

DEBRIS MANAGEMENT PLAN 2005



Solid Waste Management Program

**Solid Waste Disposal and Resource Recovery
Solid Waste Collection and Recycling
12000 Government Center Parkway, Suite 448
Fairfax, VA 22035-0059**

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I. EMERGENCY DECLARATION AND CONTINUITY OF OPERATIONS PLAN (COOP)

A local emergency may be declared pursuant to §44-146.21 of the Code of Virginia by the Director of Emergency Management (County Executive) or, in his/her absence, by the Coordinator of Emergency Management, subject to confirmation of the Board within fourteen (14) days. The declaration of a local emergency activates the County's Emergency Operation Plan (EOP), and authorizes the provision of aid and assistance there under. A local emergency should be declared when a coordinated response among several local agencies and organizations must be directed or when it becomes necessary to incur substantial financial obligations in order to protect the health and safety of persons or property or to provide assistance to victims of a disaster.

As Fairfax County continues to develop its comprehensive Emergency Operations Plan, it is essential that under any circumstances the County be able to provide needed services to its residents and businesses while assuring the viability of local government. The Continuity of Operations Plan (COOP), along with supporting ordinances and laws, will provide a method to facilitate both the continuity of government and operations in the event of a significant emergency, act of war or disaster. The specific objectives of the COOP are as follows:

1. Ensure that Fairfax County Government can continuously carry out emergency duties and responsibilities during catastrophic emergency events.
2. Ensure that emergency protective actions are placed into effect to reduce loss of life and minimize damage.
3. Protect essential facilities, equipment, records and other assets.
4. Reduce or mitigate disruptions to County operations.
5. Achieve a timely and orderly recovery from an emergency and resume full service to residents and business as quickly as possible.
6. Establish a line of succession in the event of death, incapacitation or unavailability of elected officials and key government personnel.

All County operations are responsible for assisting in the fulfillment of these objectives:

Fairfax County Continuity of Operations Plan (COOP)

1. Identify mission essential functions that must be carried out during catastrophic emergencies (maintenance of tax records, protection of vital records, computerized records and public documents, plan for restoration of services to the public, etc.)
2. Develop a plan to protect essential facilities, equipment, records and other assets.
3. Establish a line of succession for themselves, as well as for deputy agency directors or key division leaders. Each line of succession should consist of no fewer than three and no more than seven emergency interim successors.

II. FOUR PHASES OF EMERGENCY MANAGEMENT

A fundamental principle of comprehensive emergency management is that organizations must identify hazards, assess risks, take preventive action to minimize consequences and plan to effectively respond to all known and unknown hazards both *before and after* the disaster-triggering event occurs. In comprehensive emergency management the four phases of emergency management work together to form an effective protection program. Emergency activities are typically divided into four phases that form a cycle, they are:

1. Mitigation
2. Preparedness
3. Response
4. Recovery

The four phases appear in a circular relationship to each other. Each phase links to the others. Activities in one phase may overlap those in the previous. Preparedness moves swiftly into response when disaster strikes. Response yields to recovery at different times, depending on the extent and kind of damage. Similarly, recovery should help trigger mitigation, motivating attempts to prevent or reduce the potential for a future disaster. The disaster phases have no beginning or end, so recognition of a likely threat can motivate mitigation efforts as well as an actual emergency can.

Mitigation - Activities that eliminate or reduce the chance of occurrence or the effects of a disaster. If communities cannot prevent disasters, they can still act to reduce their impact. For example, requiring roof reinforcements will reduce damage from hurricane winds. Preventing new construction in floodplains or requiring flood resistant reconstruction in repairs can reduce risk of flooded homes.

Preparedness - Planning how to respond when an emergency or disaster occurs and working to marshal the resources to respond effectively. Planning activities save lives and minimize damage by preparing people to respond appropriately and effectively when an emergency is imminent or hits. To respond properly, a jurisdiction must have a plan for response, trained personnel to respond, and the necessary resources with which to respond.

Response - The period during and immediately following a disaster. During this phase, public officials provide emergency assistance to victims of the event and try to reduce the likelihood of further damage. Local fire departments, police departments, rescue squads, and emergency medical service (EMS) units are primary responders. Other County agencies and cooperating organizations execute supporting missions based upon their assigned Emergency Support Functions or “ESFs”.

Recovery - The fourth and final phase of the emergency management cycle. It continues until all systems return to normal or near-normal operation. Short-term recovery restores vital life-support systems to minimum operating conditions. Long-term recovery may continue for months-even years-until the entire disaster area returns to its previous condition or undergoes improvement with new features that are less disaster-prone.

