

*** Sample Debris Management Plan**
Developed by the Ohio Emergency Management Agency and the
Ohio Environmental Protection Agency
October 2002

*** To be incorporated into the planning format adopted by the user.**

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Sample Plan for Debris Management

Purpose

This document will define roles, responsibilities, and procedures and provide guidance for development and implementation of all elements involved in managing debris removal operations.

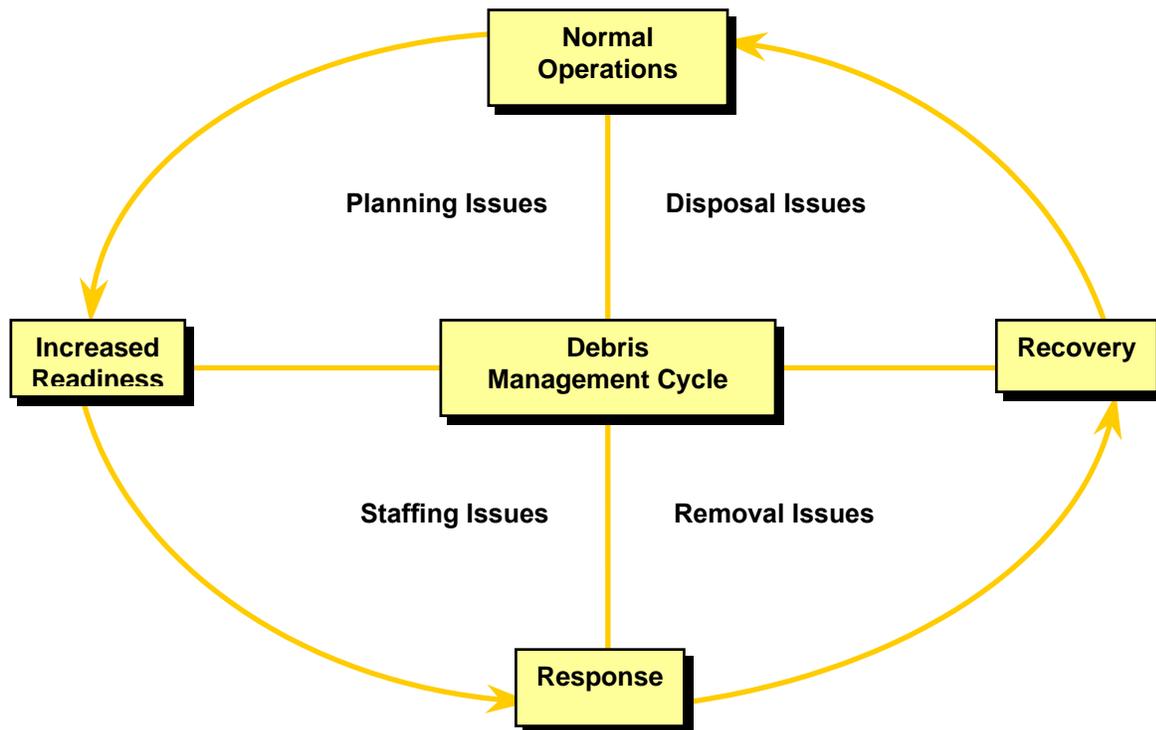
Define procedures/guidance for decision-makers to manage debris removal operations.

Concept of Operations

The concept of operations describes how debris management activities will be conducted in response to debris generating events as a phased approach. The phased approach is a four-step cycle that includes normal operations, increased readiness, response, and recovery.

All communities have unique circumstances that impact their responses to disaster events, based on local business/industry, land use, size of the community, topography, economics, etc. The county must address those unique circumstances during the development of the plan. This focus is necessary to address the extraordinary demands placed on public/private resources for debris management following a disaster event.

Debris Management Cycle



Normal operations

Prior to an emergency/disaster the county, townships, cities, and villages will designate a debris management coordinator (DMC). The DMC will be responsible for reviewing and updating the plan as needed. This plan will include the following sections:

1. List of Contacts and Job Descriptions: To include current information on name, addresses, phone numbers (office, home, pager, and cell) fax and email.
2. List of Qualified Contractors: Eligible to conduct business with government entities to include type of work each contractor can perform with availability of equipment, type of collection, removal, and reduction of debris.
3. Types of Contracts: The following types of contracts may be used when conducting debris management operations.
 - ◆ Time and Material: Under a time and material contract, the contractor is paid on the basis of time spent and resources utilized in accomplishing debris management tasks. The Federal Emergency Management Agency recommends, for reimbursement purposes, that the use of time and material contracts be limited to the first 70 work hours following a disaster event.
 - ◆ Unit Price: A unit price contract is based on weight (tons) or volume (cubic yards) of debris hauled, and should be used when the scope of work is not well defined. It requires close monitoring of collection, transportation, and disposal to ensure that quantities are accurate. A unit price contract may be complicated by the need to segregate debris for disposal.
 - ◆ Lump Sum: A lump sum contract establishes a total price using a one item bid from a contractor. It should be used only when a scope of work is clearly defined, with areas of work and quantities of material clearly identified. Lump sum contracts can be defined in one of two ways:
 - Area Method**, where the scope of work is based on a one time clearance of a specified area, or
 - Pass Method**, where the scope of work is based on a certain number of passes through a specified area, such as a given distance along a right of way.
4. Sample Contracts: Include contracts as attachments to the plan. Attachment 6 to this document includes samples of these contract types.
5. Right-of-Entry/Hold Harmless Agreements: Disaster response activities will require entering private property to remove debris that is a threat to the health and safety of occupants. The county, townships, cities and villages will evaluate and select location on

government owned property. The following issues will be addressed prior to the emergency/declaration.

6. Debris Removal: Establish a process for debris removal from public and private properties. Priorities for removal will be determined during the response phase.
7. Temporary Debris Storage and Reduction (TDSR) Site: The county, townships, cities and villages will evaluate and select locations that may be used as TDSR sites. Preference should be given to public property rather than private. The following issues will be addressed during normal operations for a TDSR site.
 - ◆ Location: Care should be taken in selection of TDSR sites. Land use, proximity to housing, and other factors that may impact the use of the site should be taken into account.
 - ◆ Operations: Monitoring receipt of debris and verifying types of debris received are critical functions for successful operation of a TDSR site. Included in the attachments to this document is a sample TDSR site layout.
 - ◆ Closeout: In order to close out a TDSR site, care should be taken to restore the site to its original condition in an environmentally friendly and timely manner. Included in the attachments to this document is a checklist for site closeout.
8. Environmental Compliance: Following a disaster event, compliance with environmental protection laws and regulations is still required. Federal and State Environmental Protection Agencies and local Health Departments should be consulted for applicable regulatory requirements.
9. Documentation: Documentation of debris management activities is important for potential reimbursement of costs. In addition, documentation is important to record activities performed and authorizations granted, and to develop a historical record for updating plans. Documentation of activities is the responsibility of those performing work as well as those who provide oversight and direction. At a minimum, documentation needs to address the following:
 - ◆ Labor, equipment, rental fees and material costs.
 - ◆ Mutual-aid agreement expenses.
 - ◆ Use of volunteered resources, including labor.
 - ◆ Administrative expenses.
 - ◆ Disposal costs.
 - ◆ Types of debris collected and amounts of each type.

Increased Readiness

In some instances there is a warning that a disaster may occur. This section covers actions taken in the event of a potential debris-generating event. Actions for consideration include:

Alerting Personnel: Procedures for alerting personnel are available in the County Emergency Operations Plan (EOP).

Reviewing and Updating the Plan: Ensure personnel understand roles and responsibilities for plan implementation. Review existing contracts, list of qualified contractors, sample contracts, right of entry/hold-harmless agreements, and other contracts necessary to conduct debris management activities.

Reviewing Waste Management Options: Ensure pre-selected temporary debris storage and reduction sites are currently available for use. Identify alternative locations if necessary. Ensure authorized waste transfer or disposal facilities are currently operational. Identify alternative facilities if those used during normal operations have been impacted by the disaster.

Response

Response to a disaster is a very important step for setting the tone on how the recovery will go. This section covers the response phase of a debris-generating event. Actions necessary in the short-term response phase include:

Activation of the Plan: The Debris management staff will be a component of the Emergency Operations Center (EOC) and will coordinate and manage debris removal operations.

Establishment of Debris Removal Priorities: When a debris-generating event occurs there is an immediate need for prioritization of actions. Debris will include fallen trees, limbs, trash, furniture, food waste, scrap tires, utility poles and wires, vehicles, building materials, hazardous materials, infectious materials, animal carcasses, silt and mud, etc. Develop and implement a priority system for debris removal. The first priority shall include roadways that allow ingress and egress to the critical public facilities such as fire stations, police stations, hospitals, and other critical facilities. Other essential, but perhaps not critical facilities include schools, municipal buildings, water treatment plants, wastewater treatment plants, power generation units, airports, temporary shelters for disaster victims, etc. The county will need to prioritize debris removal from roadways that allow ingress or egress to these facilities.

Activation of standby contracts: Standby contracts are contracts with companies that make the company available for assistance in the event of a debris-generating event. The standby contracts are in place before a disaster occurs. Develop a list of standby contracts that are reached between the community or county and contractors.

Tracking of Resources: Procedures for tracking resources are available in the County EOP. The level of detail in the tracking system will be dependent upon the size and magnitude of the disaster.

Meetings and Briefings: Procedures for holding meetings and providing briefings are available in the County EOC. The main purpose of the meetings is to brief EOC staff on current and future debris management activities. Debris management staff should participate in all EOC meetings and provide briefings as necessary.

Review of Documentation Process: Evaluate when and why decisions were made to perform certain actions. Examples may include site selection for TDSR sites, debris removal priorities and demolition of public/private structures.

