey forms and the creation, maintenance, and updating of unit level emergency contact lists by NYCHA staff. The 2015 COOP update is scheduled to be complete in December 2015. Senior managers are required to keep printed copies of the emergency contact lists for their unit at home and at work. On June 8th 2015, NYCHA's General Manager informed all NYCHA Directors of the updated COOP process via global email, which included the COOP surveys, COOP Frequently Asked Questions and COOP: What You Need to Know."

10. Develop deployment plans that would indicate when, where, and how employees would report to work and/or relocate to an alternate location during an emergency. These plans should include specific guidelines and procedures for the staff to follow.

NYCHA Response: "Deployment plans are part of the staffing plan and are not created separately."

Auditors' Comment: As discussed in the report, during our visit to 13 sampled developments we found that the developments do not have a staffing plan or a deployment plan that would be used during an emergency. Moreover, the development staff did not give any indication that they were required to have these plans. Therefore, NYCHA should ensure that the development staff are fully aware of NYCHA's requirements and ensure that staffing and deployment plans are created.

Disabled Tenant Information Listed in NYCHA's Tenant Data System Is Inaccurate

NYCHA does not maintain accurate or reliable information about disabled tenants in its Tenant Data System. Among other things, we found that some information in TDS did not match the information in the tenants' files. Further, we found that some disabled tenant information in TDS did not match information contained in the lists of disabled tenants maintained by NYCHA at the developments. The inconsistent information is of particular concern because the lists of disabled tenants maintained by the developments are generated from TDS.

TDS is supposed to be NYCHA's primary repository of complete, current information about every NYCHA tenant. As described above, this information is used by NYCHA to, among other things, identify disabled tenants in each development. NYCHA's failure to maintain accurate and complete information about its disabled residents can have a negative impact on them during emergencies, a time when they may have the greatest need of assistance.

According to NYCHA's Emergency Procedures Manual, when faced with an emergency situation,

managers must first identify the residents with physical disabilities and/or who are dependent upon life-sustaining equipment by reviewing existing information in the Tenant Data System (TDS) . . . to obtain sufficiently detailed information so that the individual may be assisted appropriately in time of emergency.

NYCHA also requires new tenants to

provide the names, addresses and phone numbers of two close relatives or friends who can who can be contacted in an emergency. . . . [NYCHA's] staff will make every effort to contact affected residents by telephone or home visit to assure them that the Authority is available to provide them assistance. If staff cannot contact the affected resident(s), they will contact the designated emergency contact person(s).

We requested and received from the property managers the lists they maintained of disabled tenants that reside in each of the 13 sampled developments. From these lists, we randomly selected and reviewed 493 of the 626 tenant files maintained at the 13 sampled developments, which include the annual Occupant's Affidavit of Income and the Housing Assistants' Income

Review Checklist, and compared the information to the data in TDS.¹ Our review found that 21 of the 493 tenants identified as disabled on the developments' property managers' lists (4 percent) were not identified as disabled in TDS. We also found inconsistent information for 122 of the 493 disabled tenants (25 percent) contained in the lists of disabled tenants maintained by the developments, the Occupant's Affidavit of Income, the Income Review Checklists, and TDS. For example, a tenant appeared on the development's list of disabled tenants, but did not report any disabilities on the Occupant's Affidavit of Income. However, the housing assistant reported three disabled occupants in the apartment on the Income Review Checklist, and reported three disabled occupants in TDS.² In addition, we found that of the 493 tenant files, 10 were missing the latest required annual Occupant's Affidavits of Income. As a result, the most recent information for these disabled tenants was not available. Finally, we found that for 385 (80 percent) of the 483 disabled tenants' files we sampled (excluding the 10 tenants with missing affidavits), the emergency contact information in TDS was not accurate and did not match the information in the tenants' files.

Overall, we found that NYCHA officials do not ensure that information regarding tenants is being accurately maintained in TDS. Therefore, in case of an emergency, NYCHA would not be able to rely on TDS to identify every disabled tenant. Since the data is unreliable and some disabled tenants may be omitted from TDS, tenants in need might not be contacted and may not receive vital assistance in an emergency as prescribed in the Emergency Procedures Manual.

Moreover, according to Local Law 60, OEM must rely on NYCHA's lists of "homebound and vulnerable" individuals as the basis for its contacts with disabled tenants in the event of an emergency. The fact that NYCHA does not have a reliable list of all of its disabled tenants is of concern because it could result in NYCHA failing to identify some disabled tenants in the event of an emergency, and as a result, they may not receive necessary assistance.

NYCHA officials informed us that in past emergencies, such as Hurricane Sandy, NYCHA staff knocked on the door of every disabled tenant to offer assistance. The staff used the lists of tenants who use wheelchairs and are dependent on life-sustaining equipment maintained by the developments to ensure that the tenants were contacted and noted on the lists whether or not they were able to make contact with each tenant. NYCHA claimed that these lists with the notations were then scanned and sent to NYCHA's Emergency Services Unit as confirmation of which tenants were contacted and which tenants were not, and the information should have later been noted in the tenants' files. However, as it pertains to Sandy, we did not find this information in any of the 493 tenant files that we reviewed. Moreover, NYCHA was not able to provide the scanned lists and instead provided a myriad of documents that include a number of people contacted, a number of people who could not be contacted, a number of people NYCHA assisted, and documents that included some names. Therefore, we could not confirm whether there was an attempt to contact all disabled tenants.

¹ Tenants are required to annually submit an Occupant's Affidavit of Income, which includes self-reported tenant information such as income, apartment occupants, disabilities, age, and emergency contact information. This multi-page form, which contains the most recent data for residents, should be submitted with all of the required documentation to the development's management office by the due date for review by NYCHA's Housing Assistants, who prepare Income Review Checklists based on the data contained in these submissions. These Income Review Checklists are maintained in each tenant file and the Housing Assistants use them as the basis for entering or updating the tenant information in TDS.

² On the Occupant's Affidavit of Income, the tenant should report the number of disabled occupants that reside in the apartment and note any associated disability.

Property Managers Do Not Maintain Complete Lists of Tenants with Physical Disabilities

The Emergency Procedures Manual directs property managers to maintain lists in hard copy of disabled tenants "so that [these tenants] may be assisted appropriately in time of emergency." However, we found that these lists do not include all disabled tenants who may be in need of special assistance. Although the Emergency Procedures Manual requires the property "managers to identify the residents with physical disabilities" and maintain updated lists of this information, we found that the managers only maintain lists of tenants who use wheelchairs or who are dependent on life-sustaining equipment. At the same time, TDS and the ERS system, which draws its information from TDS, both contain information about tenants with additional types of disabilities that are not included on the lists maintained by the developments, including mobility impairments, vision impairments, hearing impairments, and mental disabilities.