As Fairfax County continues its all-hazard emergency planning effort, the four phases of emergency management framework will be used to help ensure that Fairfax County is addressing and prioritizing both short-term and long-term planning and funding needs. The Solid Waste Management Program’s Debris Management Plan is a vital component in the DPWES role to effectively execute this strategy.

III. PURPOSE OF THE DEBRIS MANAGEMENT PLAN

The purpose of this Debris Management Plan is to enable the Solid Waste Management Program of the Fairfax County Department of Public Works and Environmental Services (DPWES) to execute its debris management mission under Fairfax County's Emergency Operations Plan and Continuity of Operations Plan.

IV. DPWES EMERGENCY SUPPORT FUNCTIONS (ESF)

Primary:	ESF #3	Damage Assessment/Public Works
Secondary:	ESF #5	Emergency Management
	ESF #7	Resource Management
	ESF #9	Urban/Ground Search & Rescue
	ESF #10	Hazardous Materials

V. SOLID WASTE MANAGEMENT PROGRAM (SWMP) MISSION ESSENTIAL FUNCTIONS

Solid Waste Management Program Primary Responsibilities Identified in ESF #3:

ESF #3 - Damage Assessment/Public Works

- Designate a Debris Manager (DM) responsible for deploying County and private debris removal resources in coordination with the Virginia Department of Transportation (VDOT) and public utilities efforts in order to maximize debris removal efficiency.
- Establish and maintain communications with Emergency Management (ESF #5) to report and receive assessments and status information.
- Establish procedures and assign responsibilities for coordinated removal, processing and disposal of debris generated by any type of disaster.
- Liaison with VDOT to expedite emergency debris clearance to enable responder access to disaster areas and to ensure effective utilization of State and County resources based upon priorities provided by Emergency Management (ESF #5).
- Liaison with Virginia Department of Environmental Quality (VDEQ) to secure necessary emergency environmental waivers and legal clearances needed to dispose of emergency debris materials from demolition activities.
- Coordinate with VDEQ to monitor emergency disposal of debris materials.
- Coordinate and monitor issuance of emergency solid waste permits for privately owned dump trucks and equipment hauling debris.
- Coordinate and monitor debris removal by private contractors.
- Coordinate with the Office of Public Affairs and Emergency Operations Center to provide the public and private haulers with proper disposal instructions.
- Liaison with the Health Department regarding necessary removal of debris for health reasons caused by interrupted disposal of sanitary wastes and for air quality monitoring at all debris staging and reduction sites.
- Perform restoration of temporary debris management sites to pre-disaster conditions, including any remedial measures necessary to meet state and federal environmental requirements due to the nature of the staging or reduction operation.

Solid Waste Management Program Secondary Responsibilities
Noted in Other ESFs:

ESF #5 - Emergency Management

- To coordinate and control DPWES emergency operations with other responding agencies from the County's Emergency Operations Center utilizing a multi-agency Incident Command System to ensure the implementation of actions requested by the Incident Commander or directed by Emergency Management.
- Developing and maintaining emergency operating plans and standard operating procedures to develop and maintain a capability for emergency operations to implement essential emergency support functions as assigned in the County's Emergency Operations Plan.
- Maintain current notification rosters, designate staffing, establish procedures for reporting emergency information and provide ongoing training to maintain emergency response capabilities.

ESF #7 – Resource Management

- Provide critical personnel, equipment and material resources needed in support emergency response and recovery operations.
- Assist with emergency operations as required.
- Monitor staffing utilization for maximum results.
- Maintain records of disaster-related expenses.

ESF #9 – Urban/Ground Search and Rescue

- Assist Fire and Rescue and Police Departments with any materials, equipment, maps, staff, and vehicles as required.
- Maintain records of disaster related expenses.

ESF #10 – Hazardous Materials

- Coordinate requests from the Incident Commander, as directed by ESF #5, Emergency Management, for county and contracted resources needed to expedite containment operations during response, regarding requests for heavy construction equipment, trucks, operators, materials, and related supplies.
- Activate additional personnel and resources as necessary.
- Coordinate DPWES resources and contractors assisting with cleanup operations and environmental issues during recovery.
- Record disaster-related expenses.

