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## Acronyms/Abbreviations

C&D	construction and demolition
CFR	Code of Federal Regulations
County	Nassau County, New York
cy	cubic yard(s)
DCZ	Debris Control Zone
DDMP	(Nassau County [New York] Multi-Jurisdictional) Disaster Debris Management Plan
DMC	Debris Management Center
DMS	Debris Management Site
EOC	Emergency Operations Center
e-waste	electronic waste
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
HHW	household hazardous waste
MAC	Multi-Agency Coordination
mph	mile(s) per hour
NRC	National Response Center
NYCRR	New York Codes, Rules and Regulations
NYSDAM	New York State Department of Agriculture and Markets
NYSDEC	New York State Department of Environmental Conservation
NYSDMV	New York State Department of Motor Vehicles
NYSEMO	New York State Emergency Management Office
NYSDOT	New York State Department of Transportation
OEM	(Nassau County [New York]) Office of Emergency Management
OSHA	Occupational Safety and Health Administration
PESH	Public Employee Safety and Health Bureau
PIO	Public Information Officer
RCA	refrigerant-containing appliance
RMW	regulated medical waste
ROW	right-of-way
STOP	Stop Throwing Out Pollutants (Program)

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TIG	Transportation Infrastructure Group
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard

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## **1.1 AUTHORITY**

The Nassau County (New York) Multi-Jurisdictional Disaster Debris Management Plan (DDMP) is developed, promulgated, and maintained under the following federal statutes and regulations: Robert T. Stafford Disaster and Emergency Assistance Act, Public Law 93-288, as amended by Public Law 100-107; and Title 44 Code of Federal Regulations (CFR), Parts 13 and 206 (2008). [Two public laws in addition to 100-107 have amended the act.]

## **1.2 BACKGROUND**

Nassau County (County) is vulnerable to natural and human-caused disasters, each potentially resulting in large amounts of assorted debris. Following a disaster, the debris must be cleared, removed, and disposed of to reduce the potential threat to the health, safety, and welfare of the affected residents and community, as well as to expedite recovery efforts in the affected areas.

The Nassau County Office of Emergency Management (OEM) has the statutory responsibility to coordinate all County preparedness, response, and recovery planning efforts, including debris clearance, removal, and disposal. With input from various State and local agencies, the OEM developed a DDMP, which is presented in this document, to recover from a disaster more effectively. The focus of the DDMP is on the debris management activities that are likely to be needed after a hurricane or nor'easter event, but the plan can also be used to coordinate debris clearance, removal, and disposal for any type of debris-generating emergency or disaster.

## **1.3 PURPOSE**

Nassau County, with support from its two cities, three towns, and 64 incorporated villages, has developed this DDMP to facilitate and coordinate the management of debris following an emergency or disaster.

This DDMP provides guidance for Nassau County and its municipalities to:

- Create an organizational structure to oversee coordinated debris management activities throughout the County
- Estimate disaster-generated debris and determine capabilities and needs to clear debris from priority routes
- Determine the types of contracts and contractors needed to assist in various phases of debris management
- Establish the most efficient and cost-effective operation and management of debris removal from public rights-of-way (ROWs), public facilities, private and recreational areas, and private property
- Develop public outreach information to notify residents of appropriate debris removal and disposal activities
- Determine the best way to dispose of debris (e.g., mulching clean-wood debris, maximizing the recycling of construction and demolition [C&D] debris)

- Ensure that the Federal Emergency Management Agency (FEMA) Public Assistance Program eligibility requirements, local and State health and safety procedures, and other required regulatory permits and licenses are understood and adhered to throughout the debris management process

## **1.4 ASSUMPTIONS**

The development of the DDMP was based on the following assumptions:

- A major natural disaster can occur at any time, but hurricanes are most likely to occur during the active Atlantic hurricane season (from June 1 to November 30), and nor'easters are most likely to occur during the nor'easter season (from October 1 through April 30).
- Hurricanes and nor'easter events generate a variety of debris, but it consists primarily of clean-wood and C&D debris.
- The amount of debris resulting from a major natural disaster will likely exceed the ability of the municipal personnel (hereafter referred to as "force account labor") of Nassau County and its municipalities to clear, remove, and dispose of the debris.
- If the emergency or disaster necessitates it, the Governor will declare a state of emergency that authorizes State agencies to temporarily suspend or reduce certain State regulations and requirements.
- If the emergency or disaster necessitates it, the Governor will declare a state of emergency that authorizes the use of State resources to assist in the removal and disposal of debris. If the event overwhelms State resources, the Governor will request, through FEMA, a Presidential Disaster Declaration.
- If the event is Presidentially declared as a major disaster, Nassau County and its municipalities will request supplemental disaster assistance under the FEMA Public Assistance Program for costs associated with applicants, facilities, and work deemed eligible, according to FEMA eligibility criteria and in compliance with special consideration requirements.
- Nassau County and its municipalities may use FEMA mission-assigned contractors, including the U.S. Army Corps of Engineers (USACE), or procured contractors to assist in some or all phases of debris management, including the clearance, removal, and disposal of the debris; debris operations monitoring; and private property demolition.

## **1.5 APPROACH**

Nassau County's approach to managing debris after an emergency or disaster using contractors or force account labor is detailed in Sections 1 through 8 of this plan.

Table 1-1 is an outline of the plan. Appendix A contains a timeline and flow chart for carrying out all phases of debris management.



**Table 1-1 Disaster Debris Management Plan Framework**

<b>Section 1. Introduction</b>	<ul style="list-style-type: none"> <li>1.1 Authority</li> <li>1.2 Background</li> <li>1.3 Purpose</li> <li>1.4 Assumptions</li> <li>1.5 Approach</li> </ul>
<b>Section 2. Disaster-Generated Debris.</b> Typical debris generated from disasters, types of disasters that could occur in Nassau County, and types and quantity of debris generated from hurricane or nor'easter events.	<ul style="list-style-type: none"> <li>2.1 Primary Types of Debris</li> <li>2.2 Types of Debris-Generating Events</li> <li>2.3 Hurricane and Nor'easter Debris</li> </ul>
<b>Section 3. Roles and Responsibilities.</b> Local roles and responsibilities for personnel involved in managing debris activities. Roles and responsibilities are defined for the Emergency Operations Center, Debris Management Center, Debris Management Team, Damage Assessment Teams, and Multi-Agency Coordination group.	<ul style="list-style-type: none"> <li>3.1 Emergency Operations Center</li> <li>3.2 Debris Management Center</li> <li>3.3 Debris Management Team</li> <li>3.4 Damage Assessment Teams</li> <li>3.5 Multi-Agency Coordination Group</li> </ul>
<b>Section 4. Debris Clearance.</b> Concepts of operations for contracted and force account labor in debris clearance activities.	<ul style="list-style-type: none"> <li>4.1 Advance Notice</li> <li>4.2 Debris Management Center Activation</li> <li>4.3 Rapid Damage Assessment</li> <li>4.4 Debris Clearance Priorities</li> <li>4.5 Multi-Agency Coordination Group Coordination</li> <li>4.6 Debris Clearance Personnel</li> <li>4.7 Debris Clearance Strategy</li> <li>4.8 Public Information</li> </ul>
<b>Section 5. Debris Removal.</b> Concepts of operations for contracted and force account labor in debris removal and monitoring activities.	<ul style="list-style-type: none"> <li>5.1 Initial Damage Assessment</li> <li>5.2 Debris Management Site Requirements</li> <li>5.3 Multi-Agency Coordination Group Coordination</li> <li>5.4 Public Information</li> <li>5.5 Debris Monitoring Personnel</li> <li>5.6 Debris Removal Personnel</li> <li>5.7 Debris Monitoring Strategy</li> <li>5.8 Debris Removal Strategy</li> </ul>
<b>Section 6. Debris Reduction and Disposal.</b> Concept of operations for both contracted and force account labor debris disposal, including the coordination and management of Debris Management Sites and recycling efforts.	<ul style="list-style-type: none"> <li>6.1 Multi-Agency Coordination Group Coordination</li> <li>6.2 Debris Disposal Personnel</li> <li>6.3 Debris Management Site Preparation</li> <li>6.4 Debris Reduction and Disposal Strategy</li> <li>6.5 Debris Management Site Close-Out</li> <li>6.6 Collection Sites</li> </ul>
<b>Section 7. Contracting/Procurement Procedures.</b> Contracting and procurement procedures, including types of debris removal contracts, competitive contracting procedures, and contract documentation requirements.	<ul style="list-style-type: none"> <li>7.1 Contracting Process</li> <li>7.2 General Provisions</li> <li>7.3 Specific Types of Contracts</li> <li>7.4 Contracting Avoidances</li> </ul>

**Table 1-1 Disaster Debris Management Plan Framework**

<b>Section 8. Private Property Demolition.</b> Debris management for private property demolition, including building safety evaluation and FEMA Public Assistance Program eligibility.	8.1 Building Safety Evaluation 8.2 Private Property Demolition 8.3 Public Assistance Program Demolition Funding
<b>Appendices A through O.</b> Supporting information, including a Debris Management Timeline (Appendix A) and FEMA publications on debris management (Appendix O).	A Example Debris Management Timeline and Debris Management Flow Chart B Debris Forecasting and Estimating Models C Contact Information D Damage Assessment Forms E Debris Control Zones F Priority Clearance Routes G Pre-qualified Contractors H Debris Removal Forms I Health and Safety Forms J Debris Management Sites K Solid Waste Management Facilities L Solid Waste Management Landfills M Hazardous Waste, HHW, and RMW Facilities N E-Waste Facilities O FEMA Publications

## 2.1 PRIMARY TYPES OF DEBRIS

Nassau County is at risk for several types of disasters, particularly hurricanes and nor'easters. The quantity and type of debris generated from each of these events is a function of the location and type of event, as well as its duration and intensity. Table 2-1 contains a description of the primary types of debris generated from natural and human-caused events.

It is important to note that not all of the debris listed in Table 2-1 is eligible for removal assistance under the FEMA Public Assistance Program. To be eligible for FEMA funding, the debris removal work must be a direct result of a Presidentially Declared Disaster, occur within the designated disaster area, and be the responsibility of the applicant (i.e., the entity or person applying for FEMA funding) at the time of the disaster. In addition, the debris removal work must be necessary to eliminate an immediate threat to lives, public health, and safety; eliminate threats of significant damage to improved public or private property; or ensure the economic recovery of the affected community to the benefit of the community at large.

**Table 2-1 Primary Types of Debris**

<b>Primary Type of Debris</b>	<b>Contents</b>
Clean Wood	Whole trees, tree stumps, tree branches, tree trunks, and other leafy material.
Construction and Demolition (C&D)	Such waste includes, but is not limited to bricks, concrete and other masonry materials, soil, rock, wood (including painted, treated and coated wood and wood products), wall coverings, plaster, drywall, plumbing fixtures, non-asbestos insulation, roofing shingles and other roof coverings, asphaltic pavement, glass, plastics that are not sealed in a manner that conceals other wastes, empty buckets ten gallons or less in size and having no more than one inch of residue remaining on the bottom, electrical wiring and components containing no hazardous liquids, and pipe and metals that are incidental to any of the above.
Hanging Limbs and Hazardous Tree Stumps	Limbs and stumps greater than 24 inches in diameter located on improved public property or a ROW if the limbs or stumps pose immediate threats to life and public health and safety.
Hazardous Waste	Commercial, agricultural, industrial, and toxic waste that is regulated under the Resource Conservation and Recovery Act and contains properties that make it potentially harmful to human health or the environment. In regulatory terms (as defined by the Resource Conservation and Recovery Act), a hazardous waste is a waste that appears on one of the four hazardous waste lists or exhibits at least one of the following four characteristics: ignitability, corrosivity, reactivity, and toxicity. Examples of hazardous and/or special waste include asbestos, creosote, high-intensity discharge lamps, used oil, waste tires, and lumber pressure-treated with chromate copper arsenate.
Household Hazardous Waste (HHW)	Products and materials that are used and disposed of by residential consumers rather than commercial or industrial consumers. HHW includes pesticides and insecticides, motor oil and antifreeze, brake and transmission fluids, solvents, paints (enamel, lead-based and latex), drain and oven cleaners, photochemicals, spot removers, wood preservatives, automobile tires and batteries, small aerosol cans, consumer batteries, outdoor gas grill propane tanks, and fluorescent bulbs.
Electronic Waste (e-waste)	Electronics that contain hazardous materials such as cathode ray tubes, including computer monitors and televisions.

**Table 2-1 Primary Types of Debris**

<b>Primary Type of Debris</b>	<b>Contents</b>
White Goods	Household appliances including ovens, stoves, washers, and dryers. Refrigerant-containing appliances including refrigerators, freezers, and window air conditioner units.
Brown Goods	Furniture such as couches, mattresses, tables, and chairs.
Utility	Power transformers, utility poles, cable, and other utility company material.
Vehicles and Vessels	Vehicles and vessels damaged, destroyed, relocated, or lost as a result of the emergency or disaster.
Sediment	Soil, mud, and sand deposited on improved public property and ROWs by the emergency or disaster.
Putrescent	Any debris that will decompose or rot, such as animal carcasses and other organic matter.
Regulated Medical Waste (RMW)	Cultures and stocks of infectious agents, human pathological wastes, human blood and blood products, sharps, and animal wastes. Does not include medical waste created at home.
Private Property	Debris, generally C&D, located on private property.

## 2.2 TYPES OF DEBRIS-GENERATING EVENTS

As noted in Section 1, this DDMP focuses on debris that is generated by the two most common types of disaster events in Nassau County—hurricanes and nor’easters—but Nassau County is also vulnerable to other types of disasters, including urban fires, civil unrest, and hazardous material events.

Table 2-2 is a list of the types of potential disasters, their associated hazards, the primary types of debris, and debris locations in Nassau County.

## 2.3 HURRICANE AND NOR’EASTER DEBRIS

The most common types of hurricane- and nor’easter-generated debris are clean wood, C&D, and sediments (soil, mud, and sand) that are washed inland as a result of storm surge. The type and amount of debris can vary, depending on the category and diameter of the storm, amount of precipitation, intensity of the storm surge, amount of land cover, and the built environment.

FEMA has developed a software model to help communities estimate the type and amount of debris that could result from a hurricane or nor’easter event. The model, known as the HAZUS-MH MR3 Hurricane Model, allows users in the Atlantic Coast and Gulf Coast regions and in Hawaii to estimate building and tree debris quantities from different hurricane categories. Table 2-3, Table 2-4, and Appendix B (Figures B-1 through B-18) show the forecasted amounts of debris generated by this model.

