State of Texas Emergency Management Plan

Catastrophic Debris Management Annex



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Acronyms and Abbreviations

ACI	Air Curtain Incinerators
DEOC	Disaster District Emergency Operations Center
DHS	Department of Homeland Security
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
HHW	Household Hazardous Waste
IHW	Industrial Hazardous Waste
MUTCD	Manual or Uniform Traffic Control Devices
PA	Public Assistance
PAPPG	Public Assistance Program and Policy Guide
PCB	Polychlorinated Biphenyls
PPE	Personal Protective Equipment
REOC	Regional Emergency Operations Center
RFP	Request for Proposal
ROE	Right of Entry
ROW	Right of Way
SOC	State Operations Center
STAR	State of Texas Assistance Request
TCEQ	Texas Commission on Environmental Quality
TDEM	Texas Division of Emergency Management
TDSRS	Temporary Debris Staging and Reduction Site
THC	Texas Historical Commission
TXDOT	Texas Department of Transportation
WMP	Waste Management Planning
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Introduction

The State Plan complies with Homeland Security Presidential Directive 5 (HSPD-5) "Management of Domestic Incidents" and Presidential Policy Directive 8 (PPD-8) "National Preparedness," the "National Preparedness Goal" and the National Incident Management System (NIMS) as the "declared state standard for incident management."

The State Plan (State Plan) is composed of a Basic Plan, Emergency Support Function Annexes, Support Annexes, Hazard Annexes, and the State of Texas Acronyms and Terms (STAT) book. The State Plan responds to Tex. Gov. Code, § 418.042, which directs the Texas Division of Emergency Management (TDEM) to "prepare and keep current a comprehensive state emergency plan." The plan outlines the "coordination of federal, state, and local emergency management activities."

Further, this annex sets forth cross-agency coordination responsibilities as agreed to by the Texas Emergency Management Council (TEMC) agency representatives in response to their mandate, Tex. Gov. Code, § 418.013, to "assist the division [TDEM] in identifying, mobilizing, and deploying state resources to respond to major emergencies and disasters throughout the state." The State Plan is designed to integrate with other state agencies or entity plans and annexes when they are included as subordinate appendices or attachments to the State Plan.

All sections of the plan contain links to related information. For an explanation of the acronyms, abbreviations, and terms in this document, refer to the <u>State of Texas Acronyms and Terms</u> Book.

This document is intended to provide guidance and is not prescriptive or comprehensive. Use judgment and discretion to determine the most appropriate actions at the time of an incident.

Overview

Purpose

The purpose of the Catastrophic Debris Management Annex is to outline the roles and responsibilities, coordination mechanisms, capabilities and actions required of stakeholders during state emergency operations to meet the needs of the whole community as mandated by Senate Bill 6 amendment to <u>Tex. Gov. Code Ch. 418</u>.

Disasters can generate a variety of debris. The quantity and type of debris generated from any particular disaster is a function of the location, magnitude, duration and intensity. These conditions directly affect the type of collection and disposal methods used to address the debris problem, associated costs incurred and the speed with which response and recovery begins.

In a large scale or catastrophic disaster, local jurisdictions may have difficulty locating the staff, equipment and funds to devote to disaster debris removal, both in the short- as well as long-term. Out of necessity, private contractors and state agencies may play a significant support role in the debris removal, collection, reduction and disposal process.

As mandated by Tex. Gov. Code Ch. 418, the Texas Division of Emergency Management (TDEM) is responsible for preparing and maintaining the State of Texas Emergency Management Plan (State Plan). TDEM designates a primary entity to support the planning process for each functional or hazard annex that comprises the State Plan. A primary entity has significant responsibility, resources and capability for this function. TDEM is designated the primary entity to assist in the catastrophic debris management planning effort. Additional support entities are included in the planning effort and provide their knowledge about capabilities, coordination and resources for the annex.