Recovery

This phase of the debris management cycle covers actions necessary to complete the debris removal, reduction, and disposal activities, based on damage assessment of the disaster. Actions necessary for recovery from debris-generating events include:

1. Public Property/Rights-of-Way Debris Removal: Debris deposited on public lands including the right-of-way will be the responsibility of local government. In some cases, where a health and/or safety threat exists, private property owners may move event-related debris to the public right-of-way for removal by government forces. Government forces or volunteers may assist private property owners if necessary to remove event-related debris that poses a health and/or safety threat.
2. Private Property Debris Removal: Debris deposited on private property is the responsibility of the property owner. The plan must include procedures for notifying the public of debris removal schedules. The key is to provide all information regarding pickup times and locations for private property owners so that debris removal activities proceed efficiently. The county should also provide instructions to the property owners for separation of debris and steps to follow if they are unable to put debris from their property on the curbside for pickup. The county, township, city or village may utilize volunteers or voluntary groups to assist property owners.

Debris removal operations will usually include curbside pickup service, which will be conducted either by the local public works or by a contractor. Contractors operate under contracts described earlier such as time and material, unit price or lump sum. Public works employees and contractors will pick up debris and haul it to either a temporary debris removal site or to a regulated waste facility.

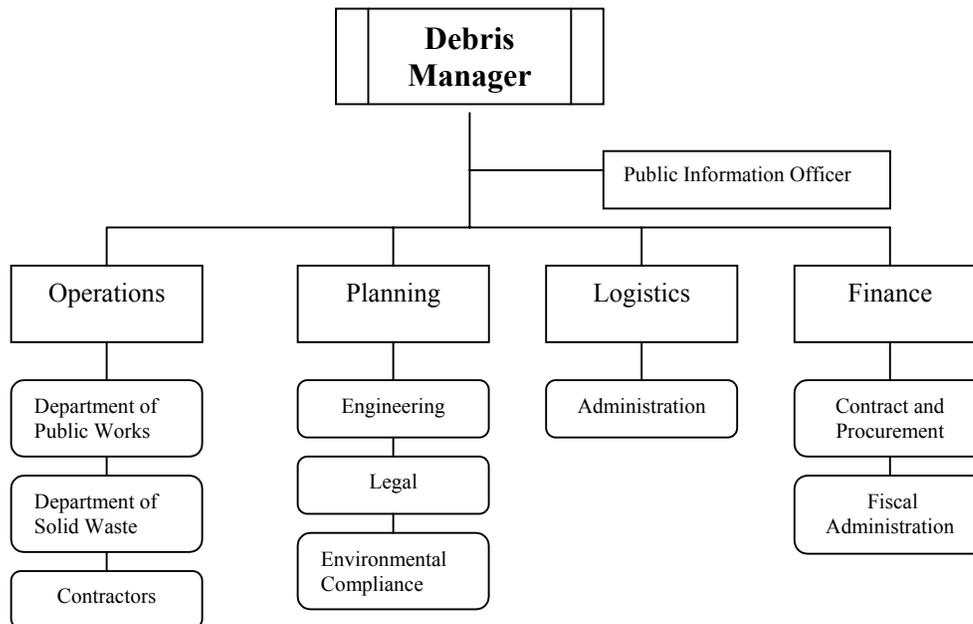
3. Hazardous Waste Removal: The plan will include procedures for handling hazardous waste removed from commercial operations as well as from private property. The county, township, city or village will work closely with Federal and State environmental protection agencies to ensure proper removal and disposal of hazardous waste. The plan also includes procedures for establishing a separate staging area for hazardous waste, to include lining with an impermeable material so chemicals do not leak into the groundwater and soil.

4. Location of Existing Facilities: Develop a list of operating facilities within the county that can accept varying types and amounts of debris. This might include landfills, transfer facilities, infectious waste treatment facilities, scrap tire storage and recovery facilities, composting facilities, and recycling facilities. The county should also be aware of companies authorized to transport scrap tires and infectious waste. Identify alternative facilities if those used during normal operations have been impacted by the disaster. Include the list as an appendix to the plan.
5. Temporary Debris Storage and Reduction Sites: When the debris is removed from damaged areas, it may be taken to a TDSR. The county should implement procedures for selection, operation, and closure of TDSR's. The Ohio Environmental Protection Agency (OEPA) and local health departments can provide assistance during operations.
6. Debris Reduction Methods: There are several methods of debris reduction. Each of the methods of debris reduction must comply with local ordinances and State environmental regulations. A list of reduction methods is included as an attachment to the plan.
7. Temporary debris storage and reduction site closeout: After the debris has been completely removed from the TDSR, the site must be returned to its previous use. The county needs to follow procedures for site closure.
8. Contract Monitoring: In the event contracts are in place for debris removal, monitoring of contractors is a very important issue. Designate a person or persons for contract monitoring. Contract monitoring verifies that the following actions are taking place:
 - ◆ Debris being picked up is a direct result of the disaster.
 - ◆ Trucks hauling debris are fully loaded.
 - ◆ Debris pick-up areas are being managed properly.
 - ◆ Trucks are sticking to debris routes.
 - ◆ Inspection of temporary storage sites to ensure operations are being carried out according to contract.
 - ◆ Verification of security and control for temporary debris storage and reduction sites.

Organization

- The purpose of this section is to provide a structured approach to debris removal operations using the Incident Command System.
- In a debris-generating event the staff is notified according to local procedures. The size of the debris management staff is dependent upon the magnitude of the disaster as well as the geographic size of the area.
- The key staff positions are either designated in the EOP or are appointed by the debris manager.

Debris Management Staff Organizational Chart



Debris Manager

The debris manager has overall responsibility for the operations, planning, logistics, and finance of the debris management activities.

Public Information

The public information officer is responsible for providing information and guidance to the public regarding debris management activities. The public information officer's duties include development of informational bulletins, hotline responses, radio and television announcements, handbills and door hangers, and newspaper notices.

Information that can help expedite the cleanup process includes:

- Segregating hazardous waste.
- Placing debris at the curbside.
- Keeping debris piles away from fire hydrants and valves.
- Reporting illegal dumping.
- Segregating recyclable materials.

The Public must be well informed on debris removal activities, such as:

- Debris pick-up schedules.
- Location of TDSR's.
- Disposal methods and compliance with Environmental Protection Agency Regulations.

- Restrictions and penalties for illegal dumps.

There are questions that will arise from residents including the following:

- What if I cannot pay for debris removal from my property?
- What if I am unable to bring the debris to the curb for pickup?

Operations

The operations section manages assets to implement this plan based on direction from the debris manager. Designate a person to serve as the operations officer who will work with other agencies to coordinate resources for debris removal activities. The operations section manages the Department of Public Works, Department of Solid Waste Management, and contracted services.

Department of Public Works roles include but are not limited to:

- Implementing the debris management plan.
- Deploying supplies and tracking of equipment.
- Estimating supplies needed.
- Developing debris removal priorities.
- Developing strategies for debris removal.

Department of Solid Waste Management roles include but are not limited to:

- Removing debris from public property.
- Transporting debris to TDSR's.
- Managing and monitoring operations at the TDSR's.
- Operating debris reduction sites.
- Ensuring all debris is transported to the appropriate TDSR's or regulated waste facility.

Contractor roles include but are not limited to:

- Removing debris from public/private property.
- Transporting debris to TDSR's.
- Operating debris reduction sites.
- Ensuring all debris is transported to the appropriate TDSR's or regulated waste facility.

Planning

The Planning section is responsible for gathering information about the incident, maintaining equipment logs, tracking use of personnel, and providing information to the debris manager. Designate a planning officer who will ensure that these responsibilities are carried out. The planning section manages the Engineering Department, Legal Department, and Environmental Compliance staff.

The Engineering Department responsibilities include but are not limited to:

- Conducting debris assessments.
- Developing cost estimates and scopes of work for public employees and contractors.
- Evaluating options for recycling/reducing/disposing debris. For information contact the local Solid Waste Management District or Ohio Department of Natural Resources, Division of Recycling and Litter Prevention (www.ohiodnr.com/recycling).
- Evaluating/selecting locations for TDSR's.

The Legal Department responsibilities include but are not limited to:

- Developing and reviewing all contracts.
- Securing all authorizations necessary for debris removal activities.
- Ensuring compliance with all environmental and historical preservation laws/regulations/policies.
- Reviewing rights-of-entry and hold harmless agreements.
- Reviewing private property insurance information and other assets to ensure benefits and resources are fully utilized.

The Environmental Compliance responsibilities include but not limited to:

- Coordinating with State and Federal agencies, such as EPA and the Ohio Historic Preservation Office to ensure compliance with environmental and historic preservation laws/regulations/policies.
- Determining environmental monitoring and reporting requirements for TDSR's.
- Maintaining records for historical purposes.

Logistics

The logistics section is responsible for establishing and maintaining any facilities designated for debris management activities. This includes food, office supplies, communication devices, equipment, personnel, and any other supplies necessary for debris management activities. Designate a logistics officer who will coordinate procurement of needed supplies. Under the logistics section is the administrative staff.

Finance

The finance section is responsible for making sure funds are available for equipment, supplies, and all other expenses. Designate a finance officer to oversee all financial issues resulting from debris management activities. Under the finance section is the Contract and Procurement Department and Fiscal Administration.

The Contract and Procurement Department duties include but are not limited to:

- Setting bidding requirements.
- Developing forms.
- Advertising for bids.

- Instructing bidders.
- Developing contracts.
- Documenting all costs for debris removal activities.

The Fiscal Administrative staff duties include but are not limited to:

- Keeping records of financial transactions for reimbursement of debris removal activities.
- Funding of debris removal activities.

Roles and Responsibilities

- The purpose of this section is to give an overview of the roles and responsibilities for operations before, during, and after a debris-generating event.
- Due to differences in each county and jurisdiction, development of exact roles and responsibilities should be dealt with at local levels. Therefore, duties of specific departments and organizations involvement in the debris removal process are not discussed.