Table 2-2 Debris-Generating Events

Event	Hazard	Extent	Primary Debris Type	Likely Location
<b>Hurricane and Nor'easter</b>	High/extreme wind	Tropical Storm = 39–73 mph Category 1 = 74–96 mph Category 2 = 96–110 mph Category 3 = 111–130 mph Category 4 = 131–155 mph	Category 1: Clean wood and little C&D from mobile homes Category 2: Clean wood and moderate C&D from mobile homes Category 3: Clean wood and major C&D from mobile, frame, and utility structures, white and brown goods Category 4: Clean wood, extensive C&D from all small buildings; white and brown goods, HHW, e-waste, vehicles and vessels, and putrescents	Countywide, particularly within the Town of Hempstead and the south shore barrier islands, where development is the most dense.
	Tornado	Can be spawned by hurricanes: F0 = 40–72 mph F1 = 73–112 mph F2 = 113–157 mph	F0: Clean wood, little C&D from mobile homes F1: Clean wood, little C&D from mobile homes F2: Clean wood, moderate C&D from mobile and frame structures, vehicles	Countywide
	Coastal erosion	Moderate hurricanes and nor'easters, 4–10 cy/foot on severe/extreme hurricanes and nor'easters, 10–20 cy/foot (an average volume of sand eroded above mean sea level from beaches more than 5 miles long)	Sediment, C&D	Northern and southern portions of the coastline (including the south shore barrier island communities), in particular communities located within the Coastal Erosion Hazard Areas
	Wave action	Up to 20 feet at its peak	Sediment, C&D	North and south shore communities located within the FEMA 100-year floodplain with wave affects (Zone V), which are extensive in the south shore barrier island coastal areas fronting the Atlantic, as well as north shore coastlines facing north and east

Table 2-2 Debris-Generating Events

Event	Hazard	Extent	Primary Debris Type	Likely Location
<b>Hurricane and Nor'easter (cont.)</b>	Storm surge	Up to 20 feet at its peak and can impact many miles of coast	C&D, clean wood, sediment, white and brown goods, vessels and vehicles	Contained relatively close to the shoreline in most communities along the north shore; along south shore, storm surge could inundate areas to/past the Southern State Parkway
	Flood inundation	Up to 20 inches of rain during a 24-hour period, 10–15 inches most likely	C&D, clean wood, sediment, white and brown goods	Most likely within the FEMA 100-year floodplain (Zone A) area along the south shore and south shore barrier island communities along the Atlantic Ocean and various bay backs along the north shore of Long Island Sound
<b>Winter Storm/ Ice Storm</b>	Heavy precipitation (generally accompanied by high wind)	4 or more inches of snow in a 6-hour period High density of blowing snow with visibility frequently below 0.25 mile Significant accumulations of solid pellets formed from freezing of rain drops	C&D, clean wood	Countywide, particularly within the Town of Hempstead and the south shore barrier islands, where development is densest
<b>Earthquake</b>	Ground shaking	M 1.0–4.0	None to very light amounts of C&D	Countywide
<b>Landslide</b>	Soil slides and debris flows	Limited information, but previous landslides indicate depths of 3–5 feet	C&D, clean wood, sediment, white and brown goods, vehicles	Hilly areas north of the Long Island Expressway

**Table 2-2 Debris-Generating Events**

<b>Event</b>	<b>Hazard</b>	<b>Extent</b>	<b>Primary Debris Type</b>	<b>Likely Location</b>
<b>Tornado/ Windstorm</b>	High/extreme wind	F0 = 40–72 mph F1 = 73–112 mph F2 = 113–157 mph	F0: Clean wood, little C&D from mobile homes F1: Clean wood, little C&D from mobile homes F2: Clean wood, moderate C&D from mobile and frame structures, vehicles	Countywide, particularly along the coast and within 20 miles of the coast
<b>Hazardous Material Event</b>	Chemical, radiation, and biological exposure	Unknown	C&D, clean wood, sediment, white and brown goods, putrescent	Long Island Expressway, railroad tracks, and Extremely Hazardous Substances facilities

Source: FEMA HAZUS-MH MR3 Hurricane Model

C&amp;D = construction and demolition

HHW = household hazardous waste

cy = cubic yard(s)

M = magnitude

FEMA = Federal Emergency Management Agency

mph = mile(s) per hour

**Table 2-3 Forecasted Debris by Municipality (City, Town, County)**

Hurricane Category	Municipality	Type and Quantity of Debris (in cubic yards)		Total (in cubic yards)
		C&D	Clean Wood	
<b>1*</b>	City of Glen Cove	0	23,272	23,272
	City of Long Beach	0	3,895	3,895
	Town of Hempstead	0	71,115	71,115
	Town of North Hempstead	0	41,682	41,682
	Town of Oyster Bay	0	206,313	206,313
	<b>Total Nassau County</b>	<b>0</b>	<b>346,277</b>	<b>346,277</b>
<b>3</b>	City of Glen Cove	357,492	154,662	512,154
	City of Long Beach	319,672	30,958	350,630
	Town of Hempstead	796,700	739,161	1,535,861
	Town of North Hempstead	293,644	340,833	634,477
	Town of Oyster Bay	1,422,356	1,451,420	2,873,776
	<b>Total Nassau County</b>	<b>3,189,864</b>	<b>2,717,034</b>	<b>5,906,898</b>
<b>4</b>	City of Glen Cove	999,712	252,748	1,252,460
	City of Long Beach	1,005,264	45,506	1,050,770
	Town of Hempstead	3,669,260	1,413,281	5,082,541
	Town of North Hempstead	1,846,184	849,164	2,695,348
	Town of Oyster Bay	5,927,800	2,957,615	8,885,415
	<b>Total Nassau County</b>	<b>13,448,220</b>	<b>5,518,314</b>	<b>18,966,534</b>

Source: FEMA HAZUS-MH MR3 Hurricane Model

\*Category 1 hurricane event-generated debris is equivalent to a nor'easter event-generated debris

To convert from tons to cubic yards:

For C&D debris, multiply tons by 4

For clean wood debris (uncompacted, unchipped, clean wood debris), multiply tons by 10

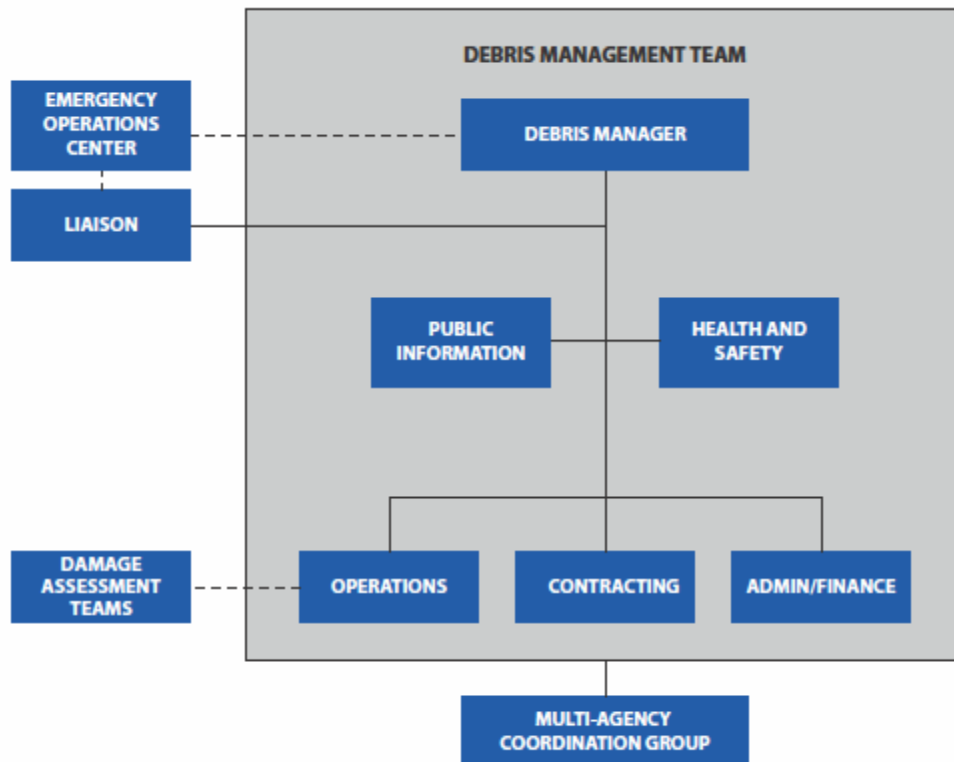
To convert from cubic yards to tons:

For C&D debris, divide cubic yards by 4

For clean wood debris (uncompacted, unchipped), divide cubic yards by 10



This section provides the framework for the coordination of the efforts of all government entities in Nassau County that will be involved in debris management activities. The location and operation of the Emergency Operations Center (EOC) and Debris Management Center (DMC), as well as the roles and responsibilities of the Debris Management Team, Damage Assessment Teams, and Multi-Agency Coordination (MAC) group, are discussed. The organizations involved in debris management in Nassau County are shown in Chart 3-1.



**Chart 3-1. Nassau County Debris Management Organization**

### 3.1 EMERGENCY OPERATIONS CENTER

During a disaster, the Nassau County EOC Director will activate the EOC and bring together County, volunteer, community government, and State and federal entities to assist in the response and recovery. The Nassau County EOC is located at 100 Carman Avenue, East Meadow, NY 11554. The main telephone number for the EOC is (516) 573-0636, and the website address for the OEM is: <http://www.nassaucountyny.gov/agencies/OEM/index.html>

The EOC Director or designated representative will have the following responsibilities:

- Place the Debris Management Team on alert after a severe weather condition watch is issued
- Activate the DDMP and DMC after a warning for a disaster has been issued or as necessary

- Work with the Debris Manager and Operations function of the Debris Management Team to assess the situation and establish priorities for debris clearance
- Work with the Debris Manager to determine if and when local resources become overwhelmed and assess the need for additional State and federal resources
- Place a formal Mission Request with the New York State Emergency Management Office (NYSEMO) for debris clearance, removal, disposal, and/or monitoring assistance

### **3.2 DEBRIS MANAGEMENT CENTER**

The DMC is organized to provide a central location for the coordination of all debris management activities. Initially, the DMC will be located at the Nassau County EOC. However, if possible, the DMC will be transferred to the Nassau County Department of Public Works if and when the EOC closes. The Nassau County EOC Director will activate the DMC, Debris Management Team, and DDMP simultaneously. The Debris Management Team will be responsible for coordinating all immediate and long-term debris management activities, including after the EOC has closed.

### **3.3 DEBRIS MANAGEMENT TEAM**

The Debris Management Team, with the consent of the Nassau County EOC Director, will be responsible for implementing the DDMP. Similar to the structure of a typical Incident Command, the contracted and/or County-staffed Debris Management Team will consist of a command staff, including a Debris Manager, Public Information Officer (PIO), Liaison Officer, Health and Safety Officer, and general staff for three essential functions—Operations, Contracting, and Administration/Finance. With the exception of the Debris Manager, the command staff and general staff can be expanded to more than one person per position, if needed.

In general, the Debris Management Team will be under the direction of the Debris Manager. Command and general staff will have the following responsibilities:

- Oversee rapid damage assessments and establish debris clearance priorities
- Oversee initial damage assessments and determine the number of Debris Management Sites (DMS[s]) needed
- Work with the MAC group to determine the need for debris clearance, removal, and disposal contractors and debris monitors
- Execute prequalified contracts on behalf of the municipalities
- Work with the MAC group to determine priority DMSs
- Establish a debris removal strategy
- Inform the public about debris removal and disposal procedures
- Ensure that all contractors and force account labor adhere to all federal, State, and local health and safety procedures and environmental and regulatory permit requirements

- Ensure the proper documentation of debris estimates, procurement information, contracts, invoices, and monitoring information
- Coordinate debris management activities with the NYSEMO, New York State Department of Environmental Conservation (NYSDEC), New York Department of Motor Vehicles (NYSDMV), New York State Department of Transportation (NYSDOT), and the New York State Department of Agriculture and Markets (NYSDAM)
- Through NYSEMO, coordinate debris management activities with FEMA, the USACE, and the U.S. Environmental Protection Agency (EPA), as needed

### **3.3.1 Debris Manager**

The Debris Manager will be from the Nassau County Department of Public Works or an independent contractor under standby contract with Nassau County prior to a disaster or emergency. The Debris Manager will be responsible for implementing the DDMP and will oversee all activities and tasks carried out by the Debris Management Team in the DMC.

The Debris Manager will be responsible for, but not limited to, the following activities:

- In conjunction with the Debris Management Team Liaison Officer, make contact with the EOC and provide the Debris Management Team with EOC updates, as needed
- Review the DDMP upon activation of the DMC
- In conjunction with the Operations function of the Debris Management Team, review rapid and initial damage assessments
- In conjunction with the EOC Director or designated representative and the Operations function, establish debris-clearing priorities and monitor performance of work within established timeframes.
- Discontinue the clearing operations when appropriate.
- Conduct daily briefings with key County and State officials.
- Establish and maintain direct coordination with County and State officials regarding State permits and regulations
- Work directly with NYSEMO, and if needed with FEMA, regarding all federal assistance debris management activities

### **3.3.2 Liaison Officer**

The Debris Management Team Liaison Officer(s) will be from the County Public Works Department and will be based at the Nassau County EOC. The role of the Liaison Officer is to serve as the point of contact for assisting and coordinating activities between the EOC and DMC and various agencies and groups, including Congressional personnel and local government officials. The Liaison Officer will have the following responsibilities:

- Receive current information on the severity of the disaster from the EOC and disseminate appropriate information to the DMC

- Coordinate with Debris Management Team staff on all requests for debris activities initiated by Nassau County OEM staff

### **3.3.3 Public Information Officer**

The PIO will be from the Nassau County EOC or be designated by the County Commissioner. The PIO will be responsible for disseminating debris information to the local press and other municipalities. The PIO will have the following responsibilities:

- Coordinate the dissemination of information through various outlets, including the press, County, and municipalities
- Prepare and issue public information announcements regarding household garbage and recycling services; landfill, transfer station, and bin drop-off locations; curbside, HHW, and electronic waste (e-waste) collection; hazardous waste spills and releases; building safety; private property demolition; and illegal dumping

### **3.3.4 Health and Safety Officer**

The Health and Safety Officer will be from the County Health Department. The role will be to ensure the personal health and safety of all contracted staff, assess and/or anticipate hazardous and unsafe situations, and enforce local and state health regulations. The Health and Safety Officer will have the following responsibilities:

- Review and provide input on any health and safety issues recorded in the Debris Roving Monitors Daily Issue Log
- Collect and file a health and safety strategy from each contractor prior to commencement of debris clearance, removal, disposal, and monitoring work
- Distribute the Occupational Safety and Health Administration (OSHA) Hurricane eMatrix, Fact Sheets, or QuickCards (see Appendix I), as needed
- Conduct weekly field visits to monitor each contractor's health and safety strategy and require contractors who do not follow the minimum safety standards to take corrective actions immediately

### **3.3.5 Operations Function**

The Operations function of the Debris Management Team will consist primarily of staff from the County Public Works Department, with support from County Parks, Recreation, and Museums. The main role of the Operations function will be to oversee the debris clearance, removal, and disposal operations and to determine the need for contractors. The operations staff will have the following responsibilities:

- Assign Damage Assessment Teams to conduct rapid and initial damage assessments
- Review damage assessment information from the multi-agency Transportation Infrastructure Group (TIG), the FEMA HAZUS-MH MR3 Hurricane model, and/or the USACE Debris Estimation Model

- In conjunction with the Debris Manager, review rapid and initial damage assessments conducted by the Damage Assessment Teams
- In conjunction with the EOC Director or designated representative and the Debris Manager, establish debris-clearing priorities
- Oversee debris clearance with the Debris Manager and determine when to end debris clearance operations
- Determine the number of clean-wood and mixed C&D DMSs
- In conjunction with the Contracting function, conduct conference calls with the MAC group to:
  - Review rapid and initial damage assessment results and other damage assessment information provided by the TIG
  - Establish debris clearance priorities
  - Determine the need for contractors to clear debris
  - Define the number of DMSs needed for debris storage
  - Establish the location of DMSs
  - Explain debris removal and disposal monitoring strategy
  - Determine the need for contractors to monitor debris removal and disposal
  - Explain debris removal and disposal strategy
  - Determine the need for contractors to clear, remove, and dispose of debris
  - Inform municipalities that they will need to provide the Contracting function with local permits for contractor-operated DMSs within their municipal boundaries
- Work with the Contracting function to ensure that all contract costs are reasonable
- In conjunction with the Contracting function, the NYSDEC, and EPA, determine the need for hazardous waste contractors
- Manage field operations, including resolving any issues with the contractors and monitors
- Oversee the DMS preparation, operation, and close-out procedures
- In conjunction with the NYSDEC, NYSDAM, NYSDMV, and EPA, determine final disposal methods for the following types of debris: clean wood; C&D; brown goods; white goods; putrescents; vehicles and vessels; sediment; and hazardous waste, including refrigerant-containing appliances (RCAs), regulated medical waste (RMW), asbestos (contaminated C&D), waste tires, HHW, and e-waste

**3.3.6 Contracting Function**

The Contracting function will consist of County Purchasing staff. The Contracting function's main role will be to execute prequalified contracts based on the needs determined by the Operations function and/or municipalities. The Contracting function will have the following responsibilities:

- Contact all contractors holding prequalified debris clearance, removal, monitoring, and disposal contracts and advise them of current and imminent conditions
- Work with the Operations function and municipalities (via a MAC group representative) to determine the need for contracted debris clearance, removal, monitoring, and disposal contractors
- Comply with County procurement practices and the procurement competition requirements specified in 44 CFR Part 13.36
- Contact prequalified contractors and execute Time-and-Material contracts for debris clearance, Unit-Price and Time-and-Material contracts for debris removal, and Unit-Price and Lump-Sum contracts for debris disposal
- Contact prequalified monitors and execute Cost-Plus Fixed Fee or Firm-Fixed Price contracts with progress payments for monitoring debris removal and disposal activities
- Provide the Operations function with daily updates of active, terminated, and completed contracts
- Work with the Operations function to ensure that all contract costs are reasonable
- Ensure that all contracts issued have a reasonable period of performance for the work
- Document procedures used to obtain all contractors
- Serve as the County liaison with the contractors

**3.3.7 Administration/Finance Function**

The Administration/Finance function will include staff from the Office of the County Clerk, Human Resources, and/or Purchasing. The main responsibility of the Administration/Finance function will be to maintain accurate and detailed records to comply with FEMA Public Assistance Program requirements for reimbursement. Administration/Finance will have the following responsibilities:

- Collect, document, and file Daily Work Inspection Reports for all debris clearance contractors (using Time-and-Material contracts) on a daily basis during debris clearance activities
- Collect, document, and file paper or electronic load tickets and other debris monitoring forms and checklists from the Debris Monitoring Supervisors
- For all contracts, collect, document, and file a copy of the contract and all invoices for that contract, a copy of the contract advertisement, prequalified contract information, a list of

bidders, and proof that the work was awarded to the low-bid contractor (or documentation on why the low bid was not accepted)

- In conjunction with the Debris Manager and the Operations function, hold a conference call with the MAC group to ensure that each municipality documents the straight time and overtime hours for all force account labor, the amount of time each employee worked on debris management–related work and the type of work completed, and any equipment and materials/supplies used for completed debris management work

### **3.4 DAMAGE ASSESSMENT TEAMS**

The Damage Assessment Teams will consist of County Public Works Department staff. Local municipalities may also provide their own Damage Assessment Teams to conduct damage assessments within their municipal boundaries. The Damage Assessment Teams will have the following primary responsibilities:

- Conduct local rapid damage assessments based on the instructions given by the Operations function
- Conduct initial damage assessments based on the instructions given by the Operations function

### **3.5 MULTI-AGENCY COORDINATION GROUP**

The Multi-Agency Coordination MAC group will consist of at least one representative from each municipality (city, town, or village) in Nassau County. Contact information is provided in Appendix C. Generally, the representative will be from a local Public Works Department. Each representative in the MAC group will have the following responsibilities:

- Participate in all conference calls with the Debris Management Team
- Distribute pertinent information to other municipal agencies and departments
- Determine municipal capability to monitor and conduct debris clearance, removal, and disposal operations
- Work with the Contracting function to execute the appropriate contracts for the municipality
- Ensure that the municipality thoroughly documents the straight time and overtime hours for all force account labor, the amount of time each employee worked on debris management–related work and the type of work completed, and any equipment and materials/supplies used for completed debris management work

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This section provides the concept of operations for debris clearance. Debris clearance operations will begin approximately 36 hours before events with warning, such as hurricane or nor'easter conditions in the mid-Atlantic region, or immediately after events without warning, such as an earthquake. The majority of this phase will consist of clearing debris that hinders immediate life-saving actions within the disaster or emergency area and that poses an immediate threat to public health and safety. During this phase, no attempt will be made to physically remove or dispose of debris. Rather, debris will only be cleared or pushed to roadway shoulders or away from entrances and exits of critical facilities or essential utilities. This phase will generally last up to 7 days. However, the timeframe of this phase depends on the severity of the event, the availability of force account labor and contracted resources, and the extent of damage from the event.