VI. CONTINUED OPERATION OF ESSENTIAL FACILITIES

During a disaster in which a large amount of debris has been created, the Division of Solid Waste Disposal and Resource Recovery (DSWDRR) will oversee operation of primary and temporary management sites designated for use in the County. The Division of Solid Waste Collection and Recycling (DSWCR) may be called upon to provide equipment and personnel support. Therefore its base of operation must be operational.

1. **I-66 Transfer Station (DSWDRR)**
Sorting of material as possible, grinding of woody debris, bulking and transport of materials to other processing or disposal facilities.
2. **I-95 Sanitary Landfill (DSWDRR)**
Sorting of material as possible, grinding of woody debris, bulking and transport of materials to other processing or disposal facilities.
3. **I-95 Energy/Resource Recovery Facility (Private Covanta Energy Facility)**
Incineration of burnable debris.
4. **Newington Collection Facility (DSWCR)**
Base for waste collection personnel and vehicles.

The Solid Waste Management Program will provide refuse collection and disposal operations necessary to support continued operation of essential facilities used for the reception and care of evacuees, volunteer workers, emergency responders, maintenance and support personnel. Below is a partial listing of essential facilities which require continuity of refuse collection service during a disaster:

- A. Fairfax County Police Department, Pine Ridge, Public Safety Communications Center and Operations Support Facility
- B. Government Center Campus and Emergency Operations Center
- C. Adult Detention Center
- D. Juvenile Detention Center
- E. Massey Public Safety Center
- F. Police Stations
- G. Shelter Sites (Schools)
- H. DVS Vehicle Maintenance Facilities
- I. Fire Stations
- J. Equipment/Responder Staging and Rehab Areas

VII. SUCCESSION OF AUTHORITY

The following lines of succession are specified in any contingency which might result in the unavailability of key administrative staff.

The decision-making authority for the Solid Waste Management Program will be based upon the type of resources and specialized expertise required to respond to each incident.

DSWCR has decision making authority for solid waste collection operations and storm debris clearance of limited scope for undeclared emergencies which can be handled within the resources of the solid waste management program.

DSWDRR assumes overall decision making authority and provides staff technical support to the Fairfax County Emergency Operations Center (EOC) when declaration of a local emergency pursuant to §44-146.21 of the Code of Virginia either occurs or appears imminent. This Debris Management Plan shall be activated when the scope of debris removal and processing options exceeds that capability of normal solid waste program operations and requires activation of additional DPWES, inter-agency, contracted or other private resources.

The succession of authority for the Solid Waste Management Program is listed by position in decreasing order:

1. Director, Division of Solid Waste Disposal and Resource Recovery (DSWDRR)
2. Director, Division of Solid Waste Collection and Recycling (DSWCR)
3. Assistant Director, DSWDRR
4. Assistant Director, DSWCR
5. Chief, Code Enforcement, Safety and Special Projects Branch
6. Chief, I-95 Landfill Operations, DSWDRR
7. Chief, Recycling and Administration Branch, DSWCR

Fairfax County Emergency Operations Center

In the time of a disaster, emergency operations will be directed and controlled from the County Emergency Operations Center (EOC) located in Suite 151C of the Fairfax County Government Center, 12000 Government Center Parkway, Fairfax, VA 22035. The EOC staff will consist of the following:

County Executive
Deputy County Executive
EOC Duty Officers, Fire and Police
Deputy Coordinator of Emergency Services
Key Agency/Department Heads (or their designated representatives)
Personnel of supporting and coordinating organizations as may be required based upon the specific needs of the particular incident.

VIII. ALERTING AND WARNING SYSTEMS

In the context of the EOP, alerting and warning systems for essential Solid Waste Management Program personnel who are required to report in support of disaster operations are composed of the following:

1. **Fairfax County Emergency Alert Network (EAN), primary** EAN notifies targeted call groups or specific individual personnel to take specific action, filling an unmet need of previous emergency notification systems used by the county. EAN enables simultaneous activation of all enrolled wireless devices to ensure timely notification of county employees, identified emergency partners, volunteer groups and public officials in the event of emergencies affecting public safety. It uses duplicate, redundant computer servers to provide an enterprise-wide platform with seamless failover which is readily accessible and used by 43 different agencies. Its systematic structure facilitates timely and effective internal decision making, coordination and communication. Alerts provide timely emergency information, customized by notification and warning groups created to provide continuity, flexibility and interoperability.