Normal Operations

During normal operations (before a disaster), the county must be aware that the following issues must be addressed to ensure preparedness for debris generating events. The responsibilities for normal operations include but are not limited to:

Engineering Department

- Evaluating options for recycling/reducing/disposing debris.
- Evaluating/selecting locations for TDSR's.

Legal Department

- Developing and reviewing all contracts.
- Reviewing rights-of-entry and hold harmless agreements.

Contract and Procurement Department

- Developing forms for use in debris removal operations.
- Developing contracts.

Increased Readiness

In the event there is a warning that a disaster may occur, the considerations for actions listed earlier in this document need to be addressed. These actions include notifying personnel, reviewing the debris management plan, and reviewing waste management actions.

Response

The magnitude of the event will determine the degree to which recycling/reduction/disposal actions take place in either the response or recovery phase. The responsibilities of each department during the response phase include but are not limited to:

Public Information Officer

- Giving the public information about:
 - Segregating hazardous waste.
 - Placing debris at the curbside.
 - Keeping debris piles away from fire hydrants and valves.
 - Reporting illegal dumping.
 - Segregating recyclable materials.
 - Debris pick-up schedules.
 - Location of TDSR's.
 - Disposal methods and compliance with Environmental Protection Agency Regulations.
 - Restrictions and penalties for illegal dumping.
- Address questions such as:
 - What if I cannot pay for debris removal from my property?
 - What if I am unable to bring the debris to the curb for pickup?

Department of Public Works

- Implementing the debris management plan.
- Deploying supplies and tracking of equipment.
- Estimating supplies needed.
- Developing strategies for debris removal.
- Developing debris removal priorities.

Department of Solid Waste

- Removing debris from public property.
- Transporting debris to TDSR's.
- Managing and monitoring operations at the TDSR's.
- Operating debris reduction sites.
- Ensuring all debris is transported to the appropriate TDSR's or regulated waste facility.

Contractor

- Removing debris from public/private property.
- Transporting debris to TDSR's.
- Operating debris reduction sites.
- Ensuring all debris is transported to the appropriate TDSR's or regulated waste facility.

Engineering Department

- Conducting debris assessments.
- Developing cost estimates and scopes of work for public employees and contractors.
- Evaluating options for recycling/reducing/disposing debris.
- Evaluating/selecting locations for TDSR's.

Legal Department

- Developing and reviewing all contracts.
- Securing all authorizations necessary for debris removal activities.
- Ensuring compliance with all environmental and historic preservation laws/regulations/policies.
- Reviewing rights-of-entry and hold harmless agreements.
- Reviewing private property insurance information and other assets to ensure benefits and resources are fully utilized.

Environmental Compliance

- Coordinating with State and Federal agencies, such as EPA and the Ohio Historic Preservation Office to ensure compliance with environmental and historic preservation laws/regulations/policies.
- Determining environmental monitoring and reporting requirements for TDSR's.
- Maintaining records for historical purposes.

Contract and Procurement Department

- Setting bidding requirements.
- Advertising for bids.
- Instructing bidders.
- Developing contracts.
- Documenting all costs for debris removal activities.

Fiscal Administrative Staff

- Keeping records of financial transactions for reimbursement of debris removal activities.
- Funding of debris removal activities.

Recovery

The magnitude of the event will determine the degree to which recycling/reduction/disposal actions take place in either the response or recovery phase. The responsibilities of each department during the recovery phase include but are not limited to:

Department of Solid Waste

- Removing debris from public property.
- Transporting debris to TDSR's.
- Managing and monitoring operations at the TDSR's.
- Operating debris reduction sites.
- Ensuring all debris is transported to the appropriate TDSR's or regulated waste facility.

Contractor

- Removing debris from public/private property.
- Transporting debris to TDSR's.
- Operating debris reduction sites.
- Ensuring all debris is transported to the appropriate TDSR's or regulated waste facility.

Engineering Department

- Evaluating options for recycling/reducing/disposing debris.
- Evaluating/selecting locations for TDSR's.

Legal Department

- Ensuring compliance with all environmental and historic preservation laws/regulations/policies.
- Reviewing private property insurance information and other assets to ensure benefits and resources are fully utilized.

Environmental Compliance

- Coordinating with State and Federal agencies, such as EPA and the Ohio Historic Preservation Office to ensure compliance with environmental and historic preservation laws/regulations/policies.
- Determining environmental monitoring and reporting requirements for TDSR's.
- Maintaining records for historical purposes.

Contract and Procurement Department

- Setting bidding requirements.
- Advertising for bids.
- Instructing bidders.
- Developing contracts.
- Documenting all costs for debris removal activities.

Fiscal Administrative Staff

- Keeping records of financial transactions for reimbursement of debris removal activities.
- Funding of debris removal activities.

Supplemental Assistance

- The purpose of this section is to explain assistance options when the local area is overwhelmed and needs additional assistance for debris removal operations.
- The issues included in this section may have already been addressed in a different portion of the County Emergency Operations Plan. However, specific points relating to debris removal are covered within this section. Therefore, it is up to local officials to decide if this portion of the debris management plan is included.

General

The County Emergency Management Agency may request supplemental assistance through the Ohio Emergency Management Agency. Such requests take place when local/county resources are exhausted and a declaration has been declared within the county. If state resources are exhausted or not available additional assistance may be requested from the Federal Emergency Management Agency under the Federal Response Plan.

Mission Assignments for State and Federal Levels

A mission assignment is a work order for a State or Federal agency to complete a specific assignment in anticipation of, or in response to, a governor's or presidential declaration of an emergency or major disaster.

State Mission Assignments

1. **Direct State Assistance** applies to emergency debris removal work and reflects the need to address a health and/or safety threat. Debris activities that are eligible for Direct State Assistance include:
 - Debris Removal from critical roadways and facilities.
 - Debris Removal from curbsides or from eligible facilities and hauling to either temporary or permanent disposal sites.
2. **Technical Assistance** is available to local officials for a variety of tasks related to debris planning. The Ohio Environmental Protection Agency, and Ohio Emergency Management Agency, can provide technical assistance in the following areas:
 - County debris management plan annex.
 - Debris management site plans.
 - Contract/TDSR checklist.
 - Documentation aids (ex. Trip tickets).

State Mission Assignment Process

1. County demonstrates work beyond capability of resources through situation/damage assessment.
2. County Emergency Management Agency makes request to the State Emergency Management Agency for supplemental assistance.
3. State Assigns Mission to State agency.
4. State Provides a Liaison.
5. State agency accomplishes mission.

State Agencies that may participate in debris removal activities

- Ohio Department of Transportation.
- Ohio Environmental Protection Agency.
- Ohio Department of Health.
- Ohio State Highway Patrol.
- Ohio Emergency Management Agency.
- Ohio Department of Natural Resources.
- Ohio National Guard.
- Ohio Department of Corrections

Federal Mission Assignments (in accordance with 44CFR, 206.208)

1. **Direct Federal Assistance** applies only to Emergency Work (debris removal and emergency protective measures) and must meet general Federal Emergency Management Agency eligibility criteria. Debris activities that are eligible for Direct Federal Assistance include:
 - Debris removal from critical roadways and facilities.
 - Debris removal from curbsides or from eligible facilities and hauling to either temporary or permanent sites.
 - Identification, design, operation, and closeout of the debris management sites.
 - Monitoring debris contractor's activities.
 - Demolition or removal of disaster damaged structures and facilities in accordance with Federal Emergency Management Agency regulations and policies.
2. **Technical Assistance** applies when a state or county lacks technical knowledge or expertise to accomplish an eligible task. The Federal Emergency Management Agency will then request technical assistance from the appropriate Federal agency in the Federal Response Plan. Eligible technical assistance includes:
 - Assistance in developing an overall debris management plan.
 - Assistance in developing Debris Management Site plans.
 - Assistance in developing of monitoring plans.
 - Assistance in developing contract guidelines.
 - Assistance in developing and implementing trip tickets processes.

Federal Mission Assignment Process

1. State demonstrates work beyond county and state capabilities.
2. State makes request to Federal Emergency Management Agency for assistance.
3. Federal Emergency Management Agency assigns mission to Federal agency.
4. Federal Emergency Management Agency provides a Project Monitor.
5. Federal Agency conducts assignment.
6. Federal Agency bills the Federal Emergency Management Agency.
7. State is informed of the cost-share.
8. State reimburses the Federal Emergency Management Agency for non-federal share.

Agencies that may be assigned missions from the Federal Government (according to 44 CFR 206.208)

- Federal Highway Administration
- United States Department of Agriculture
- Environmental Protection Agency
- United States Army Corps of Engineers
- United States Coast Guard
- Bureau of Indian Affairs

Volunteer Organizations Active in Disaster

Included in the supplemental assistance are volunteer organizations. Volunteer organizations may provide assistance for debris removal from private property. There is a wide range of Volunteer organizations at the local, state, and Federal levels. The following is an incomplete list of organizations:

- Civic Clubs
- Student Organizations
- Church Organizations
- Salvation Army
- Mennonite Services
- Catholic Relief Services
- American Red Cross
- Others

For additional information contact:

Ohio Voluntary Organizations Active in Disasters
P.O. Box 1230
Mt. Vernon, OH 43050
Phone (740) 397-4665
Fax (740) 397-1648

Attachment 1

Debris Management Fact Sheet



DEBRIS FACT SHEET FOR LOCAL OFFICIALS



The information contained within this document is intended to assist local officials responsible for all or a portion of the issues relating to managing all types of waste (“debris”) resulting from a disaster or significant emergency. Removal, reduction, recycling, temporary sites, contracting and disposal data as well as points of contact are included in the following pages.