When we asked the property managers at the 13 developments in our sample why they did not include tenants with other disabilities on their lists of disabled tenants, a number responded that they had never been told to do so by management, while others said that it had not occurred to them to do so. However, as NYCHA itself recognized in its Post-Tropical Cyclone Sandy After Action Report, "residents may have medical or other conditions not captured by NYCHA and may need evacuation or other assistance during an emergency." The failure of NYCHA's property managers to maintain lists of all disabled tenants limits the information they have available to enable them to assist all disabled tenants when there is an emergency.

Recommendations

NYCHA should:

11. Ensure that information on all disabled occupants is consistently and accurately recorded and reported in each of the relevant systems, files, and lists. This includes the number of disabled occupants residing at the location, the type of disability, and the emergency contact information.

NYCHA Response: "NYCHA has relied on a process where changes to status were given in written form to development staff that entered it in TDS and file the paperwork in the resident folder. Recently NYCHA began to offer residents the option to update some information on-line and via the new NYCHA app."

Auditors' Comment: NYCHA's response to our recommendation illustrates that it does not understand the issue discussed in the report. The audit found that information submitted by the tenants is not accurately entered into the Income Review Checklist and the Tenant Data System. The audit did not discuss the various means available to tenants to submit this information. It is NYCHA's responsibility to ensure that information submitted by its tenants (by any means) is accurately entered into NYCHA's records. It is incumbent on NYCHA to determine how and why the data entry errors have occurred and to develop a process to eliminate or at least minimize such errors.

12. Define what types of disabilities should be included on the hard copy lists maintained by the developments and ensure that this is sufficiently inclusive and consistent with other information maintained by NYCHA.

NYCHA Response: "Development staff maintains lists of residents who have self- identified as relying on wheelchairs or life sustaining equipment. These disabilities have been selected because they are most impacted by power outages, which can also render computers inoperable. For emergencies that impact people with other challenges, the TDS system can be queried for residents who have provided information on other types of disabilities, as needed."

Auditors' Comment: NYCHA's policy that development staff maintain lists of only "residents who have self-identified as relying on wheelchairs or life sustaining equipment" clearly can have an impact on other tenants with other disabilities. As discussed in the report, there are some emergencies that will not allow for queries of the TDS or reviewing of tenants' files. During Hurricane Sandy, even NYCHA's central office was impacted and may not have been able to share information on disabled tenants with the developments. Thus, we urge NYCHA to consider requiring development staff to include on their lists of tenants with disabilities additional tenants with other types of impairments.

13. Accurately record information from the tenants' annual Occupant's Affidavit of Income in the Income Review Checklist and then accurately input it into the Tenant Data System.

NYCHA Response: "This is a federal requirement, and NYCHA works to ensure compliance with the requirement. NYCHA is currently piloting online annual reviews for residents of public housing. Once fully implemented, the online process will allow all NYCHA residents to complete forms and submit supporting documentation online. Information provided will automatically be updated in the system of record, improving data entry and information collection."

Auditors' Comment: The audit found that information submitted by the tenants is not accurately input into the Income Review Checklist and the Tenant Data System. The audit did not discuss the various means available to tenants to submit this information. It is NYCHA's responsibility to ensure that information submitted by its tenants (by any means) is accurately entered into NYCHA's records.

14. Ensure that its developments receive and maintain an Occupant's Affidavit of Income for every tenant.

NYCHA Response: "All residents are required to provide the Affidavit of Income annually, and, if any resident fail to comply NYCHA takes tenancy actions.

Auditors' Comment: We understand that residents are required to provide the Affidavit of Income annually. However, during our audit we could not find, and the development staff could not supply, the Occupant's Affidavit of Income for ten tenants. Therefore, we recommend that NYCHA implements enhanced controls to ensure that it receives and maintains these necessary forms.

15. Develop a plan that will ensure that all emergency contact information for the disabled tenants is accurate and is being properly updated in NYCHA's TDS.

NYCHA Response: "NYCHA requires staff input this information if it is provided. Going forward we will consider including this information in the data that can be submitted electronically as well."

Auditors' Comment: The audit found that information submitted by the tenants is not accurately entered into the Income Review Checklist and the Tenant Data System. The audit did not discuss the various means available to tenants to submit this information. It is NYCHA's responsibility to ensure that information submitted by its tenants (by any means) are accurately entered into NYCHA's records.

- 16. Maintain evidence that NYCHA staff attempted to contact disabled tenants in the event of an emergency and whether or not contact was made.
- 17. Maintain evidence that disabled tenants' emergency contacts were notified when contact could not be made with the disabled tenants.

NYCHA Response: "NYCHA Response to 16 & 17: Documentation of the outreach conducted by NYCHA for Superstorm Sandy was provided to the Comptroller's office and included information regarding who was contacted and who was not reachable. When NYCHA uses robo-calls to provide residents with information, reports are available regarding the success of the call. We are working with our City partners to determine the best way to contact NYCHA residents during large-scale emergencies moving forward."

Auditors' Comment: As noted in the report, NYCHA was not able to provide appropriate evidence of its attempts to contact people with disabilities in connection with Hurricane Sandy. Instead, in response to our requests, NYCHA submitted various documents that included different lists of NYCHA residents. Some of these documents expressly had names of people who were identified as having been contacted following the hurricane. Other documents identified some people that could not be contacted. And some merely contained a number of people contacted without names. Based on the totality of what was submitted, there was no way for us to confirm that there was an attempt to contact all disabled tenants.

Lack of Controls Over Its Inventory of Generators

We found that NYCHA lacks adequate controls over its inventory of generators assigned to the developments. NYCHA has failed to implement procedures to ensure that generators are located as assigned, properly accounted for, and readily available when needed. Overall, there is a lack of compliance with NYCHA's inventory procedures concerning recordkeeping, inventory counts, and the physical security of the generators.³

NYCHA's Standard Procedure Manual for Operation of Development Storerooms requires that the developments maintain inventory records for items such as generators. The manual further requires that each month the property manager and the superintendent undertake a physical count of the generators on hand. Each counted item must then be recorded, along with the date of the count and the result of the count, and signed by the manager and superintendent. The managers must then reconcile the count with inventory records and bring any discrepancy to the attention of the borough office.