2. **Emergency Alert Systems (EAS)** EAS alerts are broadcast by the National Oceanic and Atmospheric Administration (NOAA), and the National Weather Service radio station KHB36, operating continuously from Manassas, Virginia on a frequency of 162.550 MHz. All DPWES facilities have been provided with weather alert radios with Specific Area Message Encoding (SAME) capability to enable receiving EAS alerts. ***Program the SAME code 051059 into your NOAA weather radio to receive specific EAS alerts for Fairfax County.***

3. **Broadcast announcements on radio/TV for essential personnel to report** All broadcasters and cable operators are required to take certain actions when the National level EAS is activated. Designated EAS relay broadcasters for Northern Virginia are WMAL radio AM 630 and WTOP radio AM 1500. Participation in the State/Local Area EAS is voluntary for broadcasters and cable operators. Other broadcast stations may participate in the State/Local Area EAS without prior FCC approval. The concept of management of each broadcast station and cable system to exercise discretion regarding the broadcast of emergency information and instructions to the general public is provided by the FCC Rules and Regulations.

4. **Notification of essential personnel** *Staff responsibilities:*
 - **Solid Waste Program Emergency Response Team Contact List** – Branch chiefs are responsible to ensure that all contact information for essential personnel is current and accurate. This shall include at minimum: employee team member names, work site, office telephone and Emergency Alert Network (EAN) call group.

 - **It is the policy of the Solid Waste Management Program that all county-issued wireless communication devices be enrolled in the Fairfax County EAN** - If you are provided with a county-issued wireless telecommunications device such as a Nextel, cellular, pager or Blackberry, you are responsible to contact your Emergency Response Coordinator to ensure that the device is properly enrolled in the EAN.
 - *Staff are encouraged to enroll personal electronic devices and home email accounts into the EAN, so that they may be better informed of an emergency*

 - **Staff Rosters** – All essential employees are responsible to notify their Emergency Response Coordinator of any changes in their home and work site contact information and any conditions affecting their ability to get to their assigned work site in an emergency.

5. **Notify management of other DPWES business areas/other agencies of need for supplemental manpower** If inadequate Solid Waste Management Program staff is available to provide essential services, other agencies (internal, VDOT, neighboring jurisdictions) may be contacted to provide assistance.

IX. ADVANCE NOTICE OF MOBILIZATION

The Solid Waste Management Program will respond to localized emergencies and minor storm events when requested by the EOC by allocating normally available equipment and personnel from the Divisions of Solid Waste Collection and Recycling and Solid Waste Disposal and Resource Recovery to assigned tasks. When the National Weather Service issues a Warning for severe weather, such as icing in excess of ½ inch or a hurricane in which streets are expected to be blocked with fallen trees and canopy vegetation, essential personnel crews will be placed on alert and be prepared to respond immediately upon activation.

When the National Weather Service issues a Warning for a Category 2 or greater hurricane, predicting winds in excess of 100 M.P.H., essential field personnel will be notified 24 hours in advance of landfall of the storm. They will be instructed to secure their homes and make necessary preparations to move their families either to a Shelter Center close to their assigned activation site or safely out of the area with friends or relatives.

X. RESPONSE PHASE

Essential field personnel and office support will report to their assigned assembly point with equipment and personal supplies to sustain three days of independent operation by crews in removal and processing of debris.

For coordination and control purposes the County has been divided into four zones which approximately correspond to the four geographic quadrants divided by I-66, I-495, and I-95.

Solid Waste Management Program field crews from DSWCR and DSWDRR, as well as designated contractors will assist in debris removal and processing, as required. Critical roadways are cleared by VDOT in accordance with the following priorities. Priority clearance routes and other specifics will be provided by Emergency Management based upon incident needs:

- Priority 1** Primary highways providing evacuation routes or access to public safety, medical or other vital public services.
- Priority 2** Access to essential utilities services such as electric power substations, potable water and sanitary sewer pumping stations and communications facilities.
- Priority 3** Collector streets and other major highways.
- Priority 4** Residential streets and access ways.

During a disaster in which a large amount of debris has been created, DSWDRR will oversee the operations at the primary and temporary debris storage and processing sites that are utilized in the County. DSWDRR staff will coordinate the transport, processing and/or disposal of the debris as required. DSWCR will provide refuse collection operations as required, to support continued operation of essential facilities used for the reception and care of evacuees, volunteer workers, emergency responders, maintenance and support personnel.