Scope

The Catastrophic Debris Management Annex is nested under the Emergency Support Function ESF-3 Annex, Public Works and Engineering. This annex establishes the necessary framework to prepare for and respond to state and local disaster events that generate disaster debris. The state's goal in the aftermath of a disaster are:

- To return vital life support systems to minimum operating standards.
- To redevelop a disaster area to preexisting conditions or to conditions that are less disaster-prone.
- To perform activities that assist families and businesses to return to a normal or improved state of being.

Goal

Outline the operational concepts, responsibilities, processes, procedures and resources used to coordinate state support for catastrophic debris management activities in order to better prepare jurisdictions to respond and recover to meet the needs of the whole community.

Objectives

- Inform decision makers about the state response capabilities for catastrophic debris management.
- Describe the state coordination methods for catastrophic debris management.
- Identify pre-disaster actions to be taken by jurisdictions in preparation to conduct catastrophic debris management.
- Describe response resources the state can provide to catastrophic debris management.
- Describe recovery operations the state can conduct for catastrophic debris management.
- Identify agencies that are stakeholders and identify by phase of emergency management each agency's responsibilities for catastrophic debris management.
- Outline the major functions and responsibilities for agencies and organizations involved in catastrophic debris management in the state of Texas.

Audience

- Texas Emergency Management Council (TEMC-R) representatives.
- State Operations Center (SOC) personnel.
- Regional Emergency Operations Center (REOC) personnel.
- Disaster District Emergency Operations Center (DDEOC) personnel.
- Community Emergency Response Team (CERT) personnel.
- Local, regional, tribal, state and federal emergency management personnel.

Planning Assumptions

- The successful management of disaster debris typically requires a united, cooperative effort by local, regional, tribal, state and federal agencies, private contractors, nongovernmental organizations, business and industry, public and private institutions, and the general public.
- Large scale/ catastrophic debris generating disasters will likely overwhelm local jurisdictions in their clean-up efforts, necessitating state involvement in the management of the disaster debris operation.
- Local, state, and nongovernmental organization debris management resources should be utilized before requesting federal assistance.
- Initial debris removal will concentrate on the clearance of roads for emergency responders and lifesaving activities.
- Hazardous material/ environmental issues will have to be addressed throughout the debris management operation.

Concept of Operations

Most disasters in Texas do not generate catastrophic quantities of debris. As a result, the disaster debris function is not frequently activated at the state level, but rather is handled adequately at the local level with appropriate state assistance. Normally, a large scale debris cleanup effort would only be expected in those rare disaster situations where excessive debris accumulates, causing it to overwhelm local and regional debris management capabilities.

Based on past experiences in Texas, the types of disasters most likely to generate large amounts of debris are those that result in significant property and environmental damage. In Texas, those disasters include:

- Tornadoes
- Hurricanes
- Floods
- Wildfire
- Potential for human-caused disasters (including terrorist attacks that result in significant physical damage)
- Potential for widespread plant or animal disease (that results in significant quantities of dead vegetation or animals)

Response to these disasters may be beyond the capability of local jurisdictions (and possibly the state) to handle in terms of debris management. The likely impact on local and state personnel and resources would necessitate an organized structure to meet basic debris management needs. Refer to Attachment A titled "Debris Categories and Forecasting" on page 25 for a more detailed analysis of the types of debris that could be expected from such disasters.

Objectives

The Following is a list of state-level objectives that may be used to support catastrophic debris management operations. Catastrophic debris management objectives apply to all hazards and may be used to assist with any type of disaster that requires state debris removal support.

Objective 1: Debris Management Coordination.

Objective 2: Pre-Disaster Debris Management.

Objective 3: Debris Management Disaster Response.

Objective 4: Debris Management Recovery Operations.

Objective 5: Summary of Responsibilities.

Objective 1: Debris Management Coordination

The successful management of disaster debris typically requires a united, cooperative effort by local, state, and federal agencies, private contractors, nongovernmental organizations, business and industry, public and private institutions, tribal governments, and the general public. The need for coordination between all organizations involved is even more important when a disaster produces catastrophic levels of debris.