Since generators are critical in the event of a power failure, while visiting the 13 sampled NYCHA developments, we conducted an inventory count of the generators. In response to our request for a list of all of the generators located in each of the developments, NYCHA provided us with a list entitled *Fixed Assets of Tagged Generators* (the List). The list identified 433 generators located at 147 developments. Of these, 22 generators were identified from that list as being located in 11 of the 13 developments we sampled. The list provided did not include two of the 13 developments.

We conducted physical inspections and found that the number of generators stored in the 11 developments that NYCHA identified as having generators was significantly different from the number of generators on NYCHA's list. Instead of the 22 generators at 11 developments, we found 33 generators stored at the 11 developments. In addition, we observed six generators at the two developments that NYCHA did not identify on the list it provided to us. Therefore, we observed a total of 39 generators at the 13 developments.

The Fixed Assets of Tagged Generators list provided by NYCHA did not include tag numbers for 37 of the 39 generators (95 percent) we observed at the 13 sampled developments and no tag numbers for those items were recorded on any of the documents provided to us on NYCHA's inventory of fixed assets. In addition, even though NYCHA's list reflects that 22 generators were located in 11 developments, we found that the tag numbers identified on the list for 20 of those generators (91percent) did not match any of the tag numbers on the generators we observed, indicating that NYCHA does not have an accurate record of where these generators are actually located. We also found that only nine of the 13 developments maintained inventory records. However, all of the inventory records we found for those nine developments were inaccurate and did not match the number of generators we observed at the developments.

Property managers and/or superintendents informed us that generators are often borrowed or loaned to other developments when there is a need. Requests for loans might come from NYCHA's central office or from an individual development. We were informed that once a generator changes location, it is not generally returned to its original location. We found that the inventory records do not reflect the change in location of the generators on "loan." Consistent with our findings, in NYCHA's Post-Tropical Cyclone Sandy After Action Report, it was noted that

³ NYCHA's lack of controls over its inventory was cited in a previous Comptroller's audit report entitled *Audit Report on the New York City Housing Authority's Controls Over Its Inventory of Equipment and Supplies*, (MD14-105A).

"[I]ocating and tracking some of NYCHA's equipment and parts was difficult," and a recommendation was made to "develop an asset management system that documents the location and specifications of NYCHA systems and equipment."

NYCHA's lack of controls over its inventory of generators could adversely affect the health and well-being of disabled tenants in the case of an emergency. This weakness is particularly troubling because some tenants rely on electricity to operate life-sustaining equipment such as oxygen, respirators, and dialysis equipment, or to refrigerate medications. Furthermore, because of the failure to keep accurate records of how many generators are available at any time or the location of each generator, the probability of theft increases significantly. In fact, in one development, the superintendent mentioned that a generator was stolen before it had even been removed from the wrappings.

At the exit conference, NYCHA officials stated that they are aware of the issues regarding the controls over inventory as cited in a previous Comptroller's audit report. Further, they expressed concerns about the accuracy of the list provided to us, stating that the list we received "was not vetted." NYCHA officials also stated that the generators discussed in this report are not emergency generators, adding that the Emergency Services Department has 13 large generators and three large mobile generators that are used for emergencies.

As previously discussed, it appears that there is confusion between employees in different areas of NYCHA and it is of concern that we (and presumably NYCHA staff and residents) are unable to rely on the information provided by NYCHA. Further, it is of concern that we received partial data in response to our request for an inventory of "all generators" in NYCHA.

Recommendations

NYCHA should:

18. Ensure that the developments comply with inventory procedures for emergency generators, and ensure that all generators are located as assigned, accounted for, and tagged.

NYCHA Response: "NYCHA's Emergency Services, and Maintenance Repair and Skilled Trades Departments maintain the Authority's 16 emergency generators, 13 of which are trailer-mounted 60 KW generators that are slated to receive GPS tracking devices, which will provide real-time tracking information. The locations for each of these are tracked and they are available 24/7."

Auditors' Comment: NYCHA did not respond to the finding that relates to generators that are located at the developments and are under the control of the development staff. As discussed in the report, NYCHA lacks adequate controls over its inventory of generators assigned to the developments. Moreover, although we had requested an inventory of all NYCHA generators, NYCHA only informed us of these "16 emergency generators, 13 of which are trailer-mounted 60 KW generators" on November 16, 2015, at the exit conference for this audit.

19. Ensure that all of the developments maintain and update their inventory.

NYCHA Response: "The Comptroller's office has been working closely with NYCHA through the Inventory Working Group to overhaul our inventory process, which includes development management of their inventory."

DETAILED SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. This audit was conducted in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

The scope of this audit covers the period from July 1, 2013, to February 28, 2015. To achieve our audit objectives, we reviewed information on NYCHA's website and we requested and reviewed the New York City Housing Authority Emergency Procedures Manual, NYCHA's Continuity of Operations Plan, and After Action Reports including the Post-Tropical Cyclone Sandy After Action Report. We also obtained and reviewed Executive Order 107 for the COOP requirements, Local Law 60, and NYCHA's posting for the Director of Emergency Preparedness position.

To gain an understanding of New York City Housing Authority emergency preparedness, we interviewed various NYCHA officials and key personnel at a sample of the developments. Specifically, we interviewed the Director of Emergency Services, Director of Emergency Preparedness, Vice President of Operations for Support Services, Vice President of the Department of Research and Management Analysis, Borough Directors from Manhattan and Brooklyn, Assistant Borough Director from Queens, and property managers and superintendents at 13 developments. Our meetings and observations were memorialized in memos.

We conducted research using the internet to obtain information and guidance regarding emergency preparedness for PHAs from the OEM, FEMA, and HUD. We determined whether NYCHA put into place some of the guidance from these knowledgeable sources. We met with OEM to gain an understanding of NYCHA's responsibilities as regards to emergencies.

To determine whether NYCHA instituted the ICS program, we obtained a list of staff that has received the ICS training. We also requested all ICS forms required to be completed for any type of emergency incident. To gain an understanding of how NYCHA manages emergency events, we attended a demonstration of the ERS. We requested a list of employees that would be put in charge for every type of emergency event established by the ERS.

We selected and visited 13 out of 334 NYCHA developments, housing 35,476 tenants. Since New York City is divided into six hurricane evacuation zones, we randomly selected four developments from flood zone one, the most vulnerable zone, and the remaining nine developments were randomly selected from zones two through six. We requested from the property managers and superintendents the developments' staffing and deployment plans, and employee contact information. In addition, we requested the list of disabled tenants maintained in the developments' property managers' offices, superintendents' offices, and emergency cabinets located in the warehouses.