XI. DEBRIS REMOVAL COORDINATION

Disaster recovery planning includes considerations for removing, processing and disposing the volumes and types of debris expected to be generated by a major natural disaster such as an ice storm, a thunderstorm system spawning multiple tornadoes or a hurricane. The planning approach is formulated in part on the concept of strategic pre-positioning of plans and resources necessary for timely, coordinated recovery operations, including removal of debris from public property and right-of-ways throughout Fairfax County using a combination of county, municipal, and contractor resources. DPWES envisions the need for multiple contracts to carry out the debris removal and disposal work throughout Fairfax County based on a Category 2 “wet” hurricane. A basic assumption is that sufficient contracted resources capable of managing the debris and infrastructure damage associated with a Category 2 “wet” hurricane will also be capable of coping with the damage created by other types of man-made and natural disasters. Therefore, the management of debris created by all other types of man-made and natural disasters is also included within the scope of this plan.

Contracts will be awarded on a contingency basis and activated only in the face of an emergency. Firms who are recipients of contingency contracts may be required to participate in disaster recovery training and/or exercises, 1 to 2 days each year.

XII. EXECUTIVE OVERVIEW OF DEBRIS MANAGEMENT PROCESS

Fairfax County’s goal is to use multiple contractors to complete the removal of up to 2.0 million cubic yards of debris within 90 calendar days and to complete all disposal and recycling operations within 180 calendar days. This assumes that all areas of the County will be accessible within that period. Due to low elevation and potential for flooding, some areas might not be accessible for several days after a major natural disaster.

The general concept of debris removal operations includes multiple, scheduled passes of each designated site, location, or right-of-way. This will allow residents and public facility personnel to return to their properties or work sites and bring debris to the right-of-way as recovery progresses:

1. Remove vegetative debris from rights-of-way and/or public property. Work crews will not remove debris from private property.
2. Haul debris to designated Debris Management sites.
3. Remove mixed debris (appliances, household items) and construction and demolition (C&D) debris from rights-of-way and/or public property.
4. Transport separated debris to designated Debris Management sites.

Temporary Debris Management (TDM) sites may be identified for the temporary storage and reduction of vegetative and woody debris only. DSWDRR will identify additional debris management sites for storage, separation, volume reduction and other processing or disposal of construction and demolition debris or other materials if needed for specific incidents. When a major disaster occurs or is imminent, DSWDRR will contact firm(s) holding contingency contracts to advise them of the intent to activate the contracts.

Debris removal will generally be limited to debris in, upon, or brought to public streets and roads, right-of-ways, county and municipal properties and facilities, specifically designated critical private facilities (such as hospitals) and other public facility sites. Processing and disposal of debris will be at DSWDRR approved disposal sites.

DSWDRR may also establish designated debris drop-off sites for use by residents. Residents will be advised to separate waste and debris to the maximum extent practicable.

Debris from hurricanes and other major storm events for which the effected area has been included in an emergency declaration will be classified into the following six categories:

1. **Household trash and putrescible solid wastes (Solid Waste)** Continued responsibility of DSWCR personnel and permitted private solid waste collectors. Contractors may be tasked with removal and disposal of some household wastes if the County and private hauler collection resources become overwhelmed.
2. **Leaves and lawn litter** Placed in transparent plastic or Kraft paper bags or open containers, sufficient to prevent leakage and spillage and which permit visual identification and inspection during collection, placed at the curb or shoulder of road.
3. **Vegetative, clean, woody debris** Suitable for chipping, grinding or burning: loosely stacked parallel to and within six feet of the curb or road shoulder, not under low wires or other hazards. This includes logs, stumps, root balls, limbs, and damaged trees that may be removed and placed by curb or road shoulder for collection and volume reduction.
4. **Construction and demolition (C&D) debris** Non-putrescible waste materials generated during the post-disaster cleanup, repair or demolition of residential and non-residential buildings, and roads and bridges. C&D includes, but is not limited to, concrete, asphalt, wood, metal, gypsum, wallboard and roofing as well as discarded furniture, furnishings, appliances, plumbing fixtures, etc., stacked by curb or shoulder:
 - Separate C&D debris from solid, vegetative and household hazardous waste.
 - Separate metal and appliances from C&D debris.
 - Separate putrescibles and containerized liquids from C&D debris, place in sealed containers and dispose of at properly permitted facilities.
 - Separate recyclable from non-recyclable C&D to the maximum extent practicable.
5. **Household Hazardous Waste (HHW)** To be separated from all other types of waste. Residents are to transport HHW to designated sites for recycling or proper disposal. Residents will be provided information on locations and hours of drop off points for the disposal of their HHW materials.