The Ohio Environmental Protection Agency (EPA) and Ohio Emergency Management Agency (EMA) are two state agencies that have primary responsibilities to respond to disasters. Disasters can generate a significant amount of debris and can disrupt local government operations in general. Their roles and day-to-day points of contact are detailed below.

Local Governments

Local health departments may be able to provide technical assistance regarding debris management and public health issues. Local health departments may also have primary responsibility during a disaster in the regulatory oversight for proper management of debris. Of particular concern for public health and safety is the management and proper disposal of debris created by a disaster or by demolition, yard waste, household hazardous waste, food stuffs, and spoiled food.

Ohio Environmental Protection Agency (www.epa.state.oh.us/dsiwm)

Division of Solid and Infectious Waste Management, Central Office
122 South Front Street, PO Box 1049
Columbus, OH 43216-1049
Phone (614) 644-2621 Fax (614) 728-5315

- Primary responsibility during a disaster is regulatory oversight for proper management of debris. This is accomplished by providing rule interpretations (regulatory requirements), technical assistance/coordination regarding temporary staging, collection, removal and disposal of debris, and resource lists.

Ohio Emergency Management Agency (www.ema.ohio.gov)

Disaster Recovery Branch
2855 West Dublin Granville Road
Columbus, OH 43235
Phone (614) 889-7171 Fax (614) 791-0018

- Primary responsibility is coordination of state assistance, through County Emergency Management Agency offices, to support the efforts of local officials following disasters and a Governor’s Proclamation. The Disaster Recovery Branch administers reimbursement programs for costs associated with local response/recovery actions, including debris operations.

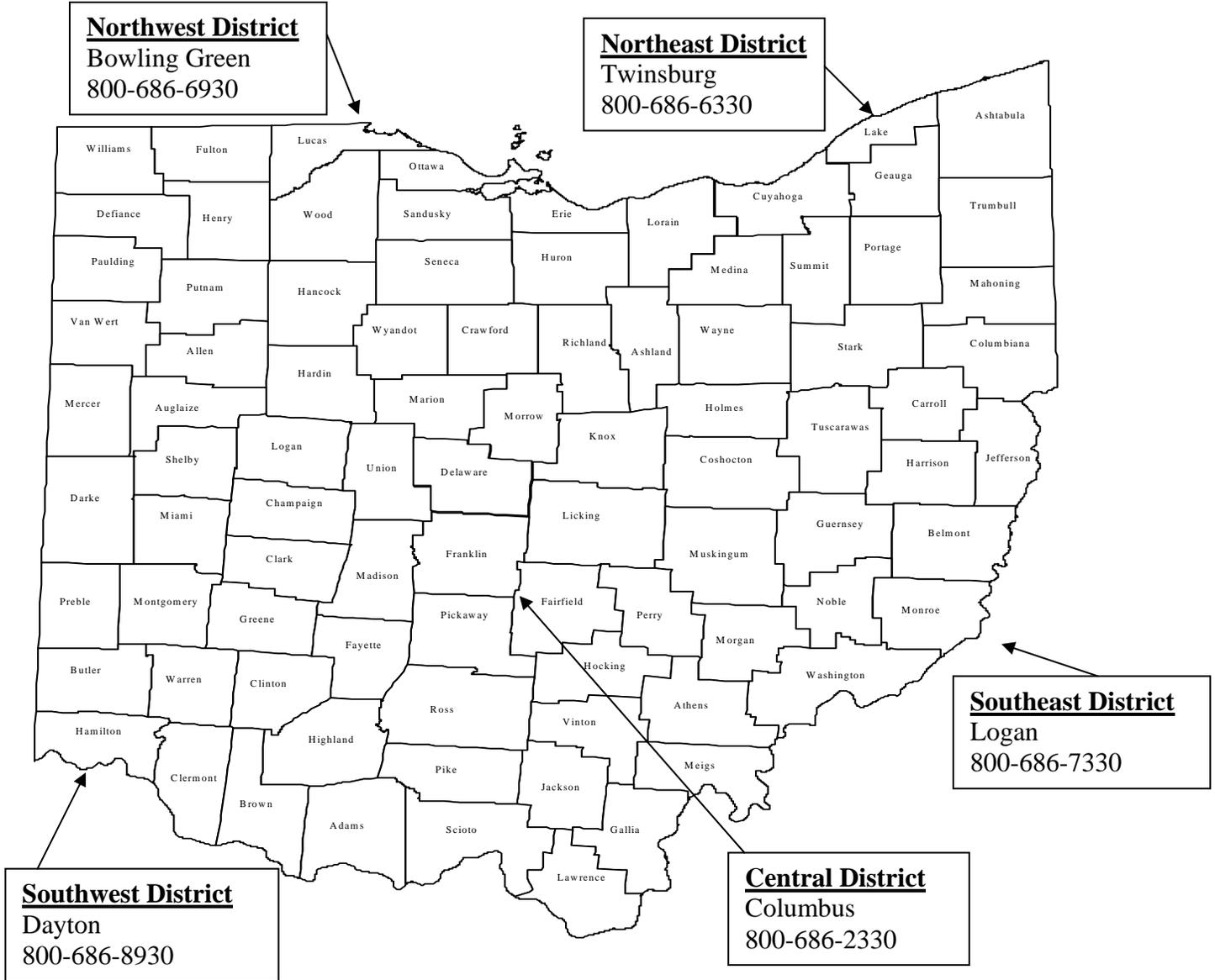
Included within this Debris Management Fact Sheet

Page 2	Contact List	Page 5	Ohio EPA Resources
Page 3	Management Options Chart	Page 6	Contracting
Page 4	Temporary Debris Sites	Page 8	FEMA Eligibility

DEBRIS MANAGEMENT CONTACTS

OHIO ENVIRONMENTAL PROTECTION AGENCY

Div. of Solid/Infectious Waste	(614) 644-2621	Hazardous Waste	(614) 644-2917
Public Drinking Water	(614) 644-2752	Burn Permits	(614) 644-2270
Waste Water Treatment	(614) 644-2001	Chemical Spills	(800) 282-9378



ADDITIONAL CONTACTS

Local Solid Waste Mgmt District (Recycling)	See Local Listing	Ohio EMA (Response and Recovery)	(877) 644-6362
Local Department of Health (Private Drinking Water)	See Local Listing	Ohio Historic Preservation Off (Environmental/Historic)	(614) 298-2000
Ohio Department of Health (Dead Animals)	(614) 466-1390	Attorney General (Consumer Protection)	(800) 282-0515
Ohio Department of Agriculture (Regulatory-Great Lakes Division)	(614) 728-6200	Ohio Dept. Natural Resources (Recycling, Floodplain Mgmt.)	(614) 265-6565
U.S. Corp of Engineer	(513) 684-3002		

Ohio Environmental Protection Agency – Management Options for Disaster Related Wastes

Variances / Exemptions: All regulated disposal facilities in Ohio have operational requirements / restrictions regarding the types and volume of waste that can be

Type of Waste	Description of Waste	Management Options
General Solid Waste (aka Municipal Solid Waste)	Food, packaging, clothing, appliances, furniture, machinery, electronic equipment, garbage, plastic, paper, bottles, cans, loose carpeting, paper products, scrap tires, street dirt, dead animals, vehicles Sand Bag Note: Sand from sand bags used to control flooding may be emptied from the bags and reused. The empty bags, if not reused, are considered solid waste. Sand contaminated with other materials (hazardous, etc.) should be handled appropriately.	<ul style="list-style-type: none"> • Recycling: segregate / recycle as much as possible (preferred) • MSW Landfill Disposal • MSW Transfer Facility Disposal • Scrap Tires: licensed tire recovery / recycling facility • Appliances: remove refrigerants prior to disposal • Vehicles: auto salvage yards • Dead Animals: landfill, compost, burn / bury / render (per Ohio Dept. of Ag. Guidelines)
Agricultural Waste & Vegetative Waste (aka Solid Waste)	Vegetative or woody waste, tree limbs, brush, shrubs (does not include buildings, other structures, dead animals, or vehicles)	<ul style="list-style-type: none"> • Recycling: drying, chipping, grinding for use in landscaping, mulching, and as a fuel supplement (preferred) • MSW Landfills Disposal • MSW Transfer Facility Disposal • Appropriate Composting Facilities • Controlled Burning – for use in declared disaster areas only; air curtain destructor use and Ohio EPA approval required
Construction & Demolition Debris (CDD)	Brick, stone, mortar, asphalt, lumber, wallboard, glass, roofing, metal, piping, fixtures, electrical wiring, heating equipment, insulation, carpeting attached to structures, railroad ties, utility poles, mobile homes	<ul style="list-style-type: none"> • Recycling: segregate and reuse as much materials as possible • CDD Landfill Disposal • MSW Landfill Disposal • MSW Transfer Facility Disposal • Mobile Homes: take to salvage company or CDD landfill
Clean Hard Fill (a subset of CDD)	CDD which consists only of reinforced or non-reinforced concrete, asphalt concrete, brick, block, tile, and stone which can be reused as construction or fill material	<ul style="list-style-type: none"> • Segregate and reuse materials as appropriate. Notify local health district of intent to use clean hard fill in filling operations
Infectious Waste	Needles and medical related glass (“sharps”), syringes, blood containing or saturated items including tubing, clothing, bandages, etc.	<ul style="list-style-type: none"> • Contact local health district or Ohio EPA District Office for guidance
Hazardous Wastes & Household Hazardous Wastes	Flammable materials (fuels, gasoline, kerosene, propane tanks, oxygen bottles, etc.), explosives, batteries, common household chemicals, industrial and agricultural chemicals, cleaners, solvents, fertilizers, etc.	<ul style="list-style-type: none"> • Segregate materials as practical and dispose of at an approved hazardous waste facility. Contact appropriate Ohio EPA District Office for guidance. • Household hazardous waste disposal is permitted at MSW facilities. However, strongly consider segregation from waste stream, where practical, and dispose of with other hazardous materials.
Radiological Wastes	Nuclear medicine materials and associated patient wastes, certain monitoring equipment	<ul style="list-style-type: none"> • Contact Ohio Department of Health for regulatory requirements and management options. Not regulated by Ohio EPA.

accepted for disposal. During emergency events, a facility may seek authorization from the Director of Ohio EPA to temporarily accept different waste streams or an increased volume of waste. Before taking disaster-related debris to a disposal facility, please make sure that the facility is willing and properly authorized to accept the material.