To determine whether NYCHA maintained accurate information regarding disabled tenants, we randomly selected 493 out of 626 tenants' files from the lists obtained at the 13 developments. We compared the information on the Occupant's Affidavit of Income to the Income Review Checklist, the TDS and the ERS. We also reviewed tenants' files for evidence that they were contacted by NYCHA in case of any emergency and specifically Super Storm Sandy. In addition,

we requested the list of disabled tenants that NYCHA claimed had been contacted during Hurricane Sandy.

We requested from NYCHA a list of drills, exercises, and other training events that took place in fiscal year 2014 and July and August of Fiscal Year 2015 and a list of training events scheduled to be conducted within the next year. We also requested all available AARs for the same time period.

In addition, we obtained NYCHA's inventory of fixed assets that included 433 generators located at 147 developments. To determine whether the generators were located at the developments indicated, we physically observed all 39 available generators at the 13 sampled developments and compared them to the list provided by NYCHA.



NEW YORK CITY HOUSING AUTHORITY

250 BROADWAY • NEW YORK, NY 10007

TEL: (212) 306-3000 • http://nyc.gov/nycha

December 7, 2015

Marjorie Landa
Deputy Comptroller for Audit
The City of New York
Office of the Comptroller
1 Centre Street
New York, NY 10007-2341

Re: Audit Report on the New York City Housing Authority's Emergency Preparedness

SR14-113A

Dear Ms. Landa:

We are writing in response to your audit report on New York City Housing Authority's (NYCHA) emergency preparedness.

NYCHA is committed to protecting the welfare of its residents. Superstorm Sandy tested the preparedness and response capabilities of the entire City. We've incorporated the lessons learned from this catastrophic event over the past three years into fundamental changes to NYCHA's emergency preparedness and operational resiliency. We have enhanced our emergency management programs to plan for, manage and recovery from, major disasters. Even with the great strides NYCHA has made since Sandy, we know there is still more work to do.

Due to the time period for this audit, we believe the findings and recommendations miss significant improvements NYCHA has made in relation to its emergency preparedness and response. We believe emergency events that occurred over the last couple of years, including Winter Storm Juno and a Legionella outbreak in the Bronx this past year, indicate that we have improved the effectiveness of our planning and responses in to emergency events.

NYCHA understands we must be more prepared than we were three years ago. In overhauling our emergency planning and procedures so that we are in better alignment with the City, we've advanced NYCHA's preparedness in three fundamental ways:

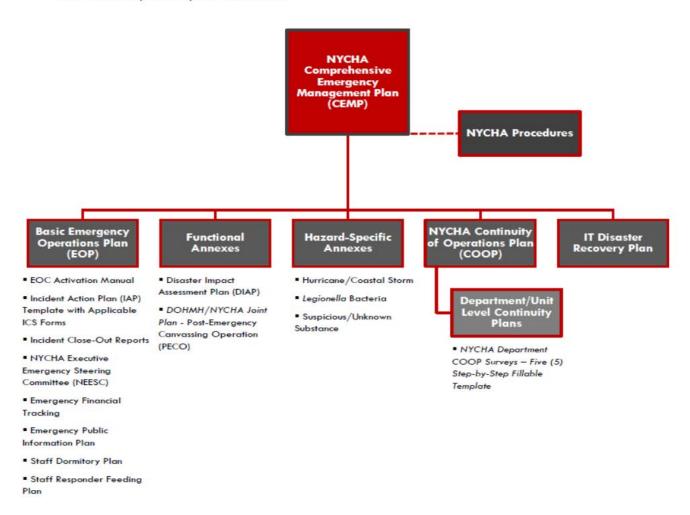
- Established a new department dedicated to large-scale emergency planning and response.
- 2. Created a comprehensive emergency management program that provides the foundation for all-hazards planning and preparedness efforts, including the creation of functional response and recovery plans.
- 3. Improved coordination with emergency managers in the public, private, and non-profit sectors to fully integrate New Yorkers who reside within the NYCHA portfolio into the City's emergency plans to ensure residents will have disaster-related needs met by emergency services providers.

With this framework in place, NYCHA continues to enhance emergency preparedness tools and strategies. Our progress has been marked with key milestones, including:

Organization: In June 2014, NYCHA created its first Office of Emergency Preparedness (OEP) to develop and implement an all-hazards approach to minimizing disruptions to agency operations and services in the event of disasters or emergency events. OEP directs NYCHA's large-scale emergency preparedness response, and continuity programs through the development of NYCHA's first-ever master emergency plan—the Comprehensive Emergency Management plan (CEMP.) The CEMP is the overarching planning document that specifies emergency management leadership and supporting roles, the organization and responsibilities of staff dedicated to managing incidents, and the internal and external resources required in the mitigation of, preparation for, response to, and recovery from emergencies and disasters. OEP is also overseeing the adoption of the National Incident Management System (NIMS), a flexible, but standardized set of incident management practices that are intended to improve the effectiveness of emergency management and response personnel across the full spectrum of potential threats and hazards.

Planning: The CEMP (the Comprehensive Emergency Management plan) is NYCHA's "central hub" for large-scale emergency planning. It integrates multiple plans intended to manage all the hazards NYCHA could face. As new threats to NYCHA's people and property surface, new plans are developed and synced into the CEMP. It outlines the roles and responsibilities of operational personnel and support providers and how those activities complement others. Initiated just last year as the first all-encompassing emergency management playbook in NYCHA's history, this massive undertaking will occur over multiple years. Within a year's time, OEP has been able to draft more than ten (10) detailed CEMP component plans.

*Graphic below displays the prioritized Planning Components for 2014 – 2016; it does not represent all of the plans that will make up the complete NYCHA CEMP



In the little bit more than a year since the office was created, OEP has finalized or drafted the following CEMP components:

- **Emergency Public Information Plan** (Finalized and submitted to Comptroller) specifies how critical information will be disseminated to NYCHA's employees, residents, and other stakeholders.
- Executive Emergency Steering Committee (Finalized and submitted to Comptroller) designed to bring together cross-agency NYCHA executives to address emergency
 planning and response operations.
- Standardized Incident Action Plans (AIP) and Close-out Reports (Finalized and submitted IAP to Comptroller) – outlines specific incident management hierarchy, planning, response, and recovery roles and responsibilities identified by staff name,