#### **4.1 ADVANCE NOTICE**

The EOC Director or designated representative will place the Debris Management Team on alert when the County Executive has requested a Pre-Landfall Emergency Declaration from the Governor. During this alert operational level, the Debris Management Team staff will be ready to report to the DMC.

The EOC Director or designated representative will formally activate the DDMP and DMC within 24 hours of expected landfall of the event. During this heightened alert operational level, the Debris Management Team staff will report to the DMC immediately.

#### **4.2 DEBRIS MANAGEMENT CENTER ACTIVATION**

In the event of a disaster, the Debris Management Team will gather at the DMC upon activation and immediately carry out the following tasks:

- The Debris Manager and/or Debris Management Team Liaison Officer will make contact with the EOC and provide the Debris Management Team with EOC updates, as needed.
- The Debris Manager and the Operations function will review the DDMP.
- The Debris Manager and the Operations function will review the data generated by the HAZUS-MH MR3 Hurricane models and/or USACE model (see Appendix B) and initiate call-up of standby and extra Debris Management Team personnel, including the Damage Assessment Teams.
- The Contracting function will contact the prequalified contractors and advise them of imminent conditions.
- The PIO will review and become familiar with the public information announcements and press lists.
- The Operations function will make contact with the MAC group through Swift Reach (or through an 800-MHz radio system as a backup) and inform them that the DMC has been activated. This announcement will also contain DMC contact information and approximate times and dates of future calls.

### **4.3 RAPID DAMAGE ASSESSMENT**

Upon activation of the DMC, local rapid damage assessments will be conducted after any event in which disaster and debris intelligence is needed. Based on the severity of the event, local, State and federal assessment resources may be activated. The costs of damage assessments conducted by the County, municipality, or contractors are not eligible for FEMA Public Assistance Program reimbursal funding.

The Operations function will instruct the Damage Assessment Teams (County Public Works Department and capable municipalities) to conduct rapid damage assessments as soon as the disaster has occurred, or after the hurricane or nor'easter has made landfall, passed, or dissipated. Each team, consisting of a minimum of two people, will complete the Rapid Damage Assessment form (see Appendix D) based on visual observations of road conditions within the team's assigned Debris Control Zone (DCZ). See Appendix E for information on DCZs. Each DCZ is 22.37 square miles (4.73 miles by 4.73 miles). The Rapid Damage Assessment form are based on a structure developed New York Disaster Preparedness Commission Highway Emergency Task Force.

Each team will spend up to 2 hours in the assigned DCZ recording the accessibility to major county routes, trafficked County and local roads, evacuation and snow emergency routes, fire and police stations, hospitals, and the County EOC. The team will submit the completed form to the Operations function immediately. Municipalities may conduct their own rapid damage assessments using the Rapid Damage Assessment form or other types of damage assessment documentation and provide this information to the Operations function. The Damage Assessment Teams should complete the rapid damage assessment within a total of 12 hours.

The Operations function and/or municipality may also want to conduct rapid damage assessments using the data generated by the HAZUS-MH MR3 model for each DCZ (see Appendix B, Table B-1) and the USACE Debris Estimation Model (see Appendix B). During this time, the Operations function should also contact the TIG, which will be recording the accessibility and condition of utilities, and the NYSDOT, for additional damage assessment input.

### **4.4 DEBRIS CLEARANCE PRIORITIES**

The Debris Manager, Operations function, and EOC Director or designated representative will contact the TIG and review the Rapid Damage Assessment forms and data generated by the HAZUS-MH MR3 and USACE models to establish debris clearance priorities. The priority will be clearing debris from roads and facilities that are necessary for first-responder activities. The pre-identified priority clearance routes and areas, as shown in Appendix F, will include:

- At least one lane of coastal evacuation routes, snow emergency routes/priority roads, and access to Red Cross evacuation shelters
- Egress/ingress to critical facilities, including fire and police stations, hospitals, Nassau County EOC, and Red Cross evacuation shelters

- At least one lane of all heavily trafficked County roads
- All County roads, if time and manpower permits

#### **4.5 MULTI-AGENCY COORDINATION GROUP COORDINATION**

Once the debris clearance priorities have been confirmed, the Operations function will make contact with the MAC group through Swift Reach (or through an 800-MHz radio system as a backup) and establish a date and time for a conference call. During the conference call, the Operations function will:

- Review rapid damage assessment results as well as other damage assessments provided by regional and State agencies
- Define debris clearance priority routes
- Determine the need for a Mission Request to the State (NYSEMO) for assistance from the NYSDOT or other State agencies to clear debris

If a conference call is not possible, the Operations function will relay the above information through Swift Reach or through an 800-MHz radio system.

#### **4.6 DEBRIS CLEARANCE PERSONNEL**

Request for State agency assistance will be made by the EOC Director to the NYSEMO through a formal Mission Request. As such, debris clearance assistance may come from the NYSDOT. However, when state resources are not available and/or cannot provide enough assistance, the Operations function may need to use contractors to clear debris. After the Debris Management Team has determined the amount of available State agency support (and/or federal support, if requested by the State) and also the number of DCZs to be cleared, the Contracting function, in compliance with County procurement practices and the procurement competition requirements specified in 44 CFR Part 13.36, will contact the prequalified contractors and execute Time-and-Material contracts for debris clearance operations. See Appendix G for a list of prequalified contractors.

##### **4.6.1 Contractors**

Once the contracts have been signed, the contractors will adhere to the following requirements.

- **Schedule.** Debris clearance operations must commence as soon as possible after the disaster or emergency has subsided, but no later than 12 hours from the time the Notice to Proceed is issued by the Contracting function. The duration of the debris clearance operations will be limited to a total of 70 work hours (for example, five 12-hour days and one 10-hour day).

Unless restricted by local ordinances or instructed otherwise by the Debris Manager, the working hours for debris clearance operations will be limited to 12 hours per day. Each contractor is responsible for coordinating with the Contracting function in the event that weather conditions delay or require a modification of the proposed daily schedule.

Extension of debris clearance operations beyond 70 hours must be approved in writing by the Debris Manager and FEMA Public Assistance Program Officer.

- **Equipment.** The types and sizes of equipment to be used must be listed in the contractor's prequalification proposal. Prior to beginning work, the contractor will be required to identify each item of equipment more fully (type, size, and equipment number). The equipment number and the contractor's name or initials must be permanently marked on each side of the vehicle at that time. Rates for equipment not listed in the proposal must be established with the Contracting function before such equipment may be used.

The contractor will operate all trucks, trailers, and other equipment in accordance with the manufacturer's instructions and with applicable federal, State, and local rules and regulations. Equipment will be in good working condition.

The contractor is also responsible for locating areas where his/her equipment may be stored, serviced, and repaired. Such areas may not include ROWs or any areas that would affect traffic flow or produce a safety hazard. This does not preclude parking equipment for short periods of time, including overnight, where work is in progress.

- **Measurement and payment.** Compensation for debris clearance operations will be measured and paid for based on a Time-and-Materials contract. Compensation will be measured and paid for based on an hourly rate only when equipment is actively operating and documented by equipment logs and operator timesheets. The hourly rate for each type of equipment must include all subsidiary costs including mobilization and demobilization, fuel, maintenance, and an operator. Time-and-Material contracts will have a cost ceiling or "not to exceed" provision in the contract. Each contractor must provide, as part of the prequalification proposal, a list of basic equipment to be used for clearance operations and the hourly rate to be charged for each. In addition, each contractor must file a Daily Work Inspection Report (see Appendix H) with the Contracting function.
- **Health and safety requirements.** Each contractor must adhere to all County and State health and safety strategies as identified by the Public Employee Safety and Health (PESH) Bureau, which under the **PESH Act** provides occupational safety and health protection to all State and local public employees. PESH enforces all safety and health standards promulgated under **OSHA**. In addition, each contractor will provide safety equipment, training, and supervision as may be required by the County, and submit the contractor's own health and safety strategy to the Health and Safety Officer before commencement of debris clearance operations. The contractor will ensure that its subcontracts contain a similar safety provision.

Additionally, the Health and Safety Officer may distribute the OSHA Hurricane eMatrix, Fact Sheets, or QuickCards to contractors for review. This information, which is provided in Appendix I, provides recommendations on how to keep workers safe in the management of disaster debris.

- **Environmental requirements.** State and local regulations, laws, and ordinances (which are noted throughout this document as either "environmental requirements" or "regulatory permits and licenses") must be addressed and followed for all environmental and historic preservation issues. Environmental laws and regulations that may affect debris operations, and therefore require compliance, include but are not limited to the Endangered Species Act,

the National Historic Preservation Act, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, and the National Floodplain Insurance Program.

- Regulatory permits and licenses. Although debris clearance will focus on County and local roads, large debris clearance vehicles will likely travel to and from Nassau County and within Nassau County on New York State highways and therefore, unless waived by the State, will need the following permit.
  - **Special Hauling Permit.** For vehicles and/or loads on any New York State highways if the vehicle and/or load exceed the legal dimensions or weights specified in the New York State Vehicle and Traffic Law, Section 385, all contractors and force account labor must have a valid Special Hauling Permit (NYSDOT Perm 61).

### 4.6.2 Force Account Labor

Municipalities using force account labor will be responsible for adhering to the following requirements.

- **Schedule.** Debris clearance operations must commence as soon as possible after the disaster or emergency has subsided. The duration of the debris clearance operations will be limited to a total of 70 hours (for example, five 12-hour days and one 10-hour day).
- **Measurement and payment.** Compensation for debris clearance operations will be measured and paid for based on recorded overtime hours worked by permanently employed municipal staff, and for regular and overtime equipment usage. In addition, regular and overtime labor are eligible for non-budgeted employees assigned specifically to perform emergency work, including temporary employees, essential employees called back from administrative leave, and permanent employees funded from an external sources such as grants. As such, a municipality must clearly document the straight time and overtime hours for all force account labor, the amount of time each employee worked on designated debris task, the type of work completed, and any equipment and materials/supplies used to complete designated debris task. For further information, refer to 44 CFR 206.221(B) and 206.228(a)(2), and FEMA Policy 9525.7, Labor Costs –Emergency Work, November 16, 2006.

The FEMA Public Assistance Pilot Program, which ended December 31, 2008, temporarily waived certain regulations and allowed state and local governments to seek both overtime and non-overtime labor costs for permanent employees related to removal of disaster debris. After the end of the Pilot Program, the non-overtime costs of permanent employees for debris removal are no longer eligible for reimbursement. State, County, and local officials should remain aware of any future changes in the FEMA regulations.

- **Health and safety requirements.** See Section 4.6.1, health and safety requirements.
- **Environmental requirements.** See Section 4.6.1, environmental requirements.
- **Regulatory permits and licenses.** See Section 4.6.1, regulatory permits and licenses.

#### **4.7 DEBRIS CLEARANCE STRATEGY**

For contracted labor, the Operations function will assign each contractor to one or more DCZ, not including municipalities, using force account labor. Both contractors and force account labor will have the following responsibilities:

- Clear debris based on the priorities and schedule set by the Debris Manager and Operations function. The Operations function will distribute a map and list of facilities and roads to clear.
- Refrain from attempting to physically remove debris or dispose of debris. Rather, the debris clearance teams will only push debris to roadway shoulders or entrances/exits of the critical facility or essential utility through cutting, tossing, and/or clearing of debris. In addition, only one lane of each road or entrance/exit to a facility/utility should be cleared at this time.
- Stop debris clearance after 70 work hours unless an extension is granted by FEMA Public Assistance Program staff.

#### **4.8 PUBLIC INFORMATION**

Within 12 hours after the activation of the DMC, the PIO will set up a public information hotline and work with the County Webmaster to post public information on the Internet. The PIO will communicate with the appropriate press and the municipalities via the MAC group. See Appendix C for contact information. Although the information will need to be modified based on the type and severity of the event (and therefore the amount of and type of debris generated from the event), the PIO will convey some or all of the following information within 24 to 48 hours of the event.

- **Resumption of household garbage and recycling services**
  - Expect delays for household garbage and recycling services.
  - Household garbage and household recyclables are not part of the disaster debris stream and should be disposed of as normal.
- **Clean-wood and C&D debris drop-off locations**
  - If there is not enough disaster generated debris to warrant curbside collection, property owners should bring clean-wood debris (tree branches and other leafy material) and/or C&D debris to landfills, transfer stations, or bins (dumpsters) as designated by the County or municipality.
  - Residents will be notified through the press, their municipality, or the County website about the locations and dates for clean wood and C&D debris drop-off locations.
  - Fees at landfills and transfer stations will be waived for disaster-generated debris only.
- **Curbside collection**
  - The schedule for curbside collection (of debris) is unknown at this point. However, debris brought to the curbside will most likely be collected 1 time a week over a 2- to 3-week period shortly after the event has occurred or dissipated.

- Residents may move disaster-generated debris to the curbside for pickup.
- Disaster-generated debris should be placed on the curbside, not in the roadway, and not in front of fire hydrants, storm drains, mailboxes, or crosswalks.
- Disaster-related debris along the curbside must be sorted into three piles:
  - ♦ Clean-wood debris (whole trees, tree stumps, tree branches, tree trunks, and other leafy material)
  - ♦ Uncontaminated C&D debris; the NYSDEC defines C&D debris as uncontaminated solid waste resulting from the construction, remodeling, repair and demolition of utilities, structures and roads; and uncontaminated solid waste resulting from land clearing. Such waste includes, but is not limited to, bricks, concrete and other masonry materials, soil, rock, wood (including painted, treated and coated wood and wood products), wall coverings, plaster, drywall, plumbing fixtures, non-asbestos insulation, roofing shingles and other roof coverings, asphaltic pavement, glass, plastics that are not sealed in a manner that conceals other wastes, empty buckets 10 gallons or smaller and having no more than 1 inch of residue remaining on the bottom, electrical wiring and components containing no hazardous liquids, and pipe and metals that are incidental to any of the above
  - ♦ Brown goods debris (furnishings) and white goods debris (major appliances)
- The collection of C&D may be expanded to include contaminated C&D debris. Contaminated C&D debris is debris mixed or co-mingled with other solid waste at the point of generation, processing or disposal, and debris that is contaminated with spills of a petroleum product, hazardous waste, or industrial waste.
- HHW or e-waste debris should not be placed on the curbside but must be brought to designated municipal or commercial collection sites.
- Unsorted debris piles will not be collected, and the property owner will be responsible for hauling unsorted, uncollected debris to a local landfill.
- Countywide debris removal will focus on removing debris that is hazardous (e.g., hanging limbs, leaning trees) first. Property owners will be notified through the press, their municipality, or the County website about the approximate dates when the curbside debris in their neighborhood will be collected.
- **Hazardous spills and releases**
  - The NYSDEC and/or EPA will be the lead in handling the removal and disposal of hazardous waste spills and releases on inland zones when the Responsible Party is not able to do so. The NYSDEC and/or U.S. Coast Guard (USCG) will be the lead in handling the removal and disposal of hazard waste spills and releases in coastal zones when the Responsible Party is unable to do so.
  - If a hazardous release occurs, dispersion should be minimized and the release should be controlled to the greatest extent possible. Next, the National Response Center (NRC) should be called at 1-800-424-8802. The NRC is a national communications center

continuously staffed to handle response activities and is available 24 hours per day, 365 days per year.