Local Government

Disaster management is best accomplished at the local level where local jurisdictions are responsible for all debris removal operations conducted within their boundaries. The state recognizes that staffing levels differ between jurisdictions as does the availability of response and recovery resources. In the event that a local jurisdiction's resources become depleted or are insufficient, a State of Texas Assistance Request (STAR) may be submitted through the district coordinator via the STAR process.

Local jurisdictions are strongly encouraged to enter into mutual aid agreements to provide assistance to one another during a disaster or emergency. These agreements should either stipulate reciprocal services or set labor and equipment rates. Mutual aid agreements must be in writing in order to be eligible for emergency assistance reimbursement by FEMA. Additional requirements for FEMA eligibility include:

- The assistance should be directly related to the disaster and meet other FEMA eligibility requirements.
- The mutual aid agreement should not be contingent upon federal funding or a declaration of a major disaster by the federal government.
- The eligible applicant receiving aid must request the grant from FEMA. The entity providing aid may not apply for a grant directly.

The applicant must be able to provide documentation that states:

- Aid was requested.
- Aid was received.
- Costs were incurred by the entity providing aid.
- Costs were paid by jurisdiction receiving aid (proof of payment).
- All federal/state/local processes and guidelines were followed.

See FEMA's <u>Public Assistance Program and Policy Guide</u>, Chapter V, Section H, Mutual Aid, for more information.

Disaster District Emergency Operations Center Support

When local capabilities are overwhelmed, jurisdictions can request state assistance through Disaster District Emergency Operations Centers (DDEOCs). DDEOCs consist of representatives from state entities and organized volunteer groups that can provide emergency resources within a disaster district.

Regional Emergency Operations Center

The Regional Emergency Operations Center (REOC) enhances communication and operations with the DDEOC and is coordinated by the regional TDEM assistant chief. The REOC is designed to assist the DDEOC with the major functions of emergency management during a disaster and may be utilized depending on the size and complexity of the event. These functions include: command, planning, operations, logistics, finance, and recovery. The REOCs are located in six regions of the state and align with the Texas Department of Public Safety identified regions. Depending on the scale and needs of the disaster, the REOC can be housed within the DDEOC, be a standalone EOC, or be a virtual EOC.

State Operations Center Support

If additional support is required, DDEOCs may submit a STAR to the State Operations Center (SOC). The TDEM may activate the state's catastrophic debris management resources based on situational requirements and requests from local jurisdictions.

If state assistance for debris management is required, it can be authorized by the governor or the Chief of TDEM. State agencies, coordinated through the SOC, may be tasked to fulfill debris management resource requests.

Assistance may include, but is not limited to:

- Overall management of the debris operations.
- Technical assistance.
- The provision of equipment and personnel to provide direct assistance in debris operations.
- Financial assistance.

Interstate Mutual Aid and Federal Support

If an incident overwhelms state resources, support may be requested from other states through the Emergency Management Assistance Compact (EMAC) or from the federal government through the FEMA. Assistance requests originate from the SOC. The EMAC may be enacted to provide assistance from one state to another upon request. The EMAC process is enacted to assist with catastrophic debris management when local and state resources are overwhelmed.

Federal Assistance within debris management activities can be provided:

- Through direct assistance provided by a federal agency such as the U.S. Army Corps of Engineers.
- Through debris management technical assistance from FEMA.
- Through the federal Public Assistance Grant Program (PA) under Categories A (Debris Removal and Disposal) or B (Emergency Protective Measures).
- These forms of assistance must be specifically requested in the governor's declaration request letter. All such assistance provided by the federal government is coordinated through the SOC and/or established Joint Field Office (JFO) by TDEM and other involved state agencies.