- specific objectives and operational emphasis, daily updates, resource tracking processes and paperwork, sign-in sheets, and financial projections and expenditures.
- Disaster Impact Assessment Plan (Draft) details operations that are necessary to identify the impact of an event, quantify losses, facilitate repair work, and to restore utility services in order to return or preserve NYCHA properties to a safe, sanitary, and decent condition as soon as possible.
- Post-Event Canvassing Operations (PECO) NYCHA Annex (Draft) joint effort with the
 Department of Health and Mental Hygiene that specifies how the City will identify
 NYCHA residents who are sheltering-in-place and in need of evacuation and / or critical
 services.
- **Notification & Warning Plan** (Draft) specifies emergency alert messaging and methods to quickly share critical information with staff and stakeholders.
- Emergency Financial Tracking and Cost Projection (Finalized and submitted to Comptroller) – identifies accurate expenditures and promotes fiscally responsible decision making.
- **Staff Dormitory Plan** (Draft) identifies support operations necessary for the establishment and management of a congregate sleeping area for all NYCHA staff prepositioned for response to a large scale event.
- **Staff Responder Feeding Plan** (Draft) identifies the process of procurement, preparation, and provision of meals to NYCHA responders necessary to facilitate continuous emergency operations.
- Continuity of Operations Plan (COOP) (Submitted to Comptroller finalized documents but 2015 plan is draft until the end of year) – overhauling NYCHA approach to planning, OEP instituted the direct involvement of Authority-wide staff and the creation of step by step surveys that NYCHA departments completed to define the actions, resources, and procedures each unit will need to ensure the execution of their essential functions.

Training: OEP has created and facilitated internal training and exercises on NYCHA's emergency planning and response to public health concerns:

– Ebola– Suspicious Substances– High-Heat Emergencies– Damage Assessment

- Hurricanes

OEP conducted a joint Full-Scale Post Disaster Community Outreach Exercise with the NYC Department of Health and Mental Hygiene (DOHMH) on Tuesday, September 30th, 2014 at Meltzer Towers. OEP has also participated in numerous external training and exercise

opportunities including the Mayor's Executive-Level Winter Weather, Extreme Heat, and Coastal Storm tabletop exercises, the American Red Cross's New York Shakes Community-Based Organization Functional Exercise, the NYC Department of Correction Annual COOP Tabletop Exercise, the City's Hurricane Sandy After-Action Review, the New York City Emergency Management's 2014 and 2015 Citywide COOP Conferences, and the International Association of Emergency Managers 2015 Conference.

Integration: OEP has successfully coordinated with local, state and federal partner agencies and volunteer, community-based, non-profit entities to have the post-disaster needs of New Yorkers who reside in NYCHA developments formally incorporated into City plans. Through integration, issues such as the identification of post-emergency needs and the timely referrals to appropriate service providers, emergency shelter, disruptions to food supply, and the distribution of temporarily unavailable life-sustaining commodities such as food, water, ice, and baby formula can be specifically addressed.

Actual Emergency Planning and Response: With NYCHA's new emergency preparedness leadership structure, hierarchy and communication plans in place, NYCHA has successfully managed its role in large-scale events since Superstorm Sandy, including:

October 2014 – NYC's Ebola Outbreak

On October 2, NYCHA's Offices of Safety and Security and Emergency Preparedness began to proactively prepare for the threat of Ebola, by establishing an interagency planning team and creating a comprehensive public health planning workbook to guide the Authority's efforts. On October 23, 2014, DOHMH reported a case of Ebola in a medical aid worker who had returned to New York City from Guinea, where the medical aid worker had served with Doctors Without Borders. The diagnosis was confirmed by CDC on October 24.

Citywide Coordination: NYCHA was engaged with the City's earliest planning efforts at the highest levels, joining the Mayor and the Commissioner of DOHMH at a senior tabletop exercise and executive level planning and strategy sessions at NYCEM.

NYCHA Planning & Response:

- Established an ICS based senior level planning team, which held regular meetings;
- Created an Ebola planning guidebook that focused on threat analysis, policy implications, communications, testing, prevention and containment;
- Identified population demographics, including vulnerable populations;
- Created planning checklist for pandemic impact to operations, employees, and residents:
- Determined resources necessary to protect employees and residents.

- Staff-wide: Circulation of daily NYCHA planning updates, information on the Employee Assistance Program (EAP) for staff with concerns and the City's Operational summaries that included Ebola patient status and DOHMH and CDC reports; also alerted union leadership of our communications to staff.
- Property Management Staff: Distributed safety training documents, safety procedures and DOHMH Ebola Fact Sheets.
- Residents: Provided the NYCHA Customer Call Center with information for resident inquiries; lined up NYCHA language bank volunteers that speak languages spoken in West Africa; utilized NYCHA's website and social media channels to educate and inform.
- Notices: Drafted templates for residents/employees that tested positive or quarantined, and for incidences that staff may have entered the apartment of an infected resident. These notices were prepared in English and translated into Spanish, Russian, and Chinese.

January 2015 – Winter Storm Juno

In response to National Weather Service forecasts of a historic snowstorm, including blizzard like conditions and up to 30 inches of snow, hitting the NYC area on January 27, 2015, Mayor de Blasio signed Mayoral Emergency Executive Order No. 87 instituting a travel ban effective 11:00 pm on Monday, January 26th. Public transit and unauthorized emergency vehicles traveling on roadways were prohibited and schools were closed on Tuesday, January 27th.

Citywide Coordination: NYCHA was engaged in citywide response efforts and participated in daily planning meetings led by NYCEM to coordinate with local, state, and federal emergency management representatives.

NYCHA Planning & Response:

- Adopted an Incident Command Structure (ICS) to oversee operational objectives, NYCHA field response; and financial tracking measures;
- Established a staffing schedule and created contingency plans to address any
 needs the disruption to mass transit may have caused. This included
 coordinating with the City to have NYCHA staff added to the authorized travel list
 in light of the travel ban, making arrangements for shuttle services to be
 provided by City partners, and creating development-based carpooling
 strategies;

- Implemented structured snow and garbage removal plan; including a fuel plan for snow removal equipment, light towers, and generators;
- Performed site inspections of developments to remove or mitigate hazards;
- Contracted snow removal workforce mainly from pool of residents;
- Prepared lists of vulnerable resident populations, including those with mobility impairments and individuals who use life sustaining equipment to facilitate emergency supportive services if needed.

- With the field: situational awareness reports with planning and response updates, snow removal progress, and citywide impacts were compiled and disseminated.
- Staff: weather updates and response notes were distributed via email; robocalls
 to staff with agency status and snow information were recorded and prepped for
 distribution.
- **Residents**: Flyers were posted with storm details and instructions for assistance (dial 311); robocalls to residents with information on agency response efforts and weather impacts were recorded and prepped for distribution.