- Hazardous waste debris such as unidentifiable drums, explosives, and radioactive and infectious materials found on land should be reported to the municipality the NRC. The NYSDEC and/or EPA will respond by identifying the debris and coordinating removal.



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This section provides the concept of operations for debris removal. Debris removal operations will begin 2 to 3 days after a small event has occurred or dissipated and 3 to 7 days after a large event. The majority of this phase will consist of removing debris from the ROW (also referred to as the curbside) and other public areas. During this phase, debris will be removed according to a strategy developed by the Operations function and, if necessary, in agreement with NYSEMO and FEMA. Debris removal typically will last a few weeks to a few months, but the timeframe will depend on the severity of the event, the availability of force account labor and contracted resources, and the extent of damage.

## **5.1 INITIAL DAMAGE ASSESSMENT**

After the debris clearance procedures are under way, the Operations function will request that the Damage Assessment Teams conduct an additional damage assessment, known as an initial damage assessment. As with the rapid damage assessment, each team, consisting of a minimum of two people, will drive through the team's assigned DCZ (see Appendix E) and complete the Initial Damage Assessment form (see Appendix D). Each team will spend up to 2 hours in the assigned DCZ, recording the level of damage to non-critical public property, such as schools, parks, and government buildings, as well as private property, such as commercial and residential structures. The team will submit the completed form to the Operations function immediately. A municipality may conduct its own initial damage assessments using the Initial Damage Assessment form or other types of damage assessment documentation. If so, the municipality should provide the completed damage assessment information to the Operations function. The Damage Assessment Teams should complete the initial damage assessment within a total of 8 to 12 hours.

The Operations function and/or municipality should contact the TIG and the regional and State agencies that are conducting damage assessment to discuss damage assessment updates. The Operations function should also review information generated by the HAZUS-MH MR3 Hurricane model and update debris damages using the USACE Debris Estimation Model (see Appendix B).

## **5.2 DEBRIS MANAGEMENT SITE REQUIREMENTS**

The Operations function, in conjunction with the NYSEMO, will determine the need for and number of DMSs to temporarily store, sort, reduce, and dispose of non-hazardous waste, such as clean-wood and mixed C&D debris (non-hazardous waste). To establish the number of DMSs that are needed, the Operations function will use the initial damage assessment results and adhere to the USACE debris storage requirements shown in Figure 5-1. The identification and location of pre-identified priority DMSs is discussed in Section 5.4.

- Debris can be stacked to a height of 10 feet
- Sixty percent of land area will be required to be used for buffers (i.e., roads, safety buffers, towers, HHW areas, and burn pits)
- 1 acre = 4,840 square yards
- 10-foot stack height = 3.33 yards
- Total volume per acre = 4,840 cubic yard/acre x 3.33 yards = 16,117 cubic yards/acre (with no buffers)
- Total cubic yards of debris/total volume per acre (16,117 cubic yards/acre) = total number of acres required for storage (with no buffers)
- To account for buffers, multiply total number of acres required for storage (with no buffers) by 1.66
- A 100-acre storage site can be cycled every 45 to 60 days or one time during a moderate hurricane

**Figure 5-1. USACE Debris Management Site Storage Requirements**

### 5.3 TYPES OF DISASTER DEBRIS

The Operations function, in conjunction with the NYSEMO, NYSDEC, and FEMA Public Assistance Program staff, must determine the major types of debris to be collected to prevent the co-mingling of household garbage and non-disaster waste, such as reconstruction waste, from entering the disaster debris stream. In addition, at this time, the Operations function will need to determine whether and how hazardous waste should be collected.

### 5.4 MULTI-AGENCY COORDINATION GROUP COORDINATION

- The Operations function will contact the MAC group through Swift Reach (or an 800-MHz radio system) and establish a date and time for a conference call. During the conference call, the Operations function will:
- Review initial damage assessment results as well as other damage assessment updates provided by regional and state agencies
- Explain the types of disaster debris to be collected
- Explain the debris removal strategy (see Section 5.6) and determine the need for contractors to remove debris
- Explain the debris monitoring strategy (see Section 5.8) and determine the need for contractors to monitor the removal and disposal of debris.

In addition, if the Operations function, with support from the NYSEMO, has determined the need for DMSs, then it will:

- Define the number of DMSs needed for debris storage.
- Establish the location of DMSs. For large debris-generating events, this would ideally include at least one clean-wood DMS and one mixed C&D DMS for all non-hazardous waste within each DCZ. Pre-identified public DMSs (see Appendix J) should be considered priority sites because they have been screened to ensure that they are not historically, culturally, or environmentally significant and are not in a Special Flood Hazard Area, tidal wetland, federally endangered grassland, or deep-flow recharge area.
- Establish the location of a clean-wood DMS in DCZ D-4 in the Asian Long-Horned Beetle (*Anoplophora glabripennis*) quarantine area to accommodate clean-wood debris only. The site must be approved by the NYSDAM.
- Inform municipalities that they need to provide the Contracting function with local permits for contractor-operated DMSs in their municipal boundaries. Municipalities that operate their own DMSs need to secure all relevant state permits.
- Notify the MAC group that the County will secure necessary State permits for all contractor-operated DMSs.

## 5.5 PUBLIC INFORMATION

During the beginning of the debris removal phase (2 to 7 days after the event), the PIO will provide the press and municipalities (see Appendix C for contact information) with new and additional information regarding local landfills or transfer stations, curbside collection, HHW collection, e-waste collection, hazardous waste handling, building safety, private property demolition, and illegal dumping. Although the information should be modified based on the type and severity of the event (and therefore the amount of and type of debris generated from the event), the PIO will convey some or all of the following information.

- **Clean-wood debris and C&D debris drop-off locations**
  - If there is not enough disaster-generated debris to warrant curbside collection, property owners should bring clean-wood debris (tree branches and other leafy material) and/or C&D debris to landfills, transfer stations, or bins (dumpsters) as designated by the County or municipality.
  - Residents will be notified through the press, their municipality, or the County website about the locations and dates for clean wood and/or C&D debris drop-off locations.
  - Fees at landfills and transfer stations will be waived for disaster-generated debris only.
- **Curbside collection**
  - The need for curbside collection of debris (and if necessary, the schedule) will be determined by the County and municipalities. However, debris brought to the curbside will most likely be collected 1 time per week over a 2- to 3-week period shortly after the event has occurred or dissipated.

- Residents may move disaster-generated debris to the curbside for pickup.
- Disaster-generated debris should be placed on the curbside, not in the roadway, and not in front of fire hydrants, storm drains, mailboxes, or crosswalks.
- Disaster-related debris along the curbside must be sorted into three piles:
  - ♦ Clean-wood debris (whole trees, tree stumps, tree branches, tree trunks, and other leafy material)
  - ♦ Uncontaminated C&D debris; the NYSDEC defines C&D as uncontaminated solid waste resulting from the construction, remodeling, repair and demolition of utilities, structures and roads; and uncontaminated solid waste resulting from land clearing. Such waste includes, but is not limited to, bricks, concrete and other masonry materials, soil, rock, wood (including painted, treated and coated wood and wood products), wall coverings, plaster, drywall, plumbing fixtures, non-asbestos insulation, roofing shingles and other roof coverings, asphaltic pavement, glass, plastics that are not sealed in a manner that conceals other wastes, empty buckets ten gallons or less in size and having no more than one inch of residue remaining on the bottom, electrical wiring and components containing no hazardous liquids, and pipe and metals that are incidental to any of the above. (If the Operations function, with input from the NYSDEC, has expanded the collection of C&D to include contaminated C&D then the PIO will also inform that the public that contaminated C&D debris, which is debris mixed or co-mingled with other solid waste at the point of generation, processing or disposal, and that is contaminated with spills of a petroleum product, hazardous waste or industrial waste, can be brought to the curbside at this time.)
  - ♦ Brown goods debris (furnishings) and white goods debris (major appliances)
- HHW and e-waste debris should not be placed on the curbside; these types of debris must be brought to designated municipal or commercial collection sites.
- E-waste will also be collected at EPA-designated collection sites.
- Generally, waste tires will not be part of the debris that is collected. If this position changes, residents will be asked to place tires along the curbside for collection.
- Refrigerators and freezers containing rotting food may create a sanitary nuisance and will not be collected. Therefore, residents must clear refrigerators and freezers of food before the items are brought to the curbside.
- Unsorted debris piles will not be collected, and the property owner will be responsible for hauling unsorted, uncollected debris to a local landfill.
- Disaster-related debris does not include reconstruction debris and normal household garbage.
- Household garbage, reconstruction debris, and non-regulated medical waste will be disposed of using normal solid waste procedures.

- Countywide debris removal will focus on removing debris from priority routes and facilities before residential areas. Property owners will be notified through the press, their municipality, or the County website about the approximate dates when the curbside debris in their neighborhoods will be collected.
- **HHW collection**
  - HHW debris should not be placed on the curbside; it should instead be brought to a designated collection site.
  - Leaking HHW containers should be placed in plastic bags or containers to prevent further seepage.
  - Residents will be notified through the press, their municipality, or the County website about the locations and dates of designated HHW collection sites, as well as permissible debris accepted at these sites.
  - Residents should adhere to the following, normal local Stop Throwing Out Pollutants (STOP) Day procedures for the handling and transportation of HHW debris: Leave products in the original containers and ensure they are sealed so that they will not leak; place products in a cardboard box in the back of the vehicle, away from the driver and passengers; and do not transport more than 5 gallons or 50 pounds of HHW debris at a time.
  - Accepted HHW debris generally includes pesticides and insecticides, motor oil and antifreeze, brake and transmission fluids, solvents, paints (enamel, lead-based and latex), drain and oven cleaners, photo chemicals, spot removers, wood preservatives, automobile tires and batteries, small aerosol cans, consumer batteries, wireless phone batteries, outdoor gas grill propane tanks, compact fluorescent bulbs, other used or leftover portions of products containing toxic chemicals, and any product that is labeled “CAUTION,” “POISONOUS,” “TOXIC,” “FLAMMABLE,” or “CORROSIVE.” In general, explosives, fireworks, radioactive materials, infectious materials, and unlabeled materials will not be accepted.
- **E-waste collection**
  - E-waste debris generally includes computers, monitors, laptops, desktop printers, fax machines, and wireless phones.
  - E-waste debris may be disposed of at a municipality’s designated collection site or at an EPA-designated Plug-In Partners during normal business hours. Plug-In Partners include, but are not limited to, Best Buy, Staples, and Office Depot, and at AT&T, T-Mobile, Sprint, and Verizon Wireless retail locations. The stores can be called or store websites checked for additional information, including types of e-waste accepted and disposal costs. However, in general, the Plug-In Partners accept the following:
    - ♦ **Best Buy.** Accepts, at no cost, wireless phones, rechargeable batteries, and ink-jet cartridges at drop-off kiosks inside the door of every U.S. Best Buy store. In addition, Best Buy hosts and/or sponsors a series of weekend recycling events at its store parking lots.

- ♦ **Office Depot.** Provides Tech Recycling Boxes for \$5 (small box), \$10 (medium box), or \$15 (large box). Consumers can fill boxes with acceptable e-waste and bring them back to an Office Depot for disposal.
- ♦ **Staples.** Accepts, at no cost, wireless phones, personal digital assistants, pagers, digital cameras, and chargers.
- ♦ **AT&T retail stores.** Accepts, at no cost, handsets, chargers, nickel-cadmium (NiCd) batteries, lithium-ion batteries, small sealed lead acid batteries, and nickel-metal hydride (NiMH) batteries, regardless of provider.
- ♦ **Sprint retail stores.** Accepts, at no cost, used wireless phones, batteries, accessories and connection cards, regardless of provider.
- ♦ **T-Mobile retail stores.** Accepts, at no cost, wireless phones, batteries, personal digital assistants, and accessories, regardless of provider.
- ♦ **Verizon Wireless retail stores.** Accepts, at no cost, used wireless phones, regardless of provider.
- Residents will be notified through the press, their municipality, or the County website about additional locations and dates for e-waste collection.
- **Hazardous spills and releases**
  - The NYSDEC and/or EPA will be the lead in handling the removal and disposal of hazardous waste spills and releases on inland zones when the Responsible Party is not able to do so. The NYSDEC and/or USCG will be the lead in handling the removal and disposal of hazard waste spills and releases in coastal zones when the Responsible Party is unable to do so.
  - If a hazardous release occurs, dispersion should be minimized and the release should be controlled to the greatest extent possible. Next, the National Response Center (NRC) should be called at 1-800-424-8802. The NRC is a national communications center continuously staffed to handle response activities and is available 24 hours per day, 365 days per year.
  - Hazardous waste debris such as unidentifiable drums, explosives, and radioactive and infectious materials found on land should be reported to the municipality the NRC. The NYSDEC and/or EPA will respond by identifying the debris and coordinating removal.
- **Building safety and private property demolition**
  - Certified local, State, or federal building inspectors or registered engineers will not generally be able to conduct an official safety evaluation until at least several days after the event, depending on the extent of local damage and the number of available qualified inspectors and engineers.
  - If a structure appears to be damaged, the property owner should contact his/her insurance company as soon as possible. If the property owner has no insurance, he/she should contact the local building department.

- If a structure needs to be demolished, the property owner will receive a written copy of the assessment by certified mail.
  - If a structure poses a health and safety threat to neighbors and has been determined to be uninsured or owned by an absentee landlord, a FEMA inspector, State inspector, and local inspector or engineer will together determine whether the structure needs to be demolished. If FEMA approves the demolition of properties identified in the demolition bid, the State will provide the municipality with written authorization to proceed with the demolition project.
  - To be eligible for FEMA Public Assistance Program funding, the uninsured property owner must complete Right-of-Entry agreements, and the municipality must provide several other documents to the State and Public Assistance Program staff before demolition begins.
- **Illegal dumping**
    - Residents should report any signs of illegal dumping by calling NYSDEC at 1-800-TIPP-DEC.

## **5.6 DEBRIS REMOVAL PERSONNEL**

After the Debris Management Team has determined the reasonable level of effort (i.e., appropriate level of response) needed to fulfill debris removal staffing requirements, the Contracting function, in compliance with County procurement practices and the procurement competition requirements specified in 44 CFR Part 13.36, will contact prequalified contractors (see Appendix G for a list of prequalified contractors) and execute Unit-Price contracts for debris removal operations.

### **5.6.1 Contractors**

Once the contracts have been signed, the contractors will adhere to the following:

- **Schedule.** When the contractor has received the written Notice to Proceed, he/she will make all necessary arrangements to mobilize a minimum of 50 percent of the required resources within 48 hours and 100 percent of the required resources within 72 hours to commence debris removal operations. Services will continue for no longer than 60 days from the Notice to Proceed, unless extended by the Contracting function with a written notice 10 days before the end of the 60 days.

Unless restricted by local ordinances or instructed otherwise by the Debris Manager or Operation function, the working hours for debris removal personnel will be limited to 12 hours per day, 7 days per week. Each contractor is responsible for coordinating with the Contracting function in the event that weather conditions delay or require a modification to the proposed daily schedule.

- **Equipment.** See Section 4.6.1, equipment requirements. In addition, the contractor will use mechanical equipment to load and reasonably compact debris into trucks and trailers. All loading equipment will be operated from the road, street, or ROW using buckets and/or boom



and grapple devices to collect and load debris. No equipment will be allowed behind the curb or outside of the public ROW unless otherwise directed by the County or municipality. All vehicles hauling debris must be equipped with adequate means for containing the load, including tailgates and tarps.