Stream Cleanup Activities: Prior to removing debris from streams and waterways, please make sure you have the appropriate authorizations, if necessary (permits from COE and/or Ohio EPA, property owner permission, etc.). Once debris is removed from the streams / waterways segregate the debris as much as possible and manage according to the above outlined options.

Temporary Debris Sites

Things to Consider

1. Site Ownership – Use public lands whenever possible to avoid potentially costly and complicated leasing arrangements, and to lessen potential trespassing allegations. Use privately owned land only if no public sites are available. If using private lands, be sure to obtain proper, detailed usage agreements with all parties having an ownership interest.
2. Site Location
 - a. Consider impact of noise, dust, traffic
 - b. Consider pre-existing site conditions
 - c. Look for good ingress/egress at site
 - d. Consider potential impact on ground water
 - e. Consider site size based on:
 - i. Expected volume of debris to be collected
 - ii. Planned volume reduction and debris processing activities
 - f. Avoid environmentally sensitive areas, such as:
 - i. Wetlands
 - ii. Rare and critical animals or plant species
 - iii. Well fields and surface water supplies
 - iv. Historical / archaeological sites
 - v. Sites near residential areas, schools, churches, hospitals, and other sensitive areas
 - g. Record detailed conditions of chosen site (pictures, video, etc.)
3. Site Operations
 - a. Use portable containers
 - b. Separate types of waste as operations continue
 - c. Monitor site at all times
 - d. Perform on-going volume reduction (on site or removal for disposal / reduction)
 - e. Provide nuisance management (dust, noise, etc.)
 - f. Provide vector controls (rats, insects, etc.)
 - g. Provide special handling for hazardous materials
 - h. Provide security (limit access to site)
 - i. Ensure appropriate equipment is available for site operations
4. Site Closeout
 - a. Remove all remaining debris to authorized locations
 - b. Restore site to pre-use conditions
 - c. Record detailed conditions of site after closeout is complete (pictures, video, etc.)

Ohio Environmental Protection Agency Resources

The following documents are available for download from the Ohio EPA Website or by contacting the appropriate Ohio EPA division.

1. Ohio EPA Registered and/or Licensed Debris Disposal Facility and Company Listings - DSIWM
 - a. Composting Facilities
 - b. Construction and Demolition Debris Landfills
 - c. Infectious Waste Transporters
 - d. Municipal Solid Waste Landfills
 - e. Municipal Solid Waste Transfer Facilities
 - f. Scrap Tire Storage and Disposal Facilities
 - g. Scrap Tire Transporters
 - h. Solid Waste Management District Contacts
2. Emergency Response Contractors - DERR
3. Orphan Drum Program – DERR
4. Open Burning Regulations – DAPC
5. Ohio EPA District Office Map and Contact Numbers (included with this fact sheet)

Ohio EPA Division of Solid & Infectious Waste Management (DSIWM)

www.epa.state.oh.us/dsiwm

(614) 644-2621

Ohio EPA Division of Emergency & Remedial Response (DERR)

www.epa.state.oh.us/derr

(614) 644-2924

Ohio EPA Division of Air Pollution Control

www.epa.state.oh.us/dapc

(614) 644-2270

CONTRACTING

Contracting Office Responsibilities

1. Determine the type of contracting needed to satisfy specific debris clearance, removal and disposal requirements of an unusual and compelling urgency.
2. Determine if any purchasing and contracting requirements are waived as a result of the disaster and subsequent declarations of emergency (See Ohio Revised Code 125.023).
3. Solicit bids, evaluate offers, award contracts, and issue notices to proceed with all contract assignments.
4. Supervise the full acquisition process for service and supply contracts and the oversight of contract actions to ensure conformance to regulatory requirements.
5. Coordinate with the local Department of Public Works and Department of Solid Waste Management staffs and consult with legal counsel. The contracting office must take care to avoid the solicitation of assistance from the general public and giving the impression that compensation will be provided for such assistance. In general, this would be considered as volunteer actions. In addition, there are a number of other issues involved with such a solicitation, including licensing, bonding, insurance, the potential for the communities to incur liability in the event of injury or death, supervision and certification of work done.

TYPES OF DEBRIS CONTRACTS

{In order to expect reimbursement under the FEMA Public Assistance Program for eligible debris work associated with a TIME and MATERIALS contract applicants Must: MAKE A DETERMINATION THAT NO OTHER CONTRACT IS SUITABLE and the CONTRACT INCLUDES A CEILING PRICE THAT THE CONTRACTOR EXCEEDS AT ITS OWN RISK , See 44 CFR, Part 13.36(b)(10)}

1. **Time and Materials Contracts** may be used for short periods of time immediately after the disaster to mobilize contractors for emergency removal efforts. They must have a dollar ceiling or a not-to-exceed limit for hours (or both), and should be terminated immediately when this limit is reached. The contract should state that (a) the price for equipment applies only when equipment is operating, (b) the hourly rate includes operator, fuel, maintenance, and repair, (c) the community reserves the right to terminate the contract at its convenience, and (d) the community does not guarantee a minimum number of hours.
2. **Unit Price Contracts** are based on weights (tons) or volume (cubic yards) of debris hauled, and should be used when the scope of work is not well defined. They require **CLOSE MONITORING** of pick up, hauling and dumping to ensure that quantities are accurate. Unit price contracts may be complicated by the need to segregate debris for disposal.

3. **Lump Sum Contracts** establish the total contract price using a one-item bid from the contractor. They should only be used when the scope of work is clearly defined, with areas of work and quantities of material clearly identified. Lump sum contracts can be defined in one of two ways: Area Method where the scope of work is based on a one-time clearance of a specified area; and Pass Method where the scope of work is based on a certain number of passes through a specified area, such as a given distance along a right-of-way.

CONTRACT MONITORING

An **EMPLOYEE or CONTRACTOR** should monitor the contractor's activities to ensure satisfactory performance. Monitoring includes: verification that all debris picked up is a direct result of the disaster; measurement and inspection of trucks to ensure they are fully loaded; on-site inspection of pick up areas, debris traffic routes, temporary storage sites, and disposal areas; verification that the contractor is working in its assigned contract areas; verification that all debris reduction and disposal sites have access control and security.

Please see the Ohio Revised Code, Sections 125.023, 307.86.92, 153.54, 153.57, 2921.01, and 2921.42 and supplementary rules and local ordinances for additional information pertaining to competitive bidding.

FEMA ELIGIBILITY

Under a Presidential disaster declaration for the State of Ohio, the Federal Emergency Management Agency (FEMA) may provide assistance to state and local governments for costs associated with debris removal operations. Debris removal operations include collection; pick up, hauling, and disposal at a temporary site, segregation, reduction, and final disposal. This document provides information on the eligibility of debris removal operations for Public Assistance (PA) funding. FEMA may also provide (See Federal Assistance, below) Direct Assistance to perform debris removal operations, to include demolition.

General Work Eligibility: Determination of eligibility is a FEMA responsibility. Removal and disposal of debris that is a result of the disaster, and is on public property, is eligible for Federal assistance. Public property includes roads, streets, and publicly-owned facilities. Removal of debris from parks and recreation areas is eligible when it affects public health and safety or limits the use of those facilities.

Debris Removal from Private Property: Costs incurred by local governments to remove debris from private property may be reimbursed by FEMA if it is pre-approved by the Federal Disaster Recovery Manager, is a public health and safety hazard, and if the work is performed by an eligible PA applicant, such as a municipal or county government. The cost of debris removal by private individuals is not eligible under the Public Assistance Program; however, within a specific time period, a private property owner may move **disaster-related** debris to the curbside for pick up by an eligible PA applicant. That time period will be established by FEMA in coordination with the state and local government. (The cost of picking up **reconstruction** debris is not eligible for FEMA reimbursement.)

Eligible Costs: If an applicant uses force account (their own) personnel and equipment, the cost of the equipment and overtime costs for personnel are eligible for federal funding. If an applicant chooses to award a contract(s) for debris operations, the costs of the contracts are also eligible for federal funding. **PA applicants should exercise judicious care in contracting for debris operations, since by law, FEMA is authorized only to assist with reasonable costs.** Reasonable costs are those that are fair and equitable for the type of work performed in the affected area. If desired, FEMA staff will provide technical assistance on this subject prior to contract award.

Use of Contractors: If an applicant decides to award contracts for debris removal, FEMA advises the following:

- Do not allow contractors to make eligibility determinations; they have no authority to do so;
- Utilize pre-negotiated contracts, if available;
- Consider using qualified local contractors because of their familiarity with the area;
- Request copies of references, licenses and financial record from unknown contractors;
- Document procedures used to obtain contractors;
- Do not accept contractor-provided contracts without close review. FEMA can provide technical assistance on contracts and contract procedures, if requested to do so by local officials.

FEMA does not recommend, pre-approve, or certify any debris contractor. FEMA does not certify or credential personnel other than official employees and Technical Assistance Contact personnel assigned to the disaster by FEMA. Only FEMA has the authority to make eligibility determinations.

FEMA ELIGIBILITY (Cont'd)

Ineligible Contracts: FEMA will not provide funding for cost-plus-percentage of cost contracts, contracts contingent upon receipt of state or federal disaster assistance funding, or contracts awarded to debarred contractors.