Assessment:

- After Action Report surveys circulated by NYCHA's Office of Emergency Preparedness;
- Post-event evaluation and discussion held to identify areas for improvement:
 - Comprehensive communications plan needed
 *NYCHA Improvement Action: Created an Emergency Public Information
 Plan to standardize communications in future events. Approved and
 instituted in June 2015.

September 2015 – Legionella at Melrose Houses

DOHMH identified a small cluster of Legionnaires' cases at NYCHA's Melrose Houses in the South Bronx, which prompted testing of the water distribution systems in the buildings of Melrose Houses. A preliminary positive test for the presence of Legionella pneumophila bacteria on September 2nd prompted more conclusive testing and immediate remediation measures out of an abundance of caution.

NYCHA Planning & Response:

• NYCHA established an Incident Command System structure immediately, and began coordinating its response and remediation efforts closely with DOHMH

- In consultation with DOHMH, NYCHA implemented a phased response:
 - Since Legionella is found in warm water, NYCHA turned off the hot water supply to building with a preliminary positive on the same day as the test results.
 - o A two-pronged remediation strategy was implemented:
 - Point-of-use filters within 24 hours of the preliminary test results, nearly 2,000 showerheads and faucet filters that screen out Legionella and other particulate were procured and installed in 109 apartments with unprecedented cooperation from residents. Hot water supply was restored following installation.
 - Ionization Systems filters were used while copper-silver ionization systems, which release ions that kill the Legionella bacteria could be procured and delivered. Filters were disconnected as ionization systems were installed to the first building within two days of the preliminary test results.
 - On September 4th, three additional buildings came back with preliminary positive Legionella test results. Hot water service was immediately suspended to the buildings out of an abundance of caution and coppersilver ionizations systems, which had been previously procured at the outset of the incident as a preparedness measure, were installed.
- Staff hours and supplies, and costs were closely tracked for accountability and to accurately report financial expenses.

• Residents: Within hours of the preliminary positive test results, NYCHA in partnership with DOHMH scheduled a community meeting that same day and posted flyers in buildings throughout the development and disseminated in person. Flyers contained notifications on hot water service, NYCHA's response, and Legionnaires' disease public health information. At the resident meeting, which was hosted by NYCHA's General Manager and the DOHMH Commissioner, residents were briefed on Legionella, preliminary test findings and NYCHA's response and provided an opportunity to ask questions (Spanish interpretation services were also provided.) A follow-up resident community meeting was held with NYCHA's operations staff to explain the filter installation process and reinforce the need for apartment access. Follow-up flyers on apartment access for filter installation were also disseminated. After test results were confirmed for all buildings, DOHMH and NYCHA officials held an English and Spanish telephone town hall over two days to answer questions and share the latest information with residents. A month after NYCHA's initial response, NYCHA held

- another town hall meeting to discuss new findings and the change in status of one test that had previously been tested positive to a negative.
- Staff: Melrose Houses employees and responding staff were briefed on the situation, command objectives and safety considerations in daily meetings. Follow up meetings were held with Melrose staff to provide additional information and training on the remediation systems installed. NYCHA's Office of Safety and Security sent an Authority-wide email to all employees to communicate NYCHA's response at Melrose Houses and provide general public health information on the disease. Daily status reports were sent to NYCHA managers, supervisors, deputy directors, directors, and executive staff.
- Stakeholders: NYCHA alerted elected officials and shared employee communications with Union leadership to keep them informed of the situation; press was also provided with updates and information.

Assessment:

- After Action surveys circulated by NYCHA's Office of Emergency Preparedness
- Post-event evaluation and discussion held, identifying areas for improvement:

*NYCHA Improvement Action: A <u>Legionella Bacteria Remediation Annex</u> was created and approved for the CEMP. The annex provides organization and structure to NYCHA's response and remediation efforts to the presence of <u>Legionella</u> bacteria in our properties.

September 2015 – Papal Visit

Designated a <u>National Special Security Event</u> by the U.S. Department of Homeland Security, the Papal visit to New York City in conjunction with the UN General Assembly was the largest security challenge in City history. On September 25th, the Papal visit included a visit to the Our Lady Queen of Angels School located across the street from NYCHA's Jefferson Houses in East Harlem. Security measures also impacted staff and residents in nearby developments.

Citywide Coordination: NYCHA participated in daily citywide planning meetings. The Secret Service served as the lead federal agency for the design and implementation of the operational security plan. A Multiagency Communications Center (MACC)—a source for all real time information sharing to all participating security agencies and a Joint Information Center (JIC) to ensure unified messaging and communications were established. NYCHA created staffing plans for representation at the MACC and JIC in the event it was requested.

NYCHA Planning & Response:

 NYCHA established an Incident Command System (ICS) structure to oversee its planning and response activities

- Three Incident Action Plans (IAPs) were developed and distributed to the NYCHA
 Emergency Preparedness All Call List. NYCHA's Emergency Preparedness All Call
 List that reaches NYCHA managers, supervisors, deputy directors, directors, and
 executive staff among others for uniformed cross-agency awareness of
 emergency information and activities.
- Operations conducted manhole inspections and sealing operations at the request of NYPD.
- Staff working in the immediate area of the Papal visit were instructed to review NYCHA's Emergency Procedure Manual specifically, Appendix G – Stoppage of Public Transportation and Appendix J-Central Office and Satellite Office Emergency Procedures, and evacuation assembly points as required by Standard Procedure 040:04:4, Fire Drills.
- Secret Service and the NYPD required three parking lots to be cleared for their purposes, which required NYCHA to identify 95 temporary parking spaces for permit holders and ensure proper notification.
- NYCHA communicated with employees and residents about security measures, including parking restrictions on NYCHA property, road closures and ID requirements for access.

- Prior to the Papal visit, flyer notifications in English and Spanish containing relevant information on the visit and potential disruptions were distributed to NYCHA residents and parking permit holders at Jefferson Houses, Johnson Houses and Washington/Lexington Houses.
- All affected resident parking permit holders also received two rounds of robocalls recorded in English and Spanish about parking restrictions.
- NYCHA staff and residents in the immediate Papal visit area, including Jefferson Houses, Corsi Houses, 335 East 111th Street, Clinton Houses, Johnson Houses, Taft Houses, King Towers, Milbank-Frawley, and Lehman Village were notified via flyers with Papal visit information, street closures, and requirements for carrying photo ID.