- **Measurement and payment.** The measurement and payment for debris removal is outlined in the contracts. For all Unit-Price contracts, the unit price must include all subsidiary costs such as labor, equipment, fuel, environmental controls, maintenance, general administration, and disposal. Compensation will be based on completed load tickets administered by the Loading Site Monitor and DMS Entrance Monitor or Final Disposal Site Monitor.
- **Types of debris.**
  - **Clean-wood, C&D, brown, and non-RCA white goods.** The cost of the removal and transport of clean-wood, C&D, and white and non-RCA white goods debris from the ROW, assigned public area, or drop-off bin to the DMS (or designated final disposal site if DMSs are not needed) will be measured and paid for based on a unit price per cubic yard of debris that is accepted at the DMS (or designated final disposal site if DMSs are not needed) for processing and disposal. The transport of clean-wood and C&D debris from a bin location to the DMS (or designated final disposal site if DMSs are not needed) will be measured and paid for based on a unit price per bin.
  - **Hazardous stumps.** The cost of the removal and transport of hazardous stumps 24 inches or more in diameter from the assigned public area will be measured and paid for based on a unit price (per stump) that is accepted at the DMS or (or designated final disposal site if DMSs are not needed) for processing.
  - **Leaning trees and hanging limbs.** The cost of the removal and transport of hazardous leaning trees and hanging limbs from the ROW or assigned public area to the DMS (or designated final disposal site if DMSs are not needed) will be measured and paid for based on a unit price per cubic yard of debris that is accepted at the DMS (or designated final disposal site if DMSs are not needed) for processing and disposal.
  - **Debris in water bodies.** The cost of the removal and transport of eligible debris from a water body to the DMS (or designated final disposal site if DMSs are not needed) will be charged and paid for based on a unit price per cubic yard of debris that is accepted at the DMS (or designated final disposal site if DMSs are not needed) for processing and disposal.
  - **Debris in public parks and recreation areas.** The cost of the removal and transport of clean wood and C&D debris from public parks and recreation areas to the DMS (or designated final disposal site if DMSs are not needed) will be measured and paid for based on a unit price per cubic yard that is accepted at the DMS (or designated final disposal site if DMSs are not needed) for processing.
  - **Sediment.** The cost of the removal and transport of sediment to the DMS (or designated final disposal site if DMSs are not needed) will be measured and paid for based on a unit price per cubic yard that is accepted at the DMA (or designated final disposal site if DMSs are not needed) for processing and disposal. The removal and transport of sand to

either the DMS (or designated final disposal site if DMSs are not needed) or originating beach will be measured and paid for based on a unit price per cubic yard that is accepted at either the final land disposal facility or loading site for processing and disposal.

- **Vehicles and vessels.** The cost of the removal and transport of unclaimed vehicles and vessels from the ROW to a temporary holding site will be based on a price per unit for the units that are brought to the temporary staging site.
- **Debris on private property.** The cost of the removal and transport of private property debris from the private property to the DMS (or designated final disposal site if DMSs are not needed) will be measured and paid for based on a unit price per cubic yard of debris that is accepted at the DMS (or designated final disposal site if DMSs are not needed) for processing and disposal.
- **Contaminated C&D debris.** The cost of the removal and transport of contaminated C&D debris (i.e., C&D waste with asbestos-containing material) from the ROW to a designated final disposal site will be measured and paid for based on a unit price per yard of debris or a unit price per container that is accepted at the designated final disposal site for processing and disposal.
- **RMW.** The cost of the removal and transport of RMW from RMW generators, including hospitals, clinical laboratories, veterinarians, funeral homes, nursing homes, home health care providers, physicians' offices, research laboratories, pharmaceutical companies, colleges and universities (including basic medical or clinical microbiology laboratories), blood banks, company infirmaries, and correctional facilities to a designated final disposal site will be measured and paid for based on a unit price per pound of debris that is accepted at the final disposal site for processing and disposal.
- **Waste tires.** The cost of the removal and transport of waste tire debris from the ROW to the designated final disposal site will be measured and paid for based on a unit price per cubic yard of waste tire debris that is accepted at the final disposal site for processing and disposal.
- **HHW and e-waste.** Although residents will be strongly encouraged to bring HHW and e-waste debris to appropriate collection sites, the cost of the removal and transport of any HHW and e-waste left on the curbside to a designated final disposal site will be measured and paid for based on a unit price per cubic yard of debris that is accepted at the final disposal site for processing and disposal. The transport of HHW and e-waste debris from a drop-off location to a designated final disposal will be measured and paid for based on a unit price cubic yard or unit price per bin that is accepted at the final disposal site for processing and disposal.
- **RCA.** The pickup of RCAs, removal of Freon, and transportation of RCAs from the ROW to a designated final disposal site will be based on a unit price per unit that is accepted at the final disposal site for processing and disposal.
- **Health and safety requirements.** See Section 4.6.1, health and safety requirements. In addition, the NYSDEC will require compliance with specific regulations and a plan application, including a waste determination plan, packaging plan, spill prevention plan, and

a contingency plan, for municipal-sponsored HHW collection sites. Following a disaster and in times of an emergency, the NYSDEC has the ability to relax operational requirements. As such, while the NYSDEC may require compliance with some specific regulations, it may not enforce the full array of requirements (e.g., plan application).

- **Environmental requirements.** See Section 4.6.1, environmental requirements.
- **Regulatory permits and licenses.**
  - **Divisible Load Overweight Permit.** For vehicles hauling a divisible load (any cargo being carried that could be separated into units of legal weight without affecting the physical integrity of the load) that exceeds the limitations of New York State Vehicle and Traffic Law, Section 385, all contractors and force account labor must have a valid Divisible Load Permit (NYSDOT Perm 39). This permit cannot be used in conjunction with a Special Hauling Permit.
  - **Special Hauling Permit.** For vehicles and/or loads on any New York State highways if the vehicle and/or load exceed the legal dimensions or weights specified in the New York State Vehicle and Traffic Law, Section 385, all contractors and force account labor must have a valid Special Hauling Permit (NYSDOT Perm 61).
  - **EPA-Certification for RCA Handling.** RCAs, including refrigerators, freezers, and window air conditioner units, must be handled by EPA-certified refrigeration technicians or recycling centers to prevent releases. As such, all contractors and force account labor handling RCAs will be responsible for providing the EPA with a copy of their certification.
  - **Waste Transporter Permit.** For the removal, transportation, and disposal of all types of regulated waste debris (hazardous and non-hazardous commercial/industrial waste, waste oil, petroleum-contaminated sediment, RMW, tires, asbestos, residential septage, nonresidential raw sewage or sewage-contaminated wastes, sludge from a sewage treatment plant or water supply treatment plant, or low-level radioactive waste), all contractors and force account labor must have a valid Waste Transporter Permit (6 New York Codes, Rules and Regulations [NYCRR] Part 364) for solid waste, a valid Waste Transporter Permit for nonsolid waste or liquid form (6 NYCRR Part 360), and an EPID number.
  - **Vehicle Dismantler Registration.** For the removal and transportation of abandoned vehicles and vessels, all contractors must have a valid NYSDMV Facility Business Certificate.
  - **Asbestos Handling License.** For the removal and transportation (or any engagement) of asbestos projects, all contractors must have a valid New York State Department of Labor Asbestos Handling License (12 NYCRR Part 56).
  - **Private Property Debris Removal Permits.** For the removal, transportation, and disposal of private property debris, the municipality in which the debris removal work is being conducted will secure all necessary permits, waivers, and documentation as prescribed by the federal and State government for the removal of debris and/or demolition of private property (see Section 8).

### 5.6.2 Force Account Labor

Municipalities using force account labor will be responsible for adhering to the following:

- **Schedule.** Unless restricted by local ordinances or instructed otherwise by the Debris Manager or Operation function, the working hours for debris monitoring personnel will be limited to 12 hours per day, 7 days per week.
- **Measurement and payment.** See Section 4.6.2, measurement and payment.
- **Health and safety requirements.** See Section 4.6.2, health and safety requirements.
- **Environmental Requirements.** See Section 4.6.2, environmental requirements.
- **Regulatory permits and licenses.** See Section 4.6.2, regulatory permits and licenses.

## 5.7 DEBRIS REMOVAL STRATEGY

For contracted labor, the Operations function will assign each contractor to one or more DCZ, not including municipalities using force account labor. Both contractor and force account labor will remove debris based on the strategy set by the Debris Manager and Operations function, and depending on the size of the event and therefore the complexity of debris removal, may include non-hazardous and hazardous waste debris, as described below.

### 5.7.1 Non-hazardous Waste Debris

- **Cut hanging limbs, leaning trees, and stumps determined to be hazardous**
  - Cut trees determined to be hazardous (condition caused by the disaster; is an immediate threat to lives, public health and safety, or improved property; has a diameter breast height of 6 inches or more; and more than 50 percent of the crown is damaged or destroyed OR has a split trunk or broken branches that exposed the heartwood OR has fallen or been uprooted within a public-use area OR is leaning at an angle greater than 30 degrees) and that have less than 50 percent of the root-ball flush at the ground level.
  - Remove hanging limbs only if they are located on improved public property. Hanging limbs must be larger than 2 inches in diameter at the point of breakage and still hanging in a tree and threatening a public-use area (e.g., trails, sidewalks). In addition, hanging limbs will be removed if the canopy of a tree is on private property, but the hanging limb extends over the ROW. Hanging limbs must be cut at the closest main branch junction. Hanging limbs from same tree should be cut at the same time, not in passes.
  - Remove tree stumps with 50 percent or more of the root-ball exposed (less than 50 percent of the root-ball exposed should be flush cut); larger than 24 inches in diameter, as measured at 24 inches above the ground; on improved public property or a public ROW; and immediate threat to life, and public health and safety.
  - Do not begin work until a Debris Loading Site Monitor or Roving Monitor completes a Hanging Limb Worksheet or a Hazardous Stump Worksheet (see Appendix H).

- Haul hanging limbs, leaning trees, and stumps to the nearest designated loading site in the DCZ (or municipality). At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined clean-wood DMS (or designated final disposal site, such as a yard waste and wood disposal facility, if DMSs are not needed). If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor (if DMSs are needed) or Final Disposal Monitor (if DMSs are not needed). Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Remove vehicles and vessels determined to be a hazardous threat**
  - Do not remove vehicles and vessels until the Operations function or municipality demonstrates that the vehicle or vessel presents a hazard or immediate threat, blocks ingress/egress in a public-use area, or obstructs water in watercourses, and is abandoned (e.g., ownership undetermined).
  - Haul vehicles and vessels to the nearest designated loading site within the DCZ (or municipality). Only contractors (or force account labor) with a valid NYSDMV Business Certificate can haul vehicles and vessels to the designated holding site. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the vehicles and vessels leave the loading site. After the debris has been documented, haul the debris to the NYSDMV-approved holding site. If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor (located at the entrance of the loading site). Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
  - In addition, prior to leaving the holding site, complete the Abandoned Vehicle and Vessel Documentation Form (see Appendix H) and give it to the Operations function (or municipality) immediately. The Operations function (or municipality) will make a copy for the NYSDMV and for the person who is holding the vehicle or vessel.
- **Collect and place clean-wood and C&D debris bins at drop-off locations**
  - If the event does not warrant the need for curbside collection, the collection of clean wood debris and C&D debris at drop-off locations may be used. As determined by the Debris Manager and/or Operations function (or municipality), place bins (dumpsters) throughout the County (or municipality) for residents to dispose of debris over a specified time period. Separate bins should be designated for clean-wood and C&D debris.
  - Do not collect bins until the bin load has been documented by the Debris Loading Site Monitor. Collect bins at specified locations or bins in a specified DCZ (or municipality). Haul the debris to the predetermined DMS or designated final site. If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor (if DMSs are used) or Final Disposal Monitor (if DMSs are not needed). Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- In lieu of bins, the Operations function (or municipality) may ask the public to haul clean-wood and C&D debris to the nearest landfill or recycling facility that accepts clean-wood and C&D debris for disposal. Place a Final Disposal Monitor at the entrance of the pre-approved landfill or recycling facility to ensure that the public disposes only of eligible debris during drop-off hours. Use the Clean Wood Debris Disposal Tracking Log or the C&D Debris Disposal Tracking Log (see Appendix H) to document accepted clean-wood and C&D debris.
- **Remove clean-wood, C&D, and brown and non-RCA white goods debris from the curbside and ROW**
  - Collect debris in three pre-sort passes so a truckload contains only clean-wood debris, C&D debris, or brown goods and non-RCA white goods debris.
  - Remove pre-sorted clean-wood debris, C&D debris, and brown and non-RCA white good debris from major roads before removing debris from minor road ROWs (e.g., residential areas) using a predetermined number of passes established by the Debris Manager and Operations function (after conferring with Public Assistance Program staff). Do not remove RCAs because they will be collected during a separate pass for RCAs only. Generally, two to three scheduled passes will occur for each debris type at 1-week intervals toward the beginning of the debris removal process.
  - Ensure that the clean-wood debris, C&D debris, and brown and non-RCA white goods debris removal passes do not contain HHW, e-waste, or contaminated C&D debris. If these debris streams are discovered during the collection of curbside debris, the contractor (or force account labor) will place HHW, e-waste, or contaminated C&D debris on the curbside to be collected by permitted hazardous waste personnel (contracted or force account labor) or as directed by the EPA.
  - Remove stumps 24 inches in diameter or smaller that do not require special equipment for removal within the general clean-wood debris removal passes. Record the stump diameter using the Stump Conversion Table (see Appendix H).
  - Separately haul the clean-wood debris, C&D debris, and brown and non-RCA white goods debris to the nearest designated loading site in the DCZ (or municipality). At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined clean-wood debris or mixed C&D debris DMS (or designated final disposal site, such as a C&D processing facility or landfill, if DMSs are not needed). If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Remove remaining debris stream**
  - **Non-hazardous vehicles and vessels.** Remove remaining non-hazardous vehicles and vessels that have been determined by the NYSDMV to be abandoned. Haul vehicles and vessels to the nearest designated loading site in the DCZ (or municipality). At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper

loading and load amount before the vehicles and vessels leave the loading site. After the debris has been documented, haul the debris to a NYSDMV approved holding site. If paper load tickets are used, give the remaining carbon copies to the NYSDMS Entrance Monitor (located at the entrance of the loading site). Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

In addition, before leaving the holding site, complete the Abandoned Vehicle and Vessel Documentation Form (see Appendix H) and give it to the Operations function (or municipality) immediately. The Operations function (or municipality) will make a copy for the NYSDMV and for the person whom is holding the vehicle or vessel.

- **Sediment.** Remove sand and sediment from the ROW or public area. Contact the NYSDEC for sediments suspected to be contaminated and follow recommended procedures for handling contaminated debris, including testing for contaminants, screening to remove other debris, and disposing contaminated sediment at a designated hazardous waste disposal facility. If the sand and sediment is not contaminated, the Operations function or force account labor will contact the NYSDEC to determine whether the sand and/or sediment can be returned to its original location, brought to a mixed C&D DMS or landfill, or is suitable for use as fill in reconstruction projects or cover material in landfills. For any of these events, haul the sand and sediment to the designated loading site in the DCZ (or municipality). At the loading site, the Loading Site Monitor will examine the load and examine it for proper loading and load amount. After the debris has been documented, haul the debris to a designated original location, mixed C&D DMS, or final disposal site, as directed by the NYSDEC. If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor or Final Disposal Monitor located at the original location, C&D DMS, or final disposal land facility. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Putrescent debris.** Remove putrescent debris (not including dead livestock) and haul to the designated loading site in the DCZ (or municipality). At the loading site, the Loading Site Monitor trucks will document the load and examine it for proper loading and load amount. After the debris has been documented, haul the debris to a landfill as designated by the NYSDEC. Do not remove dead livestock. The NYSDAM requires that livestock be buried by the owner on his/her property. If the owner is not present to bury his/her livestock, then the NYSEMO, with the assistance of the NYSDAM, will bury the livestock.
- **Utility debris.** Do not remove utility debris such as power transformers, utility poles, cable, and other utility company material. The Long Island Power Authority will be responsible for removing and disposing of all utility-related debris.
- **Debris in water bodies.** FEMA will determine the amount and type of eligible debris to be removed that is necessary to eliminate an immediate threat to public health and safety from commonly navigated waterways, on a case-by-case basis. Do not remove any debris from a commonly navigated waterway until this determination is made. In addition, do

not remove any debris from a stream, waterway, or State and federal wetland until verified orally or permitted by the NYSDEC. Debris located in a navigable channel or waterway should not be removed without oral verification and proper permitting from the USACE. Once verified and/or permitted by appropriate State and federal agencies, remove debris and haul to the designated loading site within the DCZ. At the loading site, the Loading Site Monitor trucks will document the load and examine it for proper loading and load amount. After the debris has been documented, haul the debris to a landfill.