If HHW is found while segregating mixed or other debris, the following steps are necessary:

- HHW material found is separated and reported to the County's site monitor.
- Material identified as HHW segregated from remaining debris using a method that will allow the remaining non-HHW debris to be processed.
- HHW debris will be moved and placed in the designated HHW containment area.

DSWDRR will designate HHW drop-off locations for use by Fairfax County residents only. No hazardous materials from businesses will be accepted. HHW includes, but is not limited to, the following items:

- Household Cleaning Products
- Lead-Acid Batteries and battery acid
- Nickel-Cadmium, other rechargeable batteries marked DO NOT INCINERATE
- Home Workshop/Painting Supplies, including solvents
- Aerosol spray cans
- Indoor Pesticides
- Lawn and Garden Chemicals
- Automotive Chemicals, including motor oil, antifreeze, brake fluid, transmission fluid, etc.
- Fluorescent light bulbs and ballasts
- Lead and mercury containing instruments and electronics, thermometers, thermostats, switches, barometers, etc.
- Propane tanks and other compressed gas cylinders
- Other household Flammable and / or Toxic Materials

Chlorofluorocarbon (CFC) bearing appliances, air conditioners, dehumidifiers, home refrigeration equipment and any other form of hazardous or toxic matter will be separated for proper processing.

6. **Dead animal carcasses** Household pets and small dead animals up to 50 pounds in weight should be double-bagged and set out at the public right-of-way with household trash for collection. Large animals or multiple small animals exceeding 50 pounds should be set aside for collection and proper disposal as directed by Emergency Management.

XIII. DEBRIS REMOVAL OPERATIONS

Contingency contractors commence mobilization immediately upon receipt of the initial Mobilization Task Order. DSWDRR will be responsible for all disposal fees at the authorized disposal facility. Contractors provide equipment, operators and labor for debris removal operations, supervise and direct the work, using qualified labor and proper equipment for all tasks. Work may include, but is not limited to:

1. Clearing debris from public rights-of-way and public property, where and if authorized. Work shall consist of a minimum of three (3) passes, unless otherwise directed by the County's Debris Manager (DM), to collect all of brush, tree parts, mixed debris, and C&D debris set out by residents for collection within the rights-of-way from both sides of the roadway.
2. Constructing TDM sites, as required, at locations selected or approved by DM.
3. Hauling debris from public rights-of-way and public property to TDM sites, or authorized disposal facilities, and unloading to enable processing, recycling or proper disposal.
4. Managing and operating the TDM sites and loading debris reduction by-products for hauling and disposal.
5. Performing debris by-product recycling programs, as approved by the authorized agencies.
6. Hauling non-recycled debris and debris reduction by-products to an authorized disposal facility.

7. Providing traffic control during debris loading operations on public rights-of-way.
8. Remove or arrange for the removal and recycling or proper final disposal of all debris brought to TDM sites. Options include, but are not limited to, sending the material to an authorized and properly permitted disposal facility, recycling facility, or resale entity.
9. Secure EPA Identification Number prior to the lawful disposal of any ash determined to be hazardous based upon analytical results.
10. Provide proof, in the form of signed copies of load tickets, of proper delivery to the designated disposal location(s). Such load tickets shall be checked against the log of deliveries.
11. Provide hand-fed chipping equipment and crews to conduct on-street chipping of vegetative debris (tree limbs/branches) in designated areas.
12. Provide labor, services, equipment, materials and supplies necessary to accept, process and reduce vegetative debris either through tub grinding into chips/mulch or through air curtain incineration into ash. DM will determine the method to be used based on environmental considerations.
13. The County will monitor all contractor operations and assign site monitors to all designated staging areas where disaster debris is initially separated and loaded for transfer to designated processing and disposal sites and where load tickets are initiated. All Contractor's trucks must pass through this location to have debris quantities either measured on certified scales or estimated by the Debris Manager's Debris Monitors and receive a load ticket.
14. Roving County monitors will observe contractors' operations to ensure that only eligible debris is removed from approved locations.

XIV. DEBRIS MANAGEMENT SITES

The County's two solid waste complexes will be primary debris management sites. DSWDRR will also identify locations within Fairfax County where contractors can establish temporary debris storage and reduction sites. Sites which have been identified to date are shown in Exhibit C. Contractors will provide a site operations plan for review and approval by the DM prior to beginning work. At a minimum, the plan will address the following:

- Access to the site
- Site management, to include points of contact, organizational chart, etc.
- Traffic control procedures
- Site security
- Site safety plan
- Site layout and segregation
- Environmental mitigation plan, including considerations for smoke, dust, noise, traffic, buffer zones and storm water runoff as appropriate.