<u>October 2015 – Hurricane Joaquin</u>

At the end of September, Hurricane Joaquin was a Category 4 Hurricane in the Caribbean. With a significant amount of uncertainty of Joaquin's track and intensity, NYCHA, along with NYC Emergency Management and additional City agencies started coordinating preparations for any potential impacts of Joaquin, until the trajectory of the storm no longer indicated a risk of direct contact.

Citywide coordination: NYCHA participated in more than 10 City convened conference calls to discuss weather updates, staffing, logistics, transportation, food and data. NYCHA sent staff to the Emergency Operations Center (EOC) at NYCEM and staff to the Joint Information Center (JIC) as part of storm preparedness to support New Yorkers information needs.

NYCHA Planning & Response:

- NYCHA established an Incident Command System (ICS) to manage the event
- Equipment was mobilization, staffing capabilities and facility readiness was assessed, and emergency contracts were reviewed
- Vulnerable populations lists (persons with Disabled, Access or Functional needs (DAFN) residents and other relevant resident demographics) were prepared to facilitate emergency supportive services if needed
- Mapped population and development data and locations of potential emergency equipment, such as pumps and generators.
- Created a staff dorm and feeding plan to facilitate uninterrupted NYCHA response
- Capital, Planning and Development assessed construction projects and sidewalk scaffolding to identify any issues and took protective measures to shore up sites
- Reviewed and addressed any potential risks at Sandy reconstruction sites temporary electrical repairs were performed at O'Dwyer Gardens and trenches were secured at Coney Island Houses.

NYCHA Communications:

- Residents: Resident notification with pre-storm information and preparedness
 were refined and translated into Spanish, Russian and Chinese for distribution.
 Information about NYCHA's preparations was also distributed to tenant
 association presidents and community programs stakeholders.
- Staff: Daily incident action plans (IAPs) were created and disseminated to
 executives and NYCHA staff. Situational awareness reports (an average of six
 updates throughout the day) were distributed to the NCYHA Emergency
 Preparedness All Call List, NYCHA's communication network for uniformed crossagency awareness on emergency activities and background.
- Stakeholders: Elected officials and key stakeholders were updated on NYCHA's pre-storm actions.

RESPONSES TO RECOMMENDATIONS

We have reviewed the 19 recommendations included in the audit, many of which are in agreement with NYCHA's current preparedness actions. Please find our responses below:

- 1. Comptroller's Recommendation NYCHA should develop and implement an emergency preparedness plan to include an overall view of NYCHA's capabilities and potential hazards for major emergencies and identify its resources, crucial services, and operations needed before, during and after an emergency. The plan should include:
 - a. Defined roles and responsibilities for emergency management leadership.
 - b. Distinct hierarchy and levels of command and control for every type of emergency.
 - c. Specific methods of disseminating critical information to NYCHA employees regarding their roles and responsibilities for various types of emergencies.
 - d. A communication plan that includes specific methods for dissemination of emergency information to NYCHA employees, residents, relevant City agencies, and community groups.

NYCHA Response: NYCHA created the Office of Emergency Preparedness to help NYCHA better prepare for significant emergencies. The actions of the Office to-date align with and exceed the recommendations.

- At the direction of the General Manager, the Director of Emergency
 Preparedness has been tasked with managing large-scale emergencies.
- b. As noted in the Basic Emergency Operations section of the CEMP, the totality of the circumstances of the incident determine the expertise of the team required, and the incident management hierarchy is reflected in the organizational chart included in the Incident Action Plans.
- c. NYCHA's Office of Emergency Preparedness has routinely and consistently disseminated information on emergencies, preparedness actions, and response and recovery progress agency-wide to managers, deputy directors, directors, vice presidents, executive vice presidents, senior officers, and additional key staff via an email distribution list called the Emergency Preparedness All-Call. Information is provided by the staff within operating departments to their field staff via email, call lists, NYCHA Hotline (212-306-3000/8000) and in developments at daily musters with line staff. Additionally, NYCHA communicates directly with union representatives, City Hall, and elected officials including NYCHA Tenant Association Presidents, during large scale emergencies.
- d. NYCHA's Emergency Public Information Plan, finalized June 2015 and shared with the Comptroller's office outlines the dissemination of information to all stakeholders. NYCHA has also consistently taken a pro-active approach to

providing residents and stakeholders with emergency preparedness information through direct mail (Preparedness letter from GM, NYCHA Journal articles, social media, flyer creation and distribution, town halls, etc.)

2. Comptroller's Recommendation - Require each development to adhere to the Emergency Procedures Manual and develop, maintain, and continually update a staffing plan for maintaining essential services in the event of an emergency. For each development employee, the staffing plan should include contact information, home location, and means of reporting to work if public transportation is not available. The plan should also include specific guidelines and procedures for the staff to follow.

NYCHA Response: All developments have access to all current procedures and are expected to keep supervisors and staff up to date with them. Each development maintains contact information and home location for every employee. We make arrangements for alternate transportation during periods when travel has been significantly impacted, as per our public transportation strike procedure. Each emergency may require a different response and we create an appropriate staffing plan based on the circumstances. All preparations and plans are made based on available information, and are shared with the affected developments as decisions are made.

3. Comptroller's Recommendation - Utilize the Incident Command System structure for all emergencies as prescribed in the Manual. However, if NYCHA determines that it will institute a scalable ICS structure, then NYCHA should set up procedures that specifically state how and under what emergency circumstances the ICS and the ICS forms should be utilized.

NYCHA Response: The Comptroller's recommendation is in agreement with NYCHA's current use of the ICS structure, which we have instituted to manage several large-scale incidents since Superstorm Sandy. NYCHA's Incident Command System (ICS) organizational charts, forms and Incident Action Plans for Ebola, Winter Storm Juno, the Papal Visit, Melrose Houses Legionella, and Hurricane Joaquin were created and shared with the Comptroller's office. NYCHA will review the scalability and flexibility of its existing ICS procedures.

4. Comptroller's Recommendation - Implement a training and testing plan to ensure that staff is fully prepared to use the ICS.