Objective 2: Pre-Disaster Debris Management

In accordance with state law and regulations, as well as the provisions set forth in the State Plan, to include this annex and other debris management planning and operational guides, the disposal of a disaster's catastrophic debris must be addressed in partnership with TDEM and other appropriate agencies. Additional state agencies, designated as support entities for this annex, that contribute significantly to catastrophic debris management are Texas A&M AgriLife Extension Service (AgriLife), Texas General Land Office (GLO), Texas Animal Health Commission (TAHC), Texas Commission on Environmental Quality (TCEQ), Texas Department of Transportation (TxDOT), Texas A&M Forest Service (TFS), and Texas Historical Commission (THC). State laws and regulations related to the disposal of waste must be followed during catastrophic debris management operations.

Regulatory Requirements Health and Safety

State agencies and personnel involved in debris operations will follow their established health and safety plan or policy. In addition, state agencies that contract debris removal services will require the debris contractors to provide a copy of their health and safety plan pertaining to the debris clearance, removal and disposal operations prior to commencement of operations.

Field personnel, from any state agency participating in debris management operations, will report contractor safety issues encountered during operations to their direct supervisor or to their agency's debris manager.

Environmental Considerations

TCEQ is the lead agency for environmental issues in the state of Texas. TCEQ may provide technical assistance in the proper handling and disposal of disaster debris and the coordination throughout the duration of catastrophic debris management operations. Disaster debris typically contain both kinds of waste— non-hazardous and hazardous waste, local jurisdictions should coordinate with TCEQ at the start of any catastrophic debris management effort.

A catastrophic debris management operation involving the mass disposal of dead animals will require coordination with the TAHC. All agencies and jurisdictions share responsibility for sound environmental stewardship and that it is practiced during catastrophic debris management operations.

Contracts and Finance

As a condition of eligibility, FEMA requires that any contracted services must be competitively procured in accordance with federal, state, and local purchasing requirements. Contracts should include a scope of work that clearly designates the specific services requested (e.g. specific areas from which the contractor will collect the debris; what their responsibilities will be—collection only, grinding only, collection, chipping, grinding and final management) and should include a schedule for completion of the requested work. Contracts should be bid and billed for on a

unit basis (cost per cubic yard). Contracts paid on an hourly basis are generally not reimbursable by FEMA. Any costs incurred must be fully documented in detail. It also is important that there are procedures in place to monitor and oversee contractor performance.

Contract Procurement

To be eligible for federal funding, applicants must comply with federal procurement standards as outlined in 2 CFR, § 200.317 through 200.326, Disaster Finance and Procurement, and 44 CFR, § 13.36, Procurement. Essential elements of the procurement process for debris removal and monitoring contracts include: competition; a clear and definitive scope of work; qualified bidders (documented by licenses, financial records, proof of insurance, and bonding, as applicable); a cost analysis to demonstrate cost reasonableness; compliance with all relevant local, state, and federal requirements, laws and policies; and, clear documentation of the process/rationale followed in making procurement decisions.

Cost Analysis

Applicants are encouraged to complete a cost analysis and encouraged to file documentation supporting the cost analysis with all associated contract documents pursuant to 44 CFR § 13.36, Procurement. Failure to complete a cost analysis may jeopardize FEMA Public Assistance (PA) grant funding.

Upon request, FEMA will provide guidance as necessary in the cost analysis process. Such a review does not constitute approval when determining the eligibility of costs for reimbursement under FEMA's <u>PA Grant Program</u>.

Pre-Disaster Contracts

Applicants are encouraged to pre-qualify debris removal contractors prior to an incident. Applicants should ensure pre-qualification procedures do not restrict full and open competition and should document the justification for the use of pre-qualified contractors in procurements using federal disaster funds. The solicitation for pre-qualifying contractors should be adequately defined in the contract's proposed scope of work, all potential debris types, anticipated haul distances and size of incidents for which a contract may be activated.

Contract Provisions

Contract provisions should include payment details, contract duration, performance measures, agreements to restore any collateral damage, termination for convenience and a conflict resolution process. Various types of contracts can be used including lump sum and time and materials. Cost plus contracts should not be used as they may result in FEMA limiting or denying funding for any declared incident. Existing contracts may also be used if needed for rental equipment or debris disposal.