Contractors shall assign and provide an Operations Manager (OM) to report to the DM to serve as the principal liaison between the County and the contractor's forces. The assigned OM will not require

constant presence; but is required to be physically capable of responding to the DM within one hour of notification. The OM must be knowledgeable of all aspects of debris operations and have authority in writing to commit the contractor resources. The OM shall be on call 24 hours per day, seven days per week and have electronic communications enabling immediate contact via cell phone, Fax, have Internet capabilities, for transmitting and receiving essential relevant information and to make arrangements for on-site accommodations.

County and disposal facility monitors will use their best judgment in estimating the quantity of debris in the trucks. Truck load deductions will be made for: consolidation during loading, lightly packed loads with excessive air voids, and voids caused by incomplete loading at the loading site. DSWDRR may require contractors to install scales at a particular DM site, and to use weight as the method for determining quantities. Scales will be certified by the Virginia Department of Weights and Measures.

Contractors shall be responsible for site preparation to accept the debris, to include clearing, erosion control, grading, construction and maintenance of haul roads and entrances.

Site preparation activities are limited to those necessary to meet local, State and Federal and other requirements to establish a working TDM site.

Plastic liners shall be placed under stationary equipment such as generators and mobile lighting plants unless otherwise directed by the DM.

Contractors will be responsible for traffic control, dust control, erosion control, fire protection, and on-site roadway maintenance at on-street chipping and grinding sites and at temporary debris storage and reduction sites and shall manage the site to accept debris collected under other contracts.

Contractors shall construct inspection tower(s) at the selected temporary debris storage and reduction site(s) and at final disposal sites.

Contractors shall provide utility clearances and sanitation facilities at temporary storage and reduction sites and at other debris sites as needed and shall protect existing structures at the sites and repair any damage caused by operations at no additional cost to the County.

Contractors will provide potable water, sewage treatment, fuel, electricity, other utilities, or other personnel, materials or equipment deemed necessary to operate the vegetative debris volume reduction site.

Contractors are responsible for the site closure. Site closure shall include removal of site equipment, debris, and all remnants from the processing operation (such as temporary toilets, observation towers, security fence, etc.), and grading the site, and restoring the site to pre-work conditions. The site will be restored in accordance with all local requirements. Additional guidance on the procedures for TDM site setup, operation and closeout are provided in Exhibit A.

TDM sites will be devoted to the reduction of clean woody debris by either burning or grinding, if the disaster is related to a hurricane or other major storm event. Mixed debris and Construction & Demolition (C&D) debris will be hauled directly to disposal facilities authorized by the County. All currently authorized facilities are shown in Exhibit D. Additional landfills may be identified as work progresses.

The establishment of C&D debris management sites, to operate as transfer points, will be authorized in the case of tornadoes, or other types of man-made or natural disasters producing greater volumes of C&D debris.

XV. INTER-AGENCY SUPPORT

DSWDRR will provide and coordinate heavy equipment, staff, and other assistance for various other disasters such as snowfall and flooding. Contact information for key personnel of other DPWES Agencies is shown in Exhibit R.

DSWDRR and DSWCR also have a limited number of 4-wheel drive vehicles which can be made available to aid in the transportation of medical and emergency personnel until the road system has been cleared to a point where these necessary operations can function on their own. A more complete listing of Solid Waste Management Program equipment is listed in Exhibit P.

XVI. EXTRA-COUNTY SUPPORT

DSWDRR will provide available equipment and personnel as required to render additional assistance as requested by the Coordinator of Emergency Services or his designee. Support areas include, but are not limited to:

VDOT - Heavy equipment and personnel to aid in reopening or making emergency repairs to road system.

Fairfax Water - Heavy equipment and personnel to aid in the restoration of municipal water treatment facilities and water service distribution system.

Commonwealth of Virginia - As required by Governor, or designated representative, to render whatever assistance is necessary.

United States Government - As required by the director of the Federal Emergency Management Agency (FEMA) or designated representative, to render whatever assistance is necessary and authorized under the Federal Response Plan.

Metropolitan Washington Council of Governments – Heavy equipment, personnel and disposal capabilities for regional support.

Securing contract rentals for heavy equipment with operators to supplement County resources as required.

XVII. ADMINISTRATION AND LOGISTICS

All County departments and agencies will maintain records of personnel, equipment, load tickets and material resources used to comply with this plan. Such documentation will then be used to support reimbursement from any Federal assistance that may be requested or required.