<u>NYCHA Response:</u> A multi-year training and exercise schedule that includes ICS training and emergency plans evaluation will be part of the finalized NYCHA CEMP. In the meantime, NYCHA will continue to conduct various evaluations of its emergency

preparedness, response, recovery and mitigation efforts. During 2013-2014 there was a major initiative to provide ICS training and:

- a. 1153 NYCHA personnel completed ICS-100.B Introduction to Incident Command System
- b. 998 NYCHA personnel completed ICS -200.B ICS for Single Resources and Initial Action Incidents
- c. 543 NYCHA personnel completed ICS 300 Intermediate ICS for Expanding Incidents
- d. 63 NYCHA personnel completed ICS 400 Advanced ICS for Command and General Staff
- 5. Comptroller's Recommendation Develop and implement a plan to systematically conduct drills, exercises, and other training events at all the developments to enhance the effectiveness of emergency response.
 - **NYCHA Response:** A multi-year training and exercise schedule will be part of the finalized NYCHA CEMP. In the meantime, NYCHA conducts and participates in numerous drills, exercises and training events to determine additional means to enhance its emergency response, as well as participating in the city's tabletop exercises.
- 6. Comptroller's Recommendation Generate After Action Reports after each emergency, drill, and exercise to identify strengths and weaknesses in its emergency response.
 - **NYCHA Response:** For major emergencies, in addition to After-Action reports, NYCHA utilizes a variety of means recognized by the emergency management industry to identify strengths and weakness. These methods include conducting post event "hotwash" (an immediate discussion of the performance or response with participating staff), post event surveys, after-action conferences (post event in person discussion of the event performance or response), and/or the creation of improvement plans to capture feedback and evaluate drills, exercises and training, as outlined in the CEMP.
- 7. Comptroller's Recommendation Effectively use the AARs to change, enhance, and correct weaknesses to its emergency procedures. The changes should be included in NYCHA's Emergency Procedures Manual.
 - <u>NYCHA Response:</u> NYCHA will continue to address areas identified for improvement. Emergency procedures and plans will continue to be reviewed, revised and updated as appropriate.
- 8. Comptroller's Recommendation NYCHA should make a determination on how the Emergency Reporting System will be utilized going forward and ensure this information is clearly disseminated to NYCHA employees.

NYCHA Response: Executive and Emergency Services Department (ESD) staff uses this system for quickly compiling data on NYCHA's residents for planning purposes. The system is not used for communications.

9. Comptroller's Recommendation - Determine and clearly communicate which employees will have access to the Continuity of Operations Plan.

NYCHA Response: For the 2015 COOP update, the Authority adopted a department-level approach to the annual update of NYCHA's Continuity of Operations Plan. This approach includes the completion of a five, step by step survey forms and the creation, maintenance, and updating of unit level emergency contact lists by NYCHA staff. The 2015 COOP update is scheduled to be complete in December 2015. Senior managers are required to keep printed copies of the emergency contact lists for their unit at home and at work. On June 8th 2015, NYCHA's General Manager informed all NYCHA Directors of the updated COOP process via global email, which included the COOP surveys, COOP Frequently Asked Questions and COOP: What You Need to Know.

10. Comptroller's Recommendation - Develop deployment plans that would indicate when, where, and how employees would report to work and/or relocate to an alternate location during an emergency. These plans should include specific guidelines and procedures for the staff to follow.

NYCHA Response: Deployment plans are part of the staffing plan and are not created separately.

11. Comptroller's Recommendation - NYCHA should ensure that information on all disabled occupants is consistently and accurately recorded and reported in each of the relevant systems, files, and lists. This includes the number of disabled occupants residing at the location, the type of disability, and the emergency contact information.

NYCHA Response: NYCHA has relied on a process where changes to status were given in written form to development staff that entered it in TDS and file the paperwork in the resident folder. Recently NYCHA began to offer residents the option to update some information on-line and via the new NYCHA app.

12. Comptroller's Recommendation - Define what types of disabilities should be included on the hard copy lists maintained by the developments and ensure that this is sufficiently inclusive and consistent with other information maintained by NYCHA.

NYCHA Response: Development staff maintains lists of residents who have self-identified as relying on wheelchairs or life sustaining equipment. These disabilities have been selected because they are most impacted by power outages, which can also render computers inoperable. For emergencies that impact people with other challenges, the TDS system can be queried for residents who have provided information on other types of disabilities, as needed.

13. Comptroller's Recommendation - Accurately record information from the tenants' annual Occupants' Affidavit of Income in the Income Review Checklist and then accurately input it into the Tenant Data System.

NYCHA Response: This is a federal requirement, and NYCHA works to ensure compliance with the requirement. NYCHA is currently piloting on-line annual reviews for residents of public housing. Once fully implemented, the online process will allow all NYCHA residents to complete forms and submit supporting documentation online. Information provided will automatically be updated in the system of record, improving data entry and information collection.

14. Comptroller's Recommendation - Ensure that its developments receive and maintain an Occupant's Affidavit of Income for every tenant.

NYCHA Response: All residents are required to provide the Affidavit of Income annually, and, if any resident fail to comply NYCHA takes tenancy actions.

15. Comptroller's Recommendation - Develop a plan that will ensure that all emergency contact information for the disabled tenants is accurate and is being properly updated in NYCHA's TDS.

NYCHA Response: NYCHA requires staff input this information if it is provided. Going forward we will consider including this information in the data that can be submitted electronically as well.

- 16. Comptroller's Recommendation Maintain evidence that NYCHA staff attempted to contact disabled tenants in the event of an emergency and where of not contact was made, and
- 17. Comptroller's Recommendation Maintain evidence that disabled tenants' emergency contacts were notified when contact could not be made with the disabled tenants.

NYCHA Response to 16 & 17: Documentation of the outreach conducted by NYCHA for Superstorm Sandy was provided to the Comptroller's office and included information regarding who was contacted and who was not reachable. When NYCHA uses robo-calls to provide residents with information, reports are available regarding the success of the call. We are working with our City partners to determine the best way to contact NYCHA residents during large-scale emergencies moving forward.

18. Comptroller's Recommendation - NYCHA should ensure that developments comply with inventory procedures for emergency generators, and ensure that all generators are located as assigned, accounted for, and tagged.

NYCHA Response: NYCHA's Emergency Services, and Maintenance Repair and Skilled Trades Departments maintain the Authority's 16 emergency generators, 13 of which are trailer-mounted 60 KW generators that are slated to receive GPS tracking devices, which will provide real-time tracking information. The locations for each of these are tracked and they are available 24/7.

19. Comptroller's Recommendation - Ensure that all of the developments maintain and update their inventory.

NYCHA Response: The Comptroller's office has been working closely with NYCHA through the Inventory Working Group to overhaul our inventory process, which includes development management of their inventory.

Emergency preparedness is an ongoing practice that is constantly adapting to best practices, lessons learned and more effective planning tools, such as technology. As NYCHA finalizes components of our enhanced planning procedures, we will take the Comptroller's recommendations into consideration to mitigate any perceived or real risks to NYCHA's operations in emergency situations.

Sincerei

Michael Kelly General Manager

cc. Shola Olatoye Barbara Turkewitz