All debris removal contracts must contain the following provisions:

All payment provisions must be based on unit prices (volume or weight).

- Payments based on time and material costs are limited to work performed during the first 70 hours of actual work following a disaster. Note: FEMA will typically only reimburse applicants for a time and materials contract for eligible debris clearance during the first 70 hours following a declared disaster. Supporting documentation must be provided to justify exceeding the 70-hour timeline.
- After 70 hours of work, the applicant should have sufficient information on the scope of work necessary to complete debris collection and disposal, along with a basis for estimating a reasonable cost for the contract work to effectively solicit a lump sum or unit price contract.
- For some types of debris, work, time and materials contracts may be the most cost-effective and best suited to the type of work. Applicants should work closely with the state and FEMA when awarding these contracts to ensure that eligibility requirements are met.

Contractors must submit invoices regularly and for no more than 30-day periods.

A "Termination for Convenience" clause allows contract termination at any time for any reason, such as:

- A time limit on the period of performance for the work to be done.
- A subcontract plan including a clear description of the percentage of the work the contractor may subcontract out and a list of subcontractors the contractor plans to use.
- A requirement that the contractor use mechanical equipment to load and reasonably compact debris into the trucks and trailers.
- A requirement that the contractor provide a safe working environment.
- A requirement that all contract amendments and modifications will be in writing.
- A requirement that contractors must obtain adequate payment and performance bonds, and insurance coverage.

Debris Monitoring Contracts

Applicants must monitor all debris removal operations that involve the hiring and utilization of contractors. Applicants must document all eligible debris removal expenses as a condition of receiving PA funding. Applicants may use contractors to monitor their debris removal operations. In addition to the guidance provided above, applicants should consider the following when procuring debris monitoring contracts:

- Debris monitoring contracts must be competitively procured as required by 44 CFR § 13.36, Procurement.
- Debris monitors cannot be employed by or affiliated with the debris removal contractor.
- Debris monitoring contracts are typically time and materials contracts and must contain a not-to-exceed clause, pursuant to 44 CFR § 13.36, Procurement.

- The contract should include a requirement that the contractor provide a safe working environment, including properly constructed monitoring towers.
- Use of a load ticket system to record with specificity (e.g., street address, Global Positioning System (GPS) coordinates) where debris is collected and the amount picked up, hauled, reduced and disposed of.
- Debris monitors should be trained and possess skills adequate to fulfill the duties of the job. Labor rates should be commensurate with the skill level required by the job function. Professional engineers and qualifications are not required to perform monitoring duties.
- The contractor should demonstrate that its staff is familiar with FEMA debris removal eligibility criteria.

Regional Disaster Finance Coordination Program

The Regional Disaster Finance Coordination Program is designed to give local jurisdictions the financial tools needed to help them prepare for the financial implications of disaster recovery. The program also facilitates collaboration and communication between disaster responders and financial managers during periods of relative calm, ahead of any disaster. This staff is overseen by the TDEM regional assistant chiefs. Finance coordinators are employed and stationed throughout the state, reporting to the region's recovery unit chief. Jurisdictions with questions regarding this program in regards to the financial/procurement aspects of debris management are encouraged to contact their regional disaster finance coordinators.

Finance Reporting

During a disaster, TDEM captures and reports daily expenditures in order to meet the federal thresholds for disaster assistance. In this role, TDEM and Texas Emergency Management Council (TEMC) representatives perform the following tasks:

- Collect Disaster Summary Outlines (DSO) from local jurisdictions. Local jurisdictions should include debris estimates in their DSO submissions.
- Collect daily finance reports from TEMC members through WebEOC.
- Review state agency expenditures to determine an initial estimate of the cost of the disaster.
- Compile forms, financial briefings and reports for executive leadership.
- Prepare a trend analysis on expenditure burn rates in order to estimate when the state will reach the federal financial threshold.
- TEMC-R submits a daily finance report through WebEOC to the SOC.