- **Public parks and recreational area debris.** Only at the request of the Debris Manager (or municipality), remove clean-wood debris from public parks and other recreation areas not being used for DMS operations. Haul clean-wood debris to the nearest designated loading site in the DCZ (or municipality). At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined clean-wood DMS (or designated final disposal site, such as a yard waste and wood disposal facility, if DMSs are not needed). If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Debris on private property.** Do not remove debris from private property unless requested by the Debris Manager (or municipality). Generally, debris removal from private property following a disaster is the responsibility of the property owner, no matter whose debris it is. However, large-scale disasters may deposit enormous quantities of debris on private property over a large area, resulting in widespread immediate threats to the public. As such, the NYSEMO or local government may need to enter private property to remove debris to eliminate immediate threats to life, public health, and safety; eliminate immediate threats of significant damage to improved property; or ensure economic recovery of the affected community to the benefit of the community-at-large.
- For private property debris removal, a property owner requesting debris removal assistance must first submit information regarding how the debris creates a health/safety hazard; proof of ownership of property; copies of insurance; and a Right-of-Entry form before debris removal can begin.
- When all necessary forms have been secured and debris removal work has been approved by the NYSEMO and FEMA Public Assistance Program staff, separately sort the debris into clean wood, C&D, and brown goods and white goods (including RCAs) that can be removed using equipment. Remove remaining waste by hand by a Right-of-Entry crew. Haul debris to the nearest designated loading site in the DCZ (or municipality). At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined clean-wood or C&D DMS (or designated final disposal sites if DMSs are not needed). If paper load tickets are used, give the remaining carbon copies to the DMS Entrance Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day. For private property demolition, follow procedures discussed in Section 8.



- **Remove clean-wood debris in the Asian Long-Horned Beetle quarantine area**
  - Collect clean-wood debris in a quarantine area and haul it to a designated loading site in the quarantine area as determined by the NYSDAM. At the loading site, the Debris Loading Site Monitor will examine and document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to a hazardous waste land disposal facility, as determined by the NYSDAM. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

### 5.7.2 Hazardous Waste Debris

- **Remove hazardous waste from the ROW**
  - **Commercial, agricultural, industrial, and toxic waste.** Do not respond to commercial, agricultural, industrial, and toxic waste spills. The Responsible Party, NYSDEC EPA, and/or USCG will provide first response in these types of emergencies.
  - **Contaminated C&D debris.** At the request of the Debris Manager and in conjunction with NYSEMO and NYSDEC, contaminated C&D may be collected when C&D debris generated in flooded areas may be mixed with or is contaminated with toxic substances such lead, asbestos, arsenic, petroleum products, household hazardous waste, or mold. The destruction may be so extensive that the separation of toxic materials is essentially impossible. If contaminated C&D is included as part of the debris removal strategy, scheduled passes for contaminated C&D debris instead of clean C&D debris will be conducted for contaminated debris left at the curbside. Haul the contaminated C&D debris to the nearest loading site in accordance with transportation procedures outlined in the NYSDEC Waste Transporter Permit. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to a predetermined disposal facility permitted for contaminated C&D disposal. If paper load tickets are used, give the remaining carbon copies to the Disposal Facility Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
  - **RMW.** Only under the direction of the NYSDEC or EPA, remove RMW debris from a RMW generator and haul it to the nearest loading site in accordance with transportation procedures outlined in the NYSDEC Waste Transporter Permit. If RMW debris contains hazardous or radioactive waste, or is mixed with hazardous or radioactive waste, it must be managed as either a hazardous or radioactive waste. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined RMW treatment facility. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **RCA.** Only under the direction of the NYSDEC or EPA, collect RCAs, including refrigerators, freezers, and air conditioning units, from the curbside. If Freon removal takes place off-site (rather than at the curbside), manually place the appliances on trucks or use lifting equipment that will not damage the elements that contain Freon. Haul RCAs to the nearest loading site. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined staging area, hazardous waste land disposal facility, or landfill. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Waste tires.** If waste tires are included as part of the debris removal strategy, after the scheduled clean-wood, C&D, and brown and non-RCA white goods debris curbside collection passes, conduct one scheduled pass to collect any waste tire debris left at the curbside. Haul the waste tire debris to the nearest loading site in accordance with transportation procedures outlined in the NYSDEC Waste Transporter Permit. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to designated final disposal sites. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **HHW and e-waste.** After the scheduled clean-wood, C&D, and brown goods and non-RCA white goods debris curbside collection passes, conduct one scheduled pass to collect HHW and e-waste (in separate piles) left at the curbside. Haul HHW and e-waste to the nearest loading site. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to a predetermined HHW collection and storage facility, hazardous waste land disposal facility, or e-waste dismantling and recycling facility (for e-waste only). If paper load tickets are used, give the remaining carbon copies to the Disposal Facility Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Place and collect HHW and e-waste from collection site locations**

The Town of Hempstead (including the City of Long Beach), Town of North Hempstead, Town of Oyster Bay, and City of Glen Cove collect HHW on scheduled collection days, commonly referred to as STOP Program days. This program may be expanded to include e-waste. These communities will be responsible for the set-up, operations, and close-out of the collection days in their municipalities. Depending on the amount of estimated HHW and e-waste, a municipality may decide to host several STOP Program days. However, to help ensure that only HHW and e-waste resulting from the disaster is brought to the collection locations, it is recommended that these locations remain open only during the first few weeks after a disaster. For close-out, each municipality participating in the STOP Program days will

separately haul HHW and e-waste to the nearest loading site. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to a predetermined HHW collection and storage facility, hazardous waste land disposal facility, or e-waste dismantling and recycling facility (for e-waste only). If paper load tickets are used, give the remaining carbon copies to the Disposal Facility Monitor. Keep the final carbon copy of the load ticket.

## 5.8 DEBRIS MONITORING PERSONNEL

After the Debris Management Team has determined the reasonable level of effort needed for debris removal monitoring needs, the Contracting function, in compliance with County procurement practices and the procurement competition requirements specified in 44 CFR Part 13.36, will contact the prequalified contractors (see Appendix G) and execute a Cost-Plus-Fixed Fee or Firm-Fixed Price contract for debris monitoring.

### 5.8.1 Contractors

Once the contracts have been signed, the contractors will adhere to the following:

- **Schedule.** See Section 5.6.1, schedule.
- **Measurement and payment.** Compensation for monitoring will be measured and paid for based on a Cost-Plus Fixed Fee or Firm-Fixed Price contract with progress payments.
- **Health and safety requirements.** See Section 5.6.1, health and safety requirements.
- **Environmental requirements.** See Section 5.6.1, environmental requirements.

### 5.8.2 Force Account Labor

Municipalities using force account labor will be responsible for adhering to the following:

- **Schedule.** See Section 4.6.2, schedule.
- **Measurement and payment.** See Section 4.6.2, measurement and payment.
- **Health and safety requirements.** See Section 4.6.2, health and safety requirements.
- **Environmental requirements.** See Section 4.6.2, environmental requirements.

## 5.9 DEBRIS MONITORING STRATEGY

For contracted monitors, the Operations function will assign each contractor to one or more DCZ, not including municipalities using force account labor. Both contracted monitors and force account labor will use the forms, checklists, and worksheets listed below and provided in Appendix Hs. A sample load ticket is also provided in Appendix H. However, actual serial paper load tickets or electronic load tickets (e.g., electronic haul passes) will be provided by the County, contractor, or municipality.

Depending on the size of event and therefore the number of monitors needed, both the contracted monitors and force account labor may adhere to some or all of the requirements listed in Sections 5.9.1 through 5.9.6.

### **5.9.1 Debris Monitoring Supervisors**

The Debris Monitoring Supervisors will work closely with the Operations function or the municipality and oversee all aspects of debris monitoring. The Debris Monitoring Supervisors will:

- Schedule debris monitoring resources, such as roving monitors and debris loading site monitors, within the assigned DCZ (or municipality).
- Remain in contact with the Operations function (or municipality) and provide daily progress updates.
- Identify, address, and troubleshoot any questions or problems that could affect debris removal safety and eligibility.
- Keep a master log book of all hauling equipment used by contractors (or force account labor) conducting debris removal activities in his/her assigned DCZ (or municipality).
- Collect and compile completed load tickets, Daily Issues Log, Debris Loading Site Monitoring Checklists, and DMS Monitoring Checklists at the end of each day. Submit compiled information to the Administrative/Finance function (or municipality). The Administrative/Finance function (or municipality) will collect and enter all information into an electronic database or file the paperwork daily.

### **5.9.2 Roving Monitors**

The Roving Monitors will act as the “eyes and ears” of the monitors and will make unannounced visits to all loading sites and DMSs within their assigned DCZ (or municipality). The Roving Monitors will:

- Assist their assigned DCZ (or municipality) in the measuring of all trucks and trailers.
- Take photographs of all trucks and trailers.
- Perform a pre-work inspection of areas to identify potential problems, identify covered items (e.g., utility meters, transformers, fire hydrants, mail boxes), and prevent damage from occurring while loading equipment.
- Report any damages to utility components, driveways, road surfaces, private property, vehicles, and other relevant objects or materials; document the damage with photos and, if possible, collect information about the owner and the circumstances of the damage (who, what, when, where) to the Debris Monitoring Supervisor.
- Complete a Debris Loading Site Roving Monitor Checklist for each loading site visited and submit it to the Debris Monitoring Supervisor at the end of each day. For each DMS or disposal site visited, complete a DMS or Disposal Site Roving Monitor Checklist and submit it to the Debris Monitoring Supervisor at the end of each day.

- Complete a Stockpiled Debris Field Survey Form and submit it to the Debris Monitoring Supervisor at the end of each week.
- Oversee the removal of hazardous tree stumps. Collect completed Hazardous Tree Stump Worksheets.
- Complete Hazardous Stump Worksheets and Hanging Limb Worksheets and submit them to the Debris Monitoring Supervisor as needed.
- Complete and submit a Daily Issues Log at the end of each day and return it to the Debris Monitoring Supervisor along with completed Debris Loading Site Monitoring Checklists and DMS Monitoring Checklists.

### 5.9.3 Debris Loading Site Monitors

The Debris Loading Site Monitors will verify debris eligibility based on FEMA requirements and initiate debris removal documentation by using load tickets at all contracted loading sites. The monitors will have the following responsibilities:

- Ensure that the public disposes of eligible debris only at bin drop-off locations during drop-off hours.
- Examine and document each bin at a drop-off location for proper loading and load amount prior to the bin's removal for final disposal.
- Ensure that debris disposal activity at drop-off bins is eligible and pre-sorted, if necessary.
- Coordinate daily with the contractor's representative to verify the location of the loading site in the assigned DCZ.
- Complete a Truck Certification Form for every truck and trailer to be used in the debris removal operations within each assigned DCZ (or municipality).
- Monitor collection activity of trucks.
- Ensure that loads are eligible and pre-sorted.
- Complete the loading portion of the paper or electronic load ticket and signing it. If paper carbon copies are used, retain the first carbon copy of the load ticket and give the remaining carbon copies to the truck driver. Submit paper carbon copies or electronic reading of the load ticket to the Debris Monitoring Supervisor at the end of each day.
- Record each load ticket on the Debris Loading Site/DMS Site Tracking Log at the end of each working day.
- Complete Hazardous Stump Worksheets and Hanging Limb Worksheets.

### 5.9.4 DMS Entrance Monitors

DMS Entrance Monitors will be located at the entrance of the DMS where the inspection tower is located. The monitors will be responsible for estimating information about all incoming, debris-hauling vehicles. To estimate the information, the monitors will:

- Estimate the quantity of debris contained in each truck entering the DMS.
- Obtain carbon copies of the paper load ticket from the truck driver (not necessary if an electronic load ticket is used) prior to the truck entering the DMS. Verify type and quantity of debris on paper or electronic load ticket. Sign the completed ticket and retain the second carbon copy if a paper carbon copy is used. Give the remaining third carbon copy to the truck driver. Submit carbon copies of all paper or electronic load tickets to the Debris Monitoring Supervisor at the end of each day.
- Record each issued load ticket on the Debris Loading Site/DMS Tracking Log at the end of each working day.
- Spot-check truck measurements by periodically measuring the dimensions of the trucks after the debris the trucks were hauling has been unloaded.
- Prohibit unauthorized haulers or residents from dropping off debris at the DMS.

#### **5.9.5 DMS Exit Monitors**

DMS Exit Monitors will verify debris loaded for final disposal and initiate debris disposal documentation by using load tickets at all DMS exit sites, as follows:

- Monitor collection activity of trucks.
- Ensure that loads are eligible.
- Verify the final debris destination.
- Complete the loading portion of the paper or electronic load ticket and sign it. If paper carbon copies are used, retain the first carbon copy of the load ticket and give the remaining carbon copies to the truck driver. Submit paper carbon copies and/or electronic readings of the load ticket to the Debris Monitoring Supervisor at the end of each day.
- Record each load ticket on the Debris Loading Site/DMS Site Tracking Log at the end of each working day.

A DMS Exit Monitor may also be needed at clean-wood DMSs at the grinding locations to ensure that production rates are established and maintained.

#### **5.9.6 Final Disposal Monitors**

Final Disposal Monitors will be located at the entrance of the final disposal site where the inspection tower is located. They will be responsible for estimating information about all incoming debris hauling vehicles. To estimate the information, the monitors will:

- Ensure that the public disposes of eligible debris only at transfer stations and/or landfill drop-off locations during drop-off hours.
- Estimate the quantity of debris contained in each truck entering the final disposal site.
- Obtain carbon copies of the paper load ticket from the truck driver (not necessary if an electronic load ticket is used) prior to the truck entering the final disposal site. Verify type

and quantity of debris on paper or electronic load ticket. Sign the completed ticket and retain the second carbon copy if a paper carbon copy is used. Give the remaining third carbon copy to the truck driver. Submit carbon copies of all paper or electronic load tickets to the Debris Monitoring Supervisor at the end of each day.

- For recyclable debris, ensure that the paper or electronic load ticket contains any monetary or non-monetary benefits accrued at the final disposal site.
- Record each issued load ticket on the Debris Loading Site / DMS Tracking Log at the end of each working day.
- Spot-check truck measurements by periodically measuring the dimensions of the trucks after the debris the truck was hauling has been unloaded.
- Prohibit unauthorized haulers or residents from dropping off debris at the final disposal site unless the Operations function or municipality has pre-designated landfills, disposal facilities, or transfer stations to accept disaster-generated clean-wood debris from residents. Document each clean-wood debris load on the Clean-Wood Debris Disposal Tracking Log.

This section provides the concept of operations for debris reduction and disposal. Debris disposal operations will start shortly after the commencement of debris removal operations and last up to 1 or 2 months after a small-to-moderate event and 6 or more months after a large event. The majority of this phase will consist of sorting, reducing, and disposing of debris at a DMS. During this phase, debris will be disposed of based on a strategy developed by the Operations function and approved by the NYSDEC, NYSDMV, and NYSDAM.

## **6.1 MULTI-AGENCY COORDINATION GROUP COORDINATION**

The Operations function will contact the MAC group through Swift Reach (or an 800-MHz radio system) and establish a date and time for a conference. During the conference call, the Operations function will explain the debris disposal strategy (see Sections 6.3 through 6.6) and determine the need for contractors to dispose of debris.

## **6.2 DEBRIS DISPOSAL PERSONNEL**

After the Debris Management Team has determined the appropriate level of debris disposal staffing requirements, the Contracting function, in compliance with County procurement practices and the procurement competition requirements specified in 44 CFR Part 13.36, will contact prequalified contractors (see Appendix G) and execute Unit-Price and Lump-Sum contracts for debris-disposal operations.

### **6.2.1 Contractors**

Debris disposal contractors will adhere to the following:

- **Schedule.** DMS preparation must begin within 24 hours of the receipt of the Notice to Proceed, and sites must be fully operational no more than 5 days thereafter.

Unless restricted by local ordinances or instructed otherwise by the Debris Manager, the working hours for disposal operations will be limited to 12 hours per day, 7 days per week. Each contractor is responsible for coordinating with the Contracting function in the event that weather conditions delay or require a modification to the proposed daily schedule.

- **Equipment requirements.** See Section 4.6.1, equipment. In addition, the contractor will use mechanical equipment to load and reasonably compact debris into trucks and trailers. All vehicles hauling debris must be equipped with adequate means for containing the load, including tailgates and tarps.
- **Measurement and payment.**
  - **Preparation.** DMS site preparation will be paid for on a lump-sum basis. The amount includes set-up, baseline sampling and testing, signage, and any other preparations necessary to accept debris from the designated removal zones.
  - **Operations and disposal.** The cost of DMS site operations will be measured and paid for based on a unit price per cubic yard of debris that is hauled from the DMS site and accepted at a final disposal site. The unit price must include all subsidiary costs such as,



labor, equipment, fuel, environmental controls, maintenance, general administration, and disposal. Compensation will be based on completed load tickets administered by the DMS Exit Monitor and Final Disposal Monitor at the final disposal site.