All County departments and agencies supporting debris operations will ensure 24-hour staffing capability during implementation of this plan, if the emergency or disaster requires or as directed by the DM.

All County departments are responsible for the annual review of this Plan in conjunction with the annual

update to the County's Emergency Operations Plan. It will be the responsibility of each tasked department and agency to update its respective portion of the Plan and ensure that any limitations and shortfalls are identified and documented, and work-around procedures developed, if necessary. The review will consider such items as:

- Changes in Mission
- Changes in Concept of Operations
- Changes in Organization
- Changes in Responsibility
- Changes in desired contracts
- Changes in pre-positioned contracts
- Changes in priorities

This Plan also may be updated as necessary to ensure a coordinated response as other Debris Management Plans are developed. Surrounding jurisdictions and regional coordination bodies may also develop Debris Management Plans that should be coordinated with the County's plan and other plans. This coordination is especially important with respect to allocation of resources such as temporary and disposal facilities.

XVIII. FEDERAL ASSISTANCE

The DM will request Federal assistance when the debris-generating event exceeds the County's in-house debris clearing, removal, processing and disposal capabilities. The request will be submitted by the acting DPWES ESF#3 Operations Section Chief who will submit the request to the duty ESF#7 Logistics Section Chief of the Office of Emergency Management in the Emergency Operations Center. Emergency Management will forward the request to the Virginia Department of Emergency Management (VDEM), which will coordinate the request for a mission assignment with the Federal Emergency Management Agency (FEMA). Typically, when a mission is assigned by FEMA, the U.S. Army Corps of Engineers (USACE) will provide a liaison to the EOC when activated. This liaison will serve as an advisor to EOC staff providing advice as needed and ensuring that USACE is prepared to respond when tasked.

USACE will alert a Debris Planning and Response Team (PRT) and the Advance Contracting Initiative (ACI) Contractor under contract for that area and have those resources ready to respond when a mission assignment is authorized. Once USACE receives a mission assignment from FEMA, the management groups for both the PRT and ACI contractor will be available to meet with the DM and VDEM representatives to conduct contingency planning as required.

USACE will coordinate with DMC staff on the use of any pre-identified DM and disposal sites and identify and/or acquire other sites as required to accomplish the mission assignment.

XIX. WEAPONS OF MASS DESTRUCTION/TERRORISM

The handling and disposal of debris generated from a Weapon of Mass Destruction (WMD) or terrorism event will exceed the capabilities of the County and will require immediate Federal assistance.

A WMD or terrorism event will, by its very nature, require all available assets and involve many more Federal and adjacent mutual aid jurisdictions and State departments and agencies. The nature of the

waste stream as well as whether or not the debris is contaminated will dictate the necessary cleanup and disposal actions. Debris handling considerations that are unique to this type of event include:

- Much of the affected area will likely be a crime scene. Therefore, debris may be directed to a controlled management site by State and/or Federal law enforcement officials for further analysis.
- The debris may be contaminated by chemical, biological or radiological contaminants. If so, the debris will have to be stabilized, neutralized, containerized, etc. before disposal. In such an occurrence, the operations may be under the supervision and direction of a federal agency and one or more specialty Contractors retained by that agency. The presence of contamination will influence the need for pre-treatment (decontamination), packaging and transportation.
- The type of contaminant will dictate the required capabilities of personnel working with the debris. Certain contaminants may preclude deployment of resources that are not properly trained or equipped.

The DM will continue to be the single point of contact for all debris removal and disposal issues within the County. Coordination will be exercised through the USACE, ESF#3 Branch located at the designated FEMA Disaster Field Office.

In this type of event the County will become a supporting element to the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency (USEPA), and/or the Department of Energy (DOE) and will operate as defined in the USACE WMD Emergency Response Plan (to be published).

XX. MISCELLANEOUS

Although the above specific areas are the only ones formally assigned to the Solid Waste Management Program, it must be realized that in a disaster or emergency situation, DPWES personnel and equipment may be needed to perform any variety of tasks in support of the County's Emergency Operations Plan. The Solid Waste Management Program will respond in whatever manner is necessary.

For example, coordination with the Aerial Unit of the Fairfax County Police Department in regard to the use of Mount Murtaugh (the top of the closed I-66 Landfill) as an emergency staging and operations area for helicopters operating out of the County's adjacent helicopter facility on West Ox Road.