Reimbursement

In order for federal reimbursement to occur, disaster financial-impact thresholds must be met. The first source of expenditure by any state agency in anticipation of, response to, or recovery from a disaster is from funds regularly appropriated to that agency by the legislature. Following established procedures, state agencies may seek financial assistance with extraordinary expenses for disaster response and recovery operations from grant funding. The availability of federal funding sources is contingent upon a federal disaster declaration. For more information on disaster declarations, refer to the Basic Plan. TDEM prepares the documentation for federal disaster cost reimbursement as required.

Objective 3: Debris Management Disaster Response

During disaster response, debris management will emphasize clearing key roads for emergency access by pushing debris to the edge of the right-of-way, rather than restoring roads to pre-disaster conditions. Debris management also includes identifying and removing any obvious debris situations that may pose an immediate threat to the public's lives, health and safety.

Priority Roadway Clearing and Facility Access

TDEM's intent is to activate and employ the state's catastrophic debris management resources to clear identified priority roadways and facilities. Once priority roadways and facilities are cleared, the state's catastrophic debris management resources will be reoriented based on situational requirements and requests from local jurisdictions.

Additionally, TDEM, in coordination with local jurisdictions and other state agencies, will:

- Prioritize and implement emergency clearing of debris from transportation routes to provide access for emergency response personnel, equipment and supplies in areas affected by an emergency or disaster.
- Prioritize and implement the clearing and repair or reconstruction of transportation facilities (i.e., streets, roads, bridges, ports, waterways, airfields) necessary to restore transportation capabilities.
- Prioritize and implement the clearing and restoration of critical public facilities and services, including but not limited to: electricity, potable water, sanitary sewer, storm water systems, natural gas and telephone service.
- Prioritize and perform the clearing and demolition or stabilization of damaged public structures and facilities which pose an immediate hazard or safety risk to the public health.

Search and Rescue Support

Search and rescue operations may be made even more complex by catastrophic quantities of disaster debris. It is critical that strong coordination between debris management and search and rescue operations is established and maintained for the duration of search and rescue activities. Debris clearance must be responsive to search and rescue requirements in order to aid in their efforts.

Debris Monitoring

Monitoring of debris operations is required when hiring the use of contractors. Local jurisdictions who select debris monitors should verify that the debris collected meets the eligibility criteria established by federal funding programs and document the debris collection and removal process by using a load ticket. Monitors will be established at the debris management sites for the purposes of documenting the load and estimating the volume of materials.

The load ticket serves as the basis for payment to the debris removal contractor and must be handled and managed as a legal accounting document. The load ticket documents and certifies the loading location of the debris, its eligibility under FEMA guidelines and its type and quantity of debris. For a sample load ticket, see Attachment B: Sample Monitoring Forms .	

Objective 4: Debris Management Recovery Operations

Debris management operations begin within days following a debris-generating incident. Immediately following a disaster, damage assessment teams will estimate the quantity and type of debris, and assist in prioritizing debris management operations. Debris management operations and utility restoration efforts will be closely coordinated to expedite clearance of utility impacted debris and restoration of services. Debris management operations may last an extended period of time and may involve reassessment of debris quantities, debris management sites, addressing hazardous material/environment issues, and debris separation, collection, storage, reduction, recycling and disposal activities.

Damage Assessments

As soon as possible, all local jurisdictional departments should begin gathering response costs and initial damage estimates. **These figures need not be exact but are necessary to complete the Disaster Summary Outline (DSO)**. The DSO is the first snapshot TDEM receives regarding the extent of damages in a disaster affected area. For debris planning purposes, DSOs are used to help determine the location and extent of damages. Estimates are used to determine the types and quantities of debris and the cost of removal from public property and rights-of-way. Ineligible debris is not included in the estimate and includes debris not generated by the disaster such as vegetative debris from unimproved property, white goods previously designated for disposal, residential and