- **Close-out.** DMS site closures will be paid for on a lump-sum basis. The amount includes the restoration of sites, sampling and testing of sites, and any additional activities necessary to convert the site back to its original condition and usage.
- **Health and safety requirements.** All debris disposal activities will comply with municipal and State health and safety requirements, as identified in Section 4.6.1.
- **Environmental requirements.** See Section 4.6.1, environmental requirements, and the Regulatory Permit procedures below. In addition, all sites listed in Appendix J have been screened to ensure that they are not historically or culturally significant and are not in a Special Flood Hazard Area, tidal wetland, federally endangered grassland, or deep-flow recharge area. The NYSDEC is preparing to ban open-air burning, including the use of all types of incinerators, but the restrictions may be temporarily relaxed during a disaster declaration, and the use of air-curtain incinerations may therefore be allowed on a case-by-case basis.
- **Regulatory permits and licenses.** For DMS(s) operated by a contractor, the Contracting function, with set-up information provided by the contractor, will be responsible for securing and providing the contractor with the necessary permits from the NYSDEC. Following a disaster and in times of an emergency, the NYSDEC has the ability to assign emergency permits for minimal operational procedures based on the authorization of the Governor. Although the NYSDEC may require compliance with some site-specific regulations, it is unlikely that NYSDEC would require compliance with all of the requirements listed in the following paragraph. In addition, a municipality that owns the DMS(s) will waive or provide the contractor with all local permits related to the use and operation of the site.
  - **Transfer Station Permits.** DMSs are subject to the requirements of Transfer Stations (6 NYCRR Part 360), including Applicability and Registration (360-11.1), Additional Permit Application Requirements (360-11.2), Design Requirements (360-11.3), and Operational Requirements (360-11.4).
  - **Regulatory permit procedures.** Contractors transporting debris from a DMS to a designated final disposal site need to follow the applicable regulatory permit procedures described in Section 5.5.1. Additionally, any contractor transporting debris out-of-state for final disposal must obtain the regulatory permits and licenses and follow the health and safety and environmental requirements for that state.

### 6.2.2 Force Account Labor

Municipalities using force account labor will adhere to the following:

- **Schedule.** See Section 5.6.2, schedule.
- **Measurement and payment.** See Section 4.6.2, measurement and payment.
- **Health and safety requirements.** See Section 4.6.2, health and safety requirements.

- **Environmental requirements.** See Section 6.2.1, environmental requirements.
- **Regulatory permits and licenses.** The municipality will be responsible for securing and/or waiving its own local permits and also securing the necessary permits from the NYSDEC to operate the DMS (see Section 6.2.1, regulatory permits and licenses, Transfer Station Permits).

### 6.3 DEBRIS MANAGEMENT SITE PREPARATION

As previously noted, the Operations function (or municipality) will designate a site for clean-wood debris or mixed C&D debris (non-hazardous waste) storage and disposal. Once these sites have been determined, as part of the NYSDEC permitting process, the contractor (or force account labor) will prepare and provide a regional map, site plan, and engineering report for review and approval by the NYSDEC. The contractor will also submit these items to Operations function for review and approval. In the event that the NYSDEC assigns emergency permits for the operations of these sites, site set-up requirements may be reduced. The contractor (and force account labor) will also establish the site baseline data; prepare the site groundwork; and provide site security, traffic control, protective measures, and an inspection tower to the Operations function (or municipality), as described below.

- **Regional map.** Delineate the DMS on a regional map.
- **Site plan.** Show existing site conditions and projected site use, including all site structures (such as buildings, fences, gates, entrances and exits, parking areas, on-site roadways, and signs) and the location of all water supplies; property boundaries, access roads, the locations of all surface water bodies, and 100-year floodplain boundaries; all proposed structures and areas designated for unloading, sorting, storage, and loading, including dimensions, elevations and floor plans of these structures and areas, and the general process flow; and adjacent properties, including the location of public and private water supplies.
- **Engineering report.** Describe the general operating plan for the proposed DMS, including the origin, composition, and expected weight or volume of all debris to be accepted, the maximum time any such debris will be stored, where all debris will be disposed of, the proposed capacity operating hours, and the expected life of the facility; a description of all machinery and equipment, including the design capacity; a proposed transfer plan specifying the transfer route, the number and type of transfer vehicles to be used, and how often solid waste will be transferred to the disposal site; a description of the facility's drainage system and water supply system; a plan for hiring and training equipment operators and other personnel who will operate the facility; and a contingency plan that details an alternative debris handling system for periods when not operating, or for delays in transporting debris due to undesirable conditions, such as delivery of unauthorized debris, fires, dust, odor, vectors, unusual traffic conditions, equipment breakdown or other emergencies.
- **Baseline data.** Take ground or aerial photographs and/or video; note important built environment features (structures, fences, culverts) and natural environment features (landscaping); take random soil and groundwater samples; and check for volatile organic compounds.

- **Site groundwork.** Prepare the DMS to accept clean-wood debris or mixed C&D debris (non-hazardous waste). Preparation efforts will include clearing debris, erosion control, grading, and construction and maintenance of haul roads and entrances. The contractor (or force account labor) will provide utility clearances and sanitation facilities, if needed. The contractor (or force account labor) will protect any existing structures at the sites and repair any damage caused by site operations at no cost to the County (or municipality).
- **Site security.** Install site security measures and maintain security for site operations.
- **Traffic control.** Control pedestrian and vehicular traffic on the site by providing flag persons, signs, and other traffic-control equipment, as needed. At a minimum, one flag person must be at the entrance of each DMS.
- **Protective measures.** Prohibit any disposal activity within 100 feet of the site boundaries. In addition, determine the exact location (unless provided by the municipal owner) of the on-site utilities, ensure that they are adequately marked, and carry out DMS operation work carefully to avoid damage. Place plastic liners under stationary equipment such as generators and mobile lighting plants.
- **Inspection station.** Bring in or build a temporary inspection station with a desk and chair and with protection from the weather, as required, at each DMS. The station will be located out of the way of traffic flow and clearly marked as an inspection station. The station is temporary, not secure, and not intended for storage of documents during nonworking hours.

## 6.4 DEBRIS REDUCTION AND DISPOSAL STRATEGY

The Operations function will assign each contractor to one or more DMS, not including municipalities using force account labor. Both contractors and force account labor will bring debris to permitted or registered final disposal sites, as directed by the Operations function, municipality, or NYSDDEC, NYSDMV, and NYSDAM. The names and locations of permitted or registered reduction, reuse, and recycling facilities for recyclables, C&D, non-RCA white goods, tires, automobiles, and scrap metals are listed in Appendix K. The names and locations of permitted or registered landfills are listed in Appendix L. The names and location of permitted or registered hazardous waste, HHW, and RMW facilities are listed in Appendix M.

Both the contractors and force account labor will adhere to the requirements listed in Sections 6.4.1 through 6.4.3.

### 6.4.1 Clean-wood Debris

- **Chipping and grinding**
  - Locate the grinders within the DMSs that are farthest away from residential areas.
  - Do not allow wood mulch and chip piles to exceed 18 feet in height, 50 feet in width, and 350 feet in length. Piles should be subdivided by fire lanes with at least 25 feet of clear space at the base around each pile. The piles should not be compacted.

- Monitor the temperature of stockpiled mulch at least twice daily to detect hot spots resulting from natural microbial decomposition. If a hot spot is found, mix the affected mulch to cool it down and to avoid a fire hazard.
- The Operations function (or municipality) will work with the NYSDEC and NYSDAM to determine the best possible uses for the reduced clean-wood material. Possible uses are a soil amendment to be disked into soil or mixed with potting soil; mulch for weed control, moisture retention, soil temperature control, erosion control, or slope stabilization; landscaping in parks, recreation areas, and along roadsides or railways; fuel; feedstock for composting operations; pulp wood; or a landfill product.
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to final disposal destination, such as a yard waste and wood disposal facility, as determined by the NYSDEC and NYSDAM. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **Incineration**

- Do not use portable air-curtain incinerators unless deemed permissible by the NYSDEC.
- If portable air-curtain incinerators are deemed permissible by the NYSDEC, place the incinerator units with a setback of at least 100 feet between the debris piles and the incineration area and 1,000 feet between the incineration area and the nearest building.
- Extinguish fires 2 hours before anticipated removal of the ash mound. The ash mound should be removed before it reaches 2 feet below the lip of the incineration pit.
- Do not dispose of ash until directed by the Operations function (or municipality). The NYSDEC will assist the Operations function (or municipality) in determining the best way to dispose of clean-wood debris ash. Possible uses include as a blending or stabilization component, chemical activator, replacement component in masonry products, component of pozzolanic concrete, or final disposal at an ash monofill landfill.
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

**6.4.2 Non-hazardous Waste Debris**

- **Construction and demolition debris**

- Place into piles that are sorted as uncontaminated and unadulterated wood, recognizable uncontaminated concrete and other masonry waste (including steel or fiberglass reinforcing embedded in concrete), asphalt pavement, brick, soil or rock that has not been in contact with a spill from a petroleum product, hazardous waste, industrial waste, and waste that is not co-mingled with other solid waste. Unless told otherwise by the Operations function, sort C&D debris because not all C&D processing sites accept all types of C&D debris.
- As determined by the NYSDEC and directed by the Operations function, place sorted piles of uncontaminated C&D debris on a truck to be hauled to a C&D debris processing facility to be recycled and reused. Place any remaining piles of uncontaminated, unsortable C&D debris on a truck to be hauled to a C&D debris landfill.
- Once a final disposal destination for all types of C&D debris has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **Non-RCA white goods**

- Place any non-RCA white goods debris into unsorted piles. Load the debris onto a truck and prepare it to be hauled to a scrap metal processing facility or landfill, as determined by the NYSDEC and directed by the Operations function (or municipality).
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **Brown goods**

- Place any brown goods debris, including furniture and carpeting, into unsorted piles. Load the debris onto a truck and prepare it to be hauled to a landfill.
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of

the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **Household garbage**

- Place any household garbage, or mixed wastes containing these materials into unsorted piles. Load the debris onto a truck as soon as practicable to prevent odor, vector, and sanitary nuisances, and prepare the load to be hauled to a Long Island Landfill or municipal solid waste landfill.
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **Putrescent debris**

- Place any putrescent debris into unsorted piles on a separated, lined area and/or in drums. Place onto a truck as soon as practicable (no more than 7 days) to prevent odor, vector, and sanitary nuisances, and prepare the load to be hauled to a landfill or composting facility.
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

- **Sediment**

- Place uncontaminated sediment debris into piles. Load debris onto a truck and prepare the load to be hauled to a landfill or back to originating area.
- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

**6.4.3 Hazardous Waste Debris**

Place any type of hazardous waste, contaminated debris, RMW, waste tires, and HHW and e-waste debris accidentally brought to a DMS in a separate, enclosed, lined area and/or in drums and carry out the following:

- **Commercial, agricultural, industrial, and toxic waste**
  - Place debris in a separate, enclosed, lined area and/or in drums. Contact the NYSDEC and EPA to remove debris.
- **Contaminated C&D debris**
  - Place any contaminated C&D debris in a separate, enclosed, lined area and/or in drums. Load debris onto a truck and prepare the load in accordance with the transportation procedures outlined in the NYSDEC Waste Transporter Permit to be hauled to a hazardous waste disposal facility.
  - Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **RMW**
  - Place RMW debris in containers (use refrigeration when necessary). Under the direction of the NYSDEC or EPA and after there is assurance that the debris has been treated in an autoclave, decontamination process other than an autoclave, or medical waste incinerator, load debris onto a truck and prepare the load in accordance with the transportation procedures outlined in the NYSDEC Waste Transporter Permit to be hauled to a solid waste landfill.
  - Once a final disposal destination has been confirmed by the Operation function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **Waste tires**
  - Load the debris onto a truck and prepare the load, in accordance with the transportation procedures outlined in the NYSDEC Waste Transporter Permit, to be hauled to a waste tire recycling facility (e.g., waste tire retreaders, facilities storing waste tires for on-site energy recovery, tire dealers selling waste tires, facilities using waste tires in the manufacture of new products).

- Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.
- **HHW and e-waste**
  - Place HHW and e-waste debris in a separate, enclosed, lined area and/or in containers. Load debris onto a truck and prepare the load in accordance with the transportation procedures outlined in the NYSDEC Waste Transporter Permit to be hauled to a landfill that accepts HHW and e-waste.
  - Once a final disposal destination has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the debris leaves the DMS. After the debris has been documented, haul the debris to a predetermined household hazardous waste collection and storage facility, hazardous waste land disposal facility, or e-waste dismantling and recycling facility (for e-waste only). If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

## 6.5 DEBRIS MANAGEMENT SITE CLOSE-OUT

Once the Debris Manager, Operations function, or municipality has determined that a DMS is no longer needed, it will be closed within 30 days of receiving the last load of debris. To meet federal requirements, the closure of a DMS must occur within 6 months of the disaster declaration unless an extension is granted by FEMA. The contractor (or force account labor) will close each DMS as described below.

- **Restoration.** Remove all debris from the DMS for final disposal, take out all contracting equipment and temporary structures, and re-establish grades throughout the DMS.
- **Sampling and testing.** Complete soil and groundwater closure sampling, as conducted in the DMS preparation (baseline data and testing of the DMS). The results must be provided to the Operations function (or municipality) prior to the closure of each DMS. If a DMS is found to be contaminated above the baseline values, the site must be remediated by the contractor (or force account labor) to a baseline as deemed acceptable by the Operations function (or municipality) and the NYSDEC.
- **Site inspection.** Participate in a final site inspection with the Operations function (or municipality) to ensure that the site is returned to its original condition. If environmental impacts are identified during the inspection, the contractor (or force account labor) will provide the appropriate level of mitigation to return the site back to its original condition and function. Once the Operations function (or municipality) has determined that the site has



been returned to its original condition, the Operations function (or municipality) will document the site closure.

## **6.6 HOLDING AREAS**

### **6.6.1 Vehicles and Vessels**

- Do not remove vehicles and vessels from the designated holding area until the Operations function (or municipality) secures ownership by completing a Statement of Acquisition (MV-907A form), as determined by the NYSDMV and directed by the Operations function (or municipality), and until documentation relating to the removal of abandoned vehicles and vessels is submitted to the FEMA Public Assistance Program staff for consideration.
- Once a final disposal destination (automobile dismantlers, scrap metal processors, or automobile junkyard) has been confirmed by the Operations function (or municipality), the DMS Exit Monitor will document each load and examine it for proper loading and load amount before the vehicles or vessels leave the holding site. After the debris has been documented, haul the debris to the final disposal site. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

## **6.7 COLLECTION SITES**

### **6.7.1 Clean-wood and C&D Debris**

If the amount of clean-wood and C&D debris from the event is not enough to warrant curbside collection, municipalities may set up clean-wood and C&D debris collection sites at designated municipal landfills, disposal facilities, and transfer stations. Final Disposal Monitors must be located at the entrance of the any facilities and drop-off locations that accept disaster-generated clean-wood and C&D debris. Final Disposal Monitors will be responsible for recording the amount of clean-wood and C&D debris that is dropped off for final disposal. The Final Disposal Monitors must document each clean-wood debris load on the Clean Wood Debris Disposal Tracking Log (see Appendix H).

If the amount of clean-wood and C&D debris warrants bin drop-off collections, the debris removal contractors (or force account labor) should not collect bins until the bin load has been documented by the Final Disposal Monitor. Collect bins at specific locations or bins in a specific DCZ. Haul the debris to the predetermined designated final disposal site if DMSs are not needed. If paper load tickets are used, give the remaining carbon copies to the Final Disposal Monitor. Keep the final carbon copy of the load ticket and give it to the contractor supervisor (or municipality) at the end of each day.

**6.7.2 HHW and e-waste Debris**

For close-out, haul HHW and e-waste bins separately to the nearest loading site. At the loading site, the Debris Loading Site Monitor will document each load and examine it for proper loading and load amount before the debris leaves the loading site. After the debris has been documented, haul the debris to the predetermined household hazardous waste or e-waste collection and storage facility or final disposal site that accepts HHW and e-waste. If paper load tickets are used, give the remaining carbon copies to the Disposal Facility Monitor. Keep the final carbon copy of the load ticket.

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To be eligible for reimbursement under the FEMA Public Assistance Program, debris removal (including clearance and disposal) and debris monitoring contractors must meet rules for federal grants, as noted in 44 CFR Part 13.36.

This section provides an overview of the contracting process, procurement methods, general provisions for debris contracts, types of debris contracts, and contracting avoidances.