Documentation: To ensure that processing of federal funding is done as quickly as possible, applicants should keep the following information: debris estimates, procurement information (bid requests, bid tabulations, etc.), contracts, invoices, and monitoring information (load tickets, scale records, etc). If an applicant performs debris removal, the payroll and equipment hours must be kept. All records should be maintained in the manner prescribed by the local government with consideration of state and federal record retention guidelines.

Continued on next page

FEMA ELIGIBILITY (Cont'd)

FEDERAL ASSISTANCE

Technical

FEMA and the state may provide technical assistance with planning, carrying out and monitoring of debris removal operations. If disaster related debris removal and disposal operations are beyond the capability of the state and local governments to perform or contract for the work, the state may request direct federal assistance. In such instances, FEMA will give the U.S. Army Corps of Engineers a mission assignment to prepare, execute and monitor contracts for debris operations. Applicants in need of technical assistance should contact the State Public Assistance Office, Ohio EMA, by calling (614) 799-3665.

Direct

FEMA may provide Direct Federal Assistance (Mission Assignment) to remove debris and/or structures from public or private property. Such assistance must be requested of FEMA by the State of Ohio. If such a request involves private property, the actions listed below must be taken by the applicable local government. Such actions **MUST** be based on a local ordinance/resolution adopted **PRIOR** to the disaster event. Further, such an ordinance/resolution must be based on the applicable sections of the Ohio Revised Code / Ohio Building Code. See ORC Section 4101: 1-1-15, Section 115 Unsafe Buildings.

Private Property Debris Removal / Demolition

The following actions **must** be taken, in accordance with ORC 4101, Section 115, in order for FEMA to consider reimbursement of such locally incurred costs or to undertake debris removal and/or demolition of structures on Private Property:

- Provide a pre-existing ordinance that establishes the applicant's authority to abate unsafe conditions on private property in order to preserve the public health and safety of the community
- Provide rights of entry secured from the owners of each property that the applicant has identified under the applicable ordinance as unsafe, hazardous, or dangerous
- Provide an agreement executed by the property owner to hold the community and FEMA harmless for damage or injury to property as a result of demolition or debris removal work related to event related damage.
- Indicate whether the property is insured and if a claim has been filed. Insurance proceeds would be credited to the cost of demolition before FEMA assistance is awarded.
- Implement the ordinance, **including all the due process requirements**. The community applicant must repay FEMA any money recovered from the property owner to abate the nuisance.

The applicable FEMA Public Assistance Policy, Demolition of Private and Public Facilities {No. 9523.4 (see http://www.fema.gov/r-n-r/pa/9523_4.html)}, provides further information on this subject.

Attachment 2

Sample Map of Debris Removal Route

Attachment 3

List of Solid Waste Facilities

Attachment 4

List of Qualified Contractors

Attachment 5

Sample Contracts

The attached documents are “samples” only and may not address all issues affecting an individual jurisdiction’s situation. All official documents should be reviewed by the appropriate legal authority prior to use.

Attachment 5.1

Example Mutual Aid Agreement

THIS AGREEMENT, entered into this ____ day of _____ by the participating parties hereto:

WHEREAS, each of the parties hereto desires to furnish mutual aid to each other in the event of a disaster, for which neither party might have sufficient equipment or personnel to cope, and,

WHEREAS, such a mutual aid agreements are authorized by (Site Statutory Agency).

NOW THEREFORE, the parties do mutually agree as follows:

ARTICLE I TERM

This agreement shall commence at 12:01 a.m. on _____, and continue through _____, subject to the right of each party to terminate sooner as provided herein.

ARTICLE II Services

- A. In the event of a disaster that requires aid of equipment and personnel beyond that which each party is able to provide for itself, all parties hereto agree that at the request of any party Hereto the others will loan such equipment and personnel as the respective officials of the lending jurisdiction, in their discretion, shall determine can be reasonably spared at the time without placing their own community in jeopardy.
- B. Since time is of the essence during emergencies as herein referred to, the authority to dispatch equipment and personnel or call for in accordance with the terms and conditions of this agreement shall be delegated specifically to the chief official or acting chief official of the parties hereto.
- C. The lending party shall be responsible for the delivery of said equipment and personnel to the location specified by requesting party.
- D. Upon arrival at said location, the officer in charge of the said equipment and personnel shall report to the officer in charge at the location of the disaster, who shall assume full charge of all operations at a disaster or emergency location.
- E. All equipment and personnel loaned hereunder shall be returned upon demand of the lending party or when released by the requesting party upon the cessation of the emergency.

ARTICLE III PAYMENT

No charge shall be assessed for services rendered by any party hereto.

ARTICLE IV WAIVER OF CLAIMS

Each party hereto hereby waives all claims against the other for compensation for any loss, damage, personal injury, or death occurring in consequence of the performance of either party, their agents, or employees hereunder.

ARTICLE V TERMINATION

This Agreement may be terminated by either party upon at least thirty days prior written notice to the other.

ARTICLE VI INTEGRATION

This Agreement contains the entire understanding between the parties, and there are no understandings or representations not set fourth or incorporated by reference herein. No subsequent modifications of this Agreement shall be of any force or effect unless in writing signed by the parties.

ARTICLE VII COMPLIANCE WITH LAWS

In the performance of this Agreement, each party shall comply with all applicable Federal, State, and Local laws, rules, and regulations.

SIGNATURES OF AGREEING OFFICIALS

Attachment 5.3

Example Time and Materials Contract

ARTICLE 1: Agreement Between Parties

This contract is entered into on this _____ day of _____, 20____, by and between the city/county of _____, hereinafter called the ENTITY and _____, hereinafter called the CONTRACTOR.

ARTICLE 2: Scope of Work

This contract is issued pursuant to the Solicitation and Procurement on _____, 20____, for the removal of debris caused by the sudden natural or man-made disaster of _____ to _____, 20____. It is the intent of this contract to provide equipment and manpower to remove all hazards to life and property in the affected communities. Clean up, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

ARTICLE 3: Schedule of Work

Time is of the essence for this debris removal contract.

Notice to proceed with Work: The work under this contract will commence on _____, 20____. The equipment shall be used for (recommended not to exceed 70) hours, unless the ENTITY initiates additions or deletions by written change order. Based upon unit prices of equipment and labor, no minimum or maximum number of hours is guaranteed.

ARTICLE 4: Contract Price

The hourly rates for performing the work stipulated in the contract, documents, which have been transposed from the low bidder's bid schedule, are as follows:

Equipment/Machine/Operator	Mobilization/ Demobilization Cost	Hourly Rate
-----------------------------------	--	--------------------

Manufacturer, Model

Total unit rate shall be given which includes maintenance, fuel, overhead, profit, and other associated cost with the equipment.

Estimated Cost per unit of material. Only actual invoice amounts will be paid.

Labor man-hours

Protective clothing, fringe benefits, hand tools, supervision, transportation, and any other costs.

ARTICLE 5:
Payment

The ENTITY shall pay the Contractor for mobilization and demobilization if the Notice to Proceed is issued and will pay for only the Time that the equipment and manpower is actually being used in accomplishing the work. The Contractor shall be paid within _____ days of the receipt of a pay estimate and verification of work by the inspector.

ARTICLE 6:
Claims

Not Applicable

ARTICLE 7:
Contractor's Obligations

The Contractor shall supervise accomplishment of the work effort directed by labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, personnel, liability insurance, taxes, and fees necessary to perform under the terms of the contract.

Caution and care must be exercised by the Contractor not to cause any additional damage to sidewalks, roads, buildings, and other permanent fixtures.

ARTICLE 8:
Insurance and Bonds

The Entity's representative(s) shall furnish all information necessary for commencement of the Work and direct the Work effort. Costs of construction permits, disposal sites and authority approvals will be home borne by the Entity. A representative will be designated by the Entity for inspection the work and answering any on-site questions. This representative shall furnish the Contract daily inspection reports including work accomplished and certification of hours worked.

The Entity shall designate the public and private property areas where the work is to be performed. Copies of complete "Right of Entry" forms, where they are required by State or local

law for private property shall be furnished to the contractor by the Entity. The Entity shall hold-harmless and indemnify the Contractor and his employees against any liability for any and all claims, suits, judgements, and awards alleged to have been caused by services rendered under this contract for disaster relief work unless such claims are the result of negligence on the part of the Contractor.

The Entity will terminate the contract for failure to perform or default by the Contractor.

ARTICLE 9:
Insurance and Bonds

The Contractor shall furnish proof of Worker's Compensation Coverage, Automobile Liability Coverage, and Comprehensive General Liability Insurance (Premises-Operations, Personnel Injury, etc, as deemed necessary by the Entity).

Surety: The Contractor shall deliver so the Entity fully executed Performance and Payment Bonds in the amount of 100% of the contract amount, if required by the specifications, general or special conditions of the contract. The Entity will reimburse the Contractor for the costs of the bonds, the costs of which will be included in the base bid.

ARTICLE 10:
Contractor Qualifications

The Contractor must be duly licensed in the State per statutory requirements.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

Entity (City, County, Town, Etc)

By _____ Seal

by _____ Seal
Principal of the firm

Contractor (Include address, City, State)

Attachment 5.4

Example Lump Sum Contract for Debris Removal

ARTICLE 1: Agreement Between Parties

This contract is made and entered into on this ____ day of _____, 20____, by and between the city/county of _____, hereinafter called the ENTITY and _____, hereinafter called the CONTRACTOR.

ARTICLE 2: Scope of Work

This contract is issued pursuant to the Solicitation and Procurement on _____, 20____, for the removal of debris caused by the sudden natural or manmade disaster of _____ to _____, 20____. It is the intent of this contract to provide equipment and manpower to remove all hazards to life and property in the affected communities. Clean up, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

ARTICLE 3: Schedule of Work

Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The Work under this contract will commence on _____, 20____. Maximum allowable time for completion will be _____ Calendar days, unless the Entity initiates additions or deletions by written change order. If the Contractor does not complete Work within the allotted time, liquidated damages will be assessed in the amount of _____ per day.

ARTICLE 4: Contract Price

The lump sum price for performing the work stipulated in the contract document is.
\$_____.

ARTICLE 5:
Payment

The Contractor shall submit certified pay requests for completed work. The Entity shall have 10 calendar days to approve or disapprove the pay request. The Entity shall pay the Contractor for his/her performance under the contract within _____ days of approval of the pay estimate. On contracts over 30 days in duration, the Entity shall pay the Contractor a pro-rata percentage of the contract amount on a monthly basis, based on the amount of work completed and approved in that month. The Entity will remunerate the Contractor within 30 days of the approved application for payment, after which interest will be added at a rate of _____ on each payment. Retainer shall be released upon substantial completion of the work.

Funding for this contract is authorized pursuant to Public Law of the State of Ohio _____, And _____.
Local Statute or ordinance

ARTICLE 6:
Change Orders

If the scope of work is changed by the Entity, the change in price and contract time will be promptly negotiated by the parties, prior to commencement of work.

ARTICLE 7:
Contractor's Obligations

The Contractor shall supervise and direct the Work, using skillful labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, equipment, personnel, taxes, and fees necessary to perform under the terms of the contract.

Any unusual, concealed, or changed conditions are to be immediately reported to the Entity. The Contractor shall be responsible for the protection of existing utilities, sidewalks, roads, building, and other permanent fixtures. Any unnecessary damage will be repaired at the Contractor's expense.

ARTICLE 8:
Entity's Obligations

The Entity's representative(s) shall furnish all information, documents, and utility locations, necessary for commencement of Work. Costs of construction permits and authority approvals will be borne by the Entity. A representative will be designated by the Entity for inspecting the work and answering on-site questions.

The Entity shall designate the public and private property areas where the disaster mitigation work is to be performed. Copies of complete "Right of Entry" forms, where they are required by the State and local law for private property, shall be furnished to the Contractor by the Entity. The Entity shall hold harmless and indemnify the Contractor judgements and awards alleged to

have been caused by services rendered under this contract for disaster relief work unless such claims are caused by the gross negligence of the Contractor, his subcontractors or his employees.

ARTICLE 9:
Claims

If the Contractor wishes to make a claim for additional compensation, for work or materials is not clearly covered in the contract, or nor ordered by the Entity as a modification to the contract, he/she shall notify the Entity in writing. The Contractor and the Entity will negotiate the amount of adjustment promptly; however, if no agreement is reached, a binding settlement will be determined by a third party acceptable to both Entity and Contractor under the sections of applicable State law.

ARTICLE 10:
Insurance and Bonds

The contractor shall furnish proof of Worker's Compensation Coverage, Automobile Liability Coverage, and Comprehensive General Liability Insurance (Premises-Operations, Personal injury, etc. as deemed necessary by the Entity).

Surety: The Contractor shall deliver to the Entity fully executed Performance and Payment Bonds in the amount 100% of the contract amount, if required by the specifications, or general or special conditions of the contract. The Entity will reimburse the Contractor for the costs of the bonds, the cost of which will be included in the base bid.

ARTICLE 11:
Contractor Qualifications

The Contractor must be duly licensed in the State per statutory requirements.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

Entity (City, County, Town, Etc.)

By _____ Seal

Contractor (Include Address, City, State

By _____ Seal
Principal of the Firm

Attachment 5.5

Example Unit Price Contract for Debris Removal

ARTICLE 1: Agreement Between Parties

This contract is made and entered into on this the __, 20__, by and between the county of _____, hereinafter called the ENTITY and _____, hereinafter called the CONTRACTOR.

ARTICLE 2: Scope of Work

This contract is issued pursuant to the Solicitation and Procurement on _____, 20__, for the removal of debris caused by the sudden natural or man-made-disaster of _____ to _____, 20__. It is the intent of this contract to provide equipment and manpower to remove all hazards to life and property in the affected communities. Clean up, demolition, and removal will be limited to 1) that which is determined to be in the interest of public safety and 2) that which is considered essential to the economic recovery of the affected area.

ARTICLE 3: Schedule of Work

Time is of the essence for this debris removal contract.

Notice to proceed with the Work: The work under this contract will commence on _____, 20__. Maximum allowable time for the completion will be _____ Calendar days unless the Entity initiates additions or deletions by written charge order. Subsequent changes in cost and completion time will be equitably negotiated by both pursuant to applicable State law. Liquidated damages shall be assessed at \$_____/calendar day for any days over the approved contract amount.

ARTICLE 4: Contract Price

The unit prices for performing the work stipulated in the contract documents, which have been transposed from the low bidder's bid schedule are as follows:

Quantity	Unit of Measure	Description	Unit Cost	Total
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Subtotal	_____
Cost of Bond	_____
Grand Total	_____

*Debris shall be classified as one of the following units: cubic yards, each, square foot, linear foot, gallon, or an approved unit measure applicable to the specific material to be removed.

ARTICLE 5:
Payment

The Contractor shall submit certified pay request for completed work. The Entity shall have 10 calendar days to approve or disapprove the pay request. The Entity shall pay the Contractor for his performance under the contract within 20 days of approval of the pay estimate. On contracts over 30 days in duration, the Entity shall pay the Contractor a pro-rata percentage of the contract amount on a monthly basis based on the amount of work completed and approved in the month. The Entity will remunerate the Contractor within 30 days of the approved application for payment. After which interest will be added at a rate of _____ per annum. Payments shall be subject to a retainage of _____ on each payment. Retainage shall be released upon substantial completion of the work.

Funding for this contract is authorized pursuant to Public Law of the State of Ohio, _____, and _____.
Local statue or ordinance

ARTICLE 6:
Claims

If the Contractor wishes to make a claim for additional compensation, for work or materials not clearly covered in the contract, or not ordered by the Entity as a modification to the contract. He/she shall notify the Entity in writing. The Contractor and the Entity will negotiate the amount of adjustment promptly; however, if no agreement is reached a binding settlement will be determined by a third party acceptable so both Entity and Contractor under the auspices of applicable State law.

ARTICLE 7:
Contractors Obligations

The Contractor shall supervise and direct the Work, using skillful labor and proper equipment for all tasks. Safety of the Contractor's personnel and equipment is the responsibility of the Contractor. Additionally, the Contractor shall pay for all materials, equipment, personnel, taxes, and fees necessary to perform under the terms of the contract.

Any unusual, concealed, or changed conditions are to be immediately reported to the Entity. The Contractor shall be responsible for the protection of existing utilities, sidewalks, roads, buildings, and other permanent fixtures. Any unnecessary damage will be repaired at the Contractor's expense.

ARTICLE 8:
Entity's Obligations

The Entity's representative(s) shall furnish all information, documents, and utility locations for necessary for commencement of Work. Costs of construction permits and authority approvals will be borne by the Entity. A representative will be designated by the Entity for inspecting the work and answering and on-site questions.

The Entity shall designate the public and private property areas where the disaster mitigation work is to performed. Copies of "Right of Entry" forms, as required by State laws for private property, shall be furnished to the Contractor by the Entity. The Entity shall hold harmless and indemnify the Contractor judgements and awards alleged to have been caused by services rendered under this contract for disaster relief work unless such claims are caused by the gross negligence of the Contractor, his/her subcontractors, or his/her employees.

The Entity will terminate this contract for failure to perform as specified, or for default by the Contractor.

ARTICLE 9:
Insurance and Bonds

The contractor shall furnish proof of Worker's Compensation Coverage, Automobile Liability Coverage, and Comprehensive General Liability Insurance (Premises-Operations, Personal Injury, etc...as deemed necessary by the Entity).

Surety: The contractor shall deliver to the Entity fully executed Performance and Payment Bonds in the amount of 100% of the contract amount, if required by the specifications, or general or special conditions of the contract. The Entity will reimburse the Contractor for the costs of the bonds, the cost of which will be included in the base bid.

ARTICLE 10:
Contractor Qualifications

The contractor must be fully licensed in the State of Ohio.

THIS CONTRACT IS DULY SIGNED BY ALL PARTIES HERETO:

Entity(City, County, Township, Village, etc.)

by _____ Seal
Contractor, Address, City, State

by _____ Seal
Principal of the firm

Attachment 6

Demolition Checklist

Local Responsibilities Checklist

The following checklist identifies key tasks that local officials should address before a structure is approved for demolition. To expedite the overall effort, many of the tasks can be conducted concurrently.

- √ Provide copies of all ordinances that authorize the local officials to condemn privately owned structures. The authority to condemn privately owned structures would probably have to be accomplished by an ordinance other than one designed or enacted for the demolition of publicly owned structures.
- √ The local officials should coordinate all lands, easements, and rights of way necessary for accomplishing the approved work.
- √ Implement laws that reduce the time it takes to go from condemnation to demolition.
- √ Provide copies of all applicable permits required for demolition of subject structure(s).
- √ Provide copies of pertinent temporary well capping standards.
- √ Coordinate all pertinent site inspections with local, State, and Federal inspection team(s). Identify household hazardous waste materials prior to demolition.
- √ Notify the owner/and or renter of any and all site inspections.
- √ Verify that all personal property has been removed from public and/or structure(s).
- √ Immediately prior to demolition, verify that the building is unoccupied.
- √ Ensure that the property is properly posted.
- √ Provide a clear, concise and accurate property description and demolition verification.
- √ Include a Public Health official on the demolition inspection team.
- √ The inspection not only should evaluate the structural integrity of the building, but also must demonstrate “imminent and impending peril” to public health and safety.
- √ Segregate all household hazardous waste materials to a permitted facility prior to building demolition.

- √ Provide photographs of the property and verify the address. Provide additional photographs of the property take immediately prior to and following demolition.

Private Property Utilities Checklist

The following checklist identifies key tasks that local officials should address before the structure is approved for demolition. To expedite the overall effort, many of the tasks can be conducted concurrently.

- √ Locate, mark, turn off, and disconnect all water and sewer lines.
- √ Locate, mark, turn off, and disconnect electrical, telephone, and cable television services.
- √ Provide executed right of entry agreements that have been signed by the owner and by renter, if rented. Right of entry should indicate any known owner intent to rebuild to ensure foundation and utilities are not damaged.
- √ Use radio, public meetings, and newspaper ads to give notice to property owners and their renters to remove personal property in advance of demolition.
- √ Document the name of the owner on the title, the complete address, and legal description of the property, and the source of this information. Document name of renter, if available.
- √ Ensure property will be vacated by demolition date.
- √ Provide written notice to property owners that clearly and completely describe the structures designated for demolition. Additionally, provide a list that also identifies relates structures, trees, shrubs, fences, and other items to remain on the respective property.
- √ Notify mortgagor of record.
- √ Provide the property owner the opportunity to participate in decision on whether the property can be repaired.
- √ Determine the existence and amount of insurance on the property prior to demolition.
- √ Specify procedures to determine when cleanup of property is completed.

Attachment 7

Navigational Hazard Checklist

Introduction

Publicly owned marinas damaged by a major disaster may be eligible for Federal assistance to include the marina facilities, abandoned sunken boats, and other debris that may inhibit navigation. Coordinate with the United States Coast Guard, State Marine Patrol, local government agencies, legal counsel, contractors specializing in marine salvage operations, commercial divers, and certified surveyors to ensure that navigational hazards are removed safely and efficiently.

Checklist

The following checklist should be used to ensure that all aspects of removing navigational hazards are considered.

- √ Coordinated with the United States coast guard, State Marine Patrol, local government agencies, and legal counsel.
- √ Inspect marinas in order to located debris by helicopter or boat, side scan sonar, or by diving.
- √ Use Global Position System survey methods or some type of flotation marker to pinpoint location of sunken debris.
- √ Keep a log that reflects an accurate count of debris items with corresponding locations.
- √ Record the vessel registration number and photograph the wreckage.
- √ Provide notification by certified letter to private owners of impeding vessel removal. This should be performed in accordance with legal constraints.
- √ Provide the owner an opportunity to remove the vessel prior to Federal, State, or local government initiation of debris removal.
- √ Provide public notice in local newspapers.
- √ Generate scopes of work based on items to be removed or time and materials.
- √ Maintain flexibility to allow for problems caused by tidal conditions. Problems can also occur as a result of wreckage removal by others prior to issuance of contract notice to proceed.
- √ Maintain continuous communication with local and State authorities.

- √ Continually verify the number and locations of sunken vessels and ensure that accurate records are maintained.
- √ Require a bill of sale or a vessel registration is presented to the United States Army Corps of Engineers representative on site if an individual claims a vessel during removal operations.

Attachment 8

Debris Reduction Information

Reduction by burning

Uncontrolled open burning is the least desirable method of debris reduction because of the lack of environmental control. In some cases this method may be used if a Department of Natural Resources gives a permit.

Controlled open burning is a cost-effective way of reducing debris. Controlled open burning is used when there is clean wood tree debris. The controlled burning allows the remaining ash left over to be a soil additive if the Department of Agriculture or applicable local agency determines it can be recycled. However, if there is any treated lumber, poles, nails, bolts, tin, aluminum sheeting, or other building materials that enter the burning material operations must stop because of the possible hazards associated with the burning of materials.

Air curtain pit burning reduces environmental concerns open burning has by using a system that produces high temperatures and reduces pollutants released into the atmosphere. However, someone who is familiar with the operation of the system should use it. Experience has shown many contractors are not familiar with the operation of it.

Refractor lined pit-burning uses a pre manufactured lined pit. A refractor-lined pit operates under the same principal as the air curtain operating at high temperatures. The system allows for the reduction of debris by 95%. Manufactures claim that 25 tons per hour of reduction is possible.

Environmental Controls

- Maintain at least 1000 feet between the burn pile and the debris piles. Also, maintain at least 1000 feet between burn piles and buildings.
- Extinguish the fire 2 hours before removal of ashes. Remove the ashes when they reach two inches below the top of the burn pit.
- Establish a burn area of no wider than eight feet and between nine and fourteen feet deep.
- Construct burn-pit with limestone and reinforce them with anchors or wire mesh to support loaders. Seal the bottom of the pit with limestone or clay to keep ash out of aquifers.
- Seal the ends of the pits with dirt or ash to 4 feet tall.
- Construct a twelve-inch dirt seal on the lip of the pit to seal the blower nozzle. Place the nozzle three to six inches from the end of the pit.

- Construct one-foot high, unburnable stops along the edge of the pit to prevent the loaders from damaging the pit.
- Never place any hazardous chemicals or materials within the incineration pit.
- Place the airflow so it hits two feet below the top edge of the pit and don't allow the debris to break airflow except for loading.
- Construct the pit to no longer than the length of the blower system.

Reduction by grinding and chipping

- Strong winds and tornadoes present opportunity for a big grinding and chipping operation as the method of debris reduction. The resulting product of the chipping and grinding operation may be used as a landfill product, used as topsoil, or used for residential applications.
- Chipping operations are suitable in areas where streets are narrow or in groves of trees where it is cheaper to reduce the vegetation to mulch and then return it to affected areas.
- The debris management task force should work with local environmental and agricultural groups to see if there is any market for mulch.
- When contracting a mulching project the most important consideration is the specification of the size of the mulch. The mulch also must remain free of paper and plastic if used for agricultural purposes. The following information is for the use of mulch as an agricultural product:

Size: Average size of wood chips is not to exceed four inches in length and one half inch in diameter. The debris reduction rate for moderately contaminated debris is 100 to 150 cubic yards per hour and when the debris is relatively clean it is 200 to 250 cubic yards per hour.

Contaminants: The contamination rate for material other than wood products should be less than ten percent of the mulch. Eliminate plastics completely. Use rake loaders to pick up debris because normal loaders pick up earth, which is part of the contaminant list and harms the chipper.

- Chippers are best used in residential areas, orchards, or groves. Trees present a problem if they are pushed to the side of the public right-of-way because of cost associated with transportation.
- Grinders are ideal for use at debris staging and reduction sites due to high volume capacity. Due to high capacity of debris a large storage area is needed for a large grinding operation. Sound protection also becomes a very important issue.

Reduction by recycling

- Recycling offers an option to reduce debris before it is hauled to the landfill. Recycling is a publicly supported function that has economic values for the recovered materials. Metals, wood, and soils are commonly recyclable. A drawback is the impact of recycling on the environment. In areas of agriculture there may be a large amount of fertilizer use. Therefore, use of soil may be limited due to contamination.
- Recycling, when chosen, should be by a contractor who specializes in sorting debris. Contract monitoring is a part of a recycling operation because the contractors must comply with local, state, and federal environmental regulations.
- Recycling should be given consideration early in a disaster because it may reduce cost of debris removal. The materials capable of being recycled include:

Metals- Most metals are able to be recycled and do not contain iron. However, trailer frames and other iron containing metals may be included in the recyclable materials. The metals are separated by the use of an electromagnet. The resulting materials can be sold to metal recycling firms.

Soil- Soil recycling operations use large pieces of equipment to pick up soil. The soil is transported to a staging area and reduction sites where it is combined with organic material that will decompose. Large amounts of soil can be recovered if the material is put through a screen system. The resulting soil can be given back to the agricultural community. The soil also may be used for local landfills as cover materials.

Wood- Wood debris can be ground or chipped into mulch.

Construction material- Concrete or other building materials can be used for other purposes if there is a need for them. The materials also may be shred to reduce volume then used as a cover for landfills.

Residue material- Residue material that cannot be recycled, such as cloth, rugs, and trash, can be sent to landfills for disposal.

Attachment 9

Temporary Debris Storage and Reduction Site Closeout Checklist

The following is a recommended TDSR site closeout checklist.

- √ Site Number and Location
- √ Date closure complete
- √ Household Hazardous Waste removed
- √ Contractor equipment removed
- √ Contractor petroleum and other toxic spills cleaned up
- √ Ash piles removed
- √ Compare baseline information of the temporary site conditions after the contractor vacates the site.

Attachment 10

TDSR Closeout Issues

Environmental Restoration Stockpiled debris will be a mix of woody vegetation, construction material, household items, and yard waste. Household hazardous waste and medical wastes should be segregated and removed prior to being stockpiled. Activities done at the temporary debris storage and reduction site will include stockpiling, sorting, recycling, incineration, grinding, and chipping. Incineration operations will occur in air curtain pits and only woody debris will be incinerated. Due to operations occurring contamination from petroleum spills or runoff from incineration and debris piles may occur. Therefore close monitoring of the environmental conditions is a coordinated effort.

Site Remediation During the debris removal process and after the material is removed from the debris site; environmental monitoring will need to be conducted. This is to ensure no long-term environmental effects occur. Environmental monitoring is needed for the following areas:

- Ash- Monitoring consists of chemical testing to determine suitability of material for landfill placement.
- Soils- Monitoring consists of using portable meters to determine if soils are contaminated by volatile hydrocarbons. Contractors do monitoring if there has been a determination that chemicals such as oil or diesel has spilled on site.
- Groundwater- Monitoring is done on selected sites to determine effects of rainfall leaching (leaking) through ash areas or stockpile areas.

Develop a checklist for site close out procedures. A sample checklist is included in this document.

Attachment 11

Sample Layout for TDSR Site