## 7.1 CONTRACTING PROCESS

During a disaster, the Contracting function should use one or more of the following methods to ensure eligibility of the FEMA Public Assistance Program funding:

- **Pre-drafted contracts.** The Contracting function may draft a debris removal or debris monitoring contract prior to a disaster. Once the extent of the disaster is known, the appropriate scope of work can be determined and the contract can be finalized.
- **Pre-event or standing contracts.** The Contracting function may choose to solicit bids and award contracts in non-disaster times for specific debris management positions, including a Debris Manager. This allows time for a deliberate procurement process and gives the Contracting flexibility in mobilizing the appropriate resources in anticipation of an event.
- **Pre-qualified contractors.** The Contracting function will have a list of prequalified contractors to carry out debris removal and debris monitoring work in Nassau County. The prequalified contractors listed in Appendix G have met the minimum requirements for insurance, bonding, and licensing. During a disaster, all prequalified contractors are invited to bid on a contract. The prequalified contractors can then focus on developing costs rather than assembling documentation that is needed to qualify for bidding.

## 7.2 METHODS OF PROCUREMENT

To ensure that an established procurement process is followed, FEMA finds the following four methods of procurement acceptable:

- **Small purchase procedures.** An informal method for securing services or supplies that do not cost more than \$100,000 by obtaining several price quotes from different sources.
- **Sealed bids.** The preferred method for procuring construction contracts, this procurement is a formal method in which bids are publicly advertised and solicited, and the contract is awarded to the responsible bidder whose proposal is the lowest in price. This method is the preferred method for procuring construction contracts.
- **Competitive proposals.** Contractors are awarded on their qualifications instead of cost. This method is often used for procuring professional services, such as engineering services. In addition, this method normally involves more than one source submitting an offer and is used when conditions are not appropriate for sealed bids.
- **Noncompetitive proposals.** Noncompetitive, sole-source proposals should only be used when the award of a contract is not feasible under small purchase procedures, sealed bids, or competitive proposals, and one of the following circumstances applies: The item is available

only from a single source; an emergency requirement that does not permit a delay; solicitation from a number of sources has been attempted; and competition is determined to be inadequate. It is important to note that FEMA strongly discourages applicants from using this type of procurement.

### **7.3 GENERAL PROVISIONS**

To ensure that the County's procurement interests are protected, the following items should be included in any debris removal and debris monitoring contract.

- **Basis of payment.** The basis of payment and the payment process must be clearly outlined in the contract. Contractor payments should be based on verification of completed work, and the required information for the payment request should be included in the provisions of the contract. For Time-and-Material contracts, the types and sizes of equipment to be used must be listed in the contractor's prequalification proposal. Prior to beginning work, the contractor will be required to identify each item of equipment more fully (type, size, and equipment number). In addition, a Time-and-Material contract must have a cost ceiling or "not to exceed" provision in the contract. For Unit-Price contracts, weight-to-volume conversion factors should be published to clarify further possible differences between invoices and payment. Basis of payment is usually based on the volume and/or weight of the contractor's loads. If the contract payment is based on volume, provisions in the contract are required to substantiate invoices and payment. For Cost-Plus Fixed Fee, Firm-Fixed Price, or Lump-Sum contracts, the Contracting function should consider using a progressive payment method for contract services, which would require documentation from the contractor to verify and validate the completed work, support the contractor's invoices, and receive reimbursement under the FEMA Public Assistance Program.
- **Reasonable cost.** Reasonable costs must be clearly defined and appear in every contract. A reasonable cost, which by its nature and amount does not exceed that which would be incurred by a prudent person under the circumstance prevailing at the time the decision was made to incur the cost, must be included as part of the respective scope of work in order to be eligible for FEMA Public Assistance Program.
- **Duration.** The duration of contract must be clearly stated. By doing so, the applicant sets clear expectations for the contractor. Moreover, the contractor can effectively manage resources and schedule work to meet the applicant's expectations. As described in Section 5.6.1, debris removal and debris monitoring services should continue for no longer than 60 days from the Notice to Proceed, unless extended by the Contracting function with a written notice 10 days before the end of the 60 days.
- **Performance measures.** To ensure that debris removal and debris monitoring are conducted in a timely manner, the contract must include specific timelines for specific tasks to be completed. The contract language clauses should be specific as to how performance will be evaluated.

- **Subcontracting.** The contract must include a subcontract plan that contains a clear description of the percentage of the work the contractor may subcontract out and limits the use of subcontractors to only those approved by the County.
- **Equipment.** The contract must state that all trucks and other equipment must be in compliance with all applicable federal, State, and local rules and regulations. In addition, the contract should require each contractor to fully identify each item of equipment by type, size, and equipment number, and provide this information to the Contracting function. The equipment number and the contractor's name or initials must be permanently marked on each side of the vehicle at that time. Rates for equipment not listed in the proposal must be established with the Contracting function before such equipment may be used.
- **Health and safety.** The contract must state that each contractor will provide safety equipment, training, and supervision as may be required by the County, and submit its own health and safety strategy to the Health and Safety Officer before commencement of debris clearance operations. The contractor will ensure that its subcontracts contain a similar safety provision.
- **Conflict Resolution.** The conflict resolution process must be well-defined in the contract, including alternatives for mediation if an issue arises and is difficult to resolve.
- **Termination clause.** The contract must contain a termination clause that allows the County to terminate the contract if the contractor does not deliver services in the manner delineated in the contract. The termination clause should be specific as to what would be considered reasons for termination.

## 7.4 TYPES OF CONTRACTS

- **Time-and-Material contract.** A Time-and-Material contract is used when the scope of work necessary to achieve an outcome is unknown. This type of contract is typically used in the immediate aftermath of a disaster event during debris clearance. FEMA generally limits the reimbursement of this type of contract to the first 70 hours of work.

A Time-and-Material contract establishes hourly rates for labor and equipment that will be used to perform specific tasks. The contractor is paid based on the actual time spent to perform the specified tasks and for the usage of equipment. The contractor is also paid for the actual cost of materials that are used during operations. The debris monitoring contractor must provide a list of equipment that is used and the appropriate staff positions, their hourly rate, and a description of the responsibilities for each position.

- **Unit-Price contract.** A Unit Price contract is used when the individual work tasks are known, but the total amount of work cannot be verified. Units can be measured in terms of weight, volume, or any other quantifiable measure. A Unit-Price contract must provide a detailed outline of the tasks that are required to complete the work. In addition, a Unit-Price contract requires intensive documentation and control because each unit must be collected, verified, and accounted for during removal, separation, reduction, and disposal of debris.
- **Cost-Plus Fixed Fee, Firm-Fixed Price, and Lump-Sum contracts.** These types of contracts are used when the scope of work can be identified and quantified. The advantage of

these types of contracts is that the total price for the specified work is known. The contract must contain every work activity that will be required, the quantity of debris that will be removed, and/or the specific number of passes that will be required to collect, haul, and/or dispose of debris. In addition, a breakdown of costs for each item of work activity must be stated in the bid specifications or contract so that if additional work is necessary during the term of the contract, the Contracting function can determine the cost for that work based on the contract line item costs.

## **7.5 CONTRACTING AVOIDANCES**

Contracting pitfalls can result in a determination of ineligibility for FEMA Public Assistance Program funding. To avoid the pitfalls, the Contracting function should adhere to the following guidance from the 2006 FEMA Recovery Division Fact Sheet: Debris Removal Applicant's Contracting Checklist:

- DO NOT award a debris removal contract on a sole-source basis.
- DO NOT sign a contract until it has been thoroughly reviewed by legal representation.
- DO NOT allow any contractor to make eligibility determinations because FEMA is the only organization with this authority.
- DO NOT accept any contractor's claim that it is "FEMA certified." FEMA does not certify, credential, or recommend debris contractors.
- DO NOT award a contract to develop and manage Debris Management Sites unless it is necessary. Contact the NYSEMO to assist in the determination for the need of such sites.
- DO NOT allow separate line-item payments for stumps 24 inches or small in diameter; these stumps should be treated as normal debris.
- DO NOT "piggyback" or use a contract awarded by another entity.
- DO NOT award pre-disaster/stand-by contracts that do not have variable mobilization costs.

This section provides an overview of the local safety evaluation process for private property damaged from disasters, the determination of eligibility for demolition of private property, and the types of eligible and ineligible demolition work.

## 8.1 BUILDING SAFETY EVALUATION

Local certified building inspectors or registered engineers, Safety Assessment Program evaluators, or Direct Federal Assistance personnel (e.g., USACE) cannot generally conduct an official safety evaluation of private property until several days after an event, depending on the extent of local damage and the number of available qualified inspectors and engineers. The first safety evaluation will most likely be a rapid evaluation, requiring only 15 to 30 minutes for each property and limited to inspecting the building exterior. If a severe interior problem is brought to the attention of the inspector or engineer or the structure cannot be adequately viewed from the exterior, an interior evaluation will likely be conducted as well.

During this evaluation, the inspector or engineer will quickly determine whether a building is safe enough to occupy and, if not, decide which restrictions to place on its use or entry. The results of the inspection will be placed near the entrance to the building and will likely be one of three categories:

- **Inspected.** The extent of the damage is insignificant or is readily repairable and does not pose a significant safety hazard. This posting is intended only to inform occupants that the building may be safely occupied. It does not imply that existing damage should be ignored or that repairs are not necessary.
- **Restricted.** The extent of the damage prevents unrestricted occupancy, but unsafe conditions do not exist. Entry is normally limited to occupants or owners so that they can retrieve valuable or essential property or to contractors so that necessary repairs can be made.
- **Unsafe.** The extent of the damage is so severe that the structure is dangerous to the life, health, or safety of the public because it is so damaged or structurally unsafe that partial or complete collapse is imminent. It is unsafe to occupy or enter the building for any reason.

## 8.2 PRIVATE PROPERTY DEMOLITION

The “red tagging” or unsafe posting of a structure does not automatically mean that the property has been condemned or will require demolition. Demolition may eventually be the appropriate action for a property owner to take if the necessary repairs are too expensive. The local building official will conduct a detailed inspection to determine whether the unsafe structure poses an immediate threat to the public and requires demolition. If the structure needs to be demolished, the property owner will receive a written copy of the assessment by the local building inspector via certified mail. If demolition is required or deemed appropriate, the primary responsibility for demolition of an unsafe structure and subsequent removal of demolition debris lies with the owner. Most insurance policies have a clause that provides payment for demolishing structures damaged beyond repair. However, the demolition of a privately owned structure and subsequent removal of demolition debris may be eligible for the FEMA Public Assistance Program if no insurance exists that would pay for the demolition, if the owner is not capable of paying for such



work, and if no opportunity exists to recover the cost from the owner. FEMA is prohibited by the Robert T. Stafford Disaster and Emergency Assistance Act, Section 312, from approving funds for work that is covered by any other source of funding. Therefore, the State and municipality must verify that insurance coverage or any other source of funding does not exist for the demolition of private structures. If FEMA discovers that duplication of benefits from other funding sources has occurred, FEMA will deobligate Public Assistance Program funding.

After the municipality has identified unsafe, uninsured private structures, it will contact FEMA to schedule site visits. The municipality will also provide FEMA with a list of the properties to be inspected (including the owner's name, street address, and the tax or parcel identification number), a map identifying each property, the name of a local building inspector or engineer to be part of the inspection team, and insurance information, if available.

A FEMA inspector, State inspector, and local inspector or engineer will together determine whether a structure is at least 50 percent damaged. If FEMA approves the demolition of a property identified in the demolition bid, the State will provide the municipality with written authorization to proceed with the demolition project.

If permission for the demolition or debris removal of private property is authorized and considered for Public Assistance Program funding, the municipality will be required to properly document all legal processes used to gain access to private property; applicable scopes of work; and compliance with federal, State, and local environmental and historic preservation review requirements. The municipality should work with the State and/or Public Assistance Program staff prior to the commencement of any private property demolition or debris work to ensure that all legal, environmental, historic, and scope-of-work considerations are addressed.

### **8.2.1 Regulatory Permits, Licenses, and Necessary Documentation**

The municipality should acquire the following documents to present to the NYSEMO, NYSDEC, the State Historic Preservation Officer, and/or Public Assistance Program staff:

- A Right-of-Entry form signed by the property owner, which includes a Hold Harmless agreement and indemnification applicable to the project's scope of work.
- Investigation of insurance coverage and liens.
- Photos that show the property address, if available, and condition of the property prior to the beginning of the work.
- Structural assessments or other certifications showing that the structure is determined to be unsafe or poses an immediate threat to the public, based on local ordinances or building codes.
- Documentation of environmental and historic review, which may include a site visit and approval from the State Historic Preservation Officer to document that no historic and archaeological sites restrictions exist; or a consultation with the NYSDEC Endangered Species Unit that no Endangered, Threatened, and Special Concern First & Wildlife Species of New York State exist on the property site.

- Documentation that no asbestos or hazardous waste is present. If asbestos is found, the contractor must adhere to New York State Labor Law and Industrial Code Rule 56 (12 NYCRR Part 56) for asbestos, which the Asbestos Control Bureau oversees for the abatement of toxic hazards associated with asbestos. Requirements of this code include the licensing of contractors, certification of all persons working on asbestos projects, filing of notifications of large asbestos projects, and a pre-demolition survey of buildings to identify any asbestos that may be present to ensure proper abatement of asbestos materials.

After the municipality staff has read the State-provided forms for historic preservation, endangered species, and hazardous materials and understands that it is the municipality's responsibility to ensure full compliance with all federal, State, and local rules and regulations regarding these matters, the municipality will sign and return these forms to the State. At this time, the municipality will also provide copies of the bid specifications, final property list, and bid results prior to demolition.

If permission for demolition is not provided, the municipality will follow its legal condemnation process, including Right-of-Entry and Hold Harmless agreements.

### 8.2.2 Demolition Strategy

Contractors will demolish a structure based on the strategy determined by the municipality, which includes the following:

- **Permits.** The municipality will provide the contractor with all necessary demolition or excavation permits prior to the commencement of demolition work. If asbestos is found, the contractor must provide a copy of the valid Asbestos Handling License to the municipality prior to the removal of asbestos. In addition, the contractor must adhere to New York State Labor Law and Industrial Code Rule 56 (12 NYCRR Part 56) for asbestos removal and disposal.
- **Site preparation.** The site will be prepared following municipal permit procedures, including site security, air monitoring, wetting requirements, and Best Management Practices.
- **Demolition.** Each structure will be demolished in a controlled manner and as regulated by the local building code. If asbestos is present, the contractor must adhere to New York State Labor Law and Industrial Code Rule 56 (12 NYCRR Part 56) for asbestos.
- **Disposal.** Debris will be disposed of in the following manner:
  - If the residence contains asbestos, all contaminated C&D debris will be hauled to a disposal site that accepts asbestos-containing material.
  - Uncontaminated C&D debris will be hauled to a C& D debris processing facility or C&D landfill.
  - Brown goods debris and household garbage will be hauled to a landfill.
  - Non-RCA white goods debris will be hauled to a scrap metal processor or landfill.

- RCA white goods debris will be handled by the EPA and then hauled to a scrap metal processor or landfill.
- All HHW debris will be hauled to a hazardous waste collection and storage facility or landfill that accepts HHW.
- E-waste debris will be hauled to a disposal site that accepts e-waste.

### **8.3 PUBLIC ASSISTANCE PROGRAM DEMOLITION FUNDING**

#### **8.3.1 Eligible Costs**

Costs that may be eligible for FEMA Public Assistance Program demolition funding are associated with the demolition of private structures and are limited to the demolition and removal of the structures and other improvements that may represent an immediate threat to public health and safety. Examples of costs that may be eligible are:

- Capping wells
- Pumping and capping septic tanks
- Filling in basements and swimming pools
- Testing and removing hazardous materials from unsafe structures, including asbestos and HHW
- Securing utilities (e.g., electric, phone, water, sewer)
- Securing permits, licenses, and title searches
- Demolition of disaster-damaged outbuildings, such as garages, sheds, and workshops, that are determined to be unsafe

At project completion, the State will notify FEMA that the municipality's demolition project has been completed. A joint FEMA/State team will inspect the municipality's demolition site to ensure full compliance with the original scope of work.

#### **8.3.2 Ineligible Costs**

Ineligible costs associated with the demolition of private structures may include:

- Removal of slabs or foundations, except in very unusual circumstances, such as when disaster-generated erosion under slabs on a hillside causes an immediate public health and safety threat
- Removal of pads and driveways
- Structures condemned as safety hazards before the disaster
- Fees for permits, licenses, and titles issued directly by the applicant unless it can be demonstrated that the fees are above and beyond administrative costs

The demolition of commercial structures, including apartments, condominiums, and mobile homes in commercial trailer parks, is generally ineligible for FEMA Public Assistance Program funding. It is assumed and expected that these commercial buildings retain insurance that will cover the cost of demolition. However, in some cases, as determined by FEMA, the demolition of commercial structures by a State or local government may be eligible for FEMA Public Assistance Program funding when such removal is in the public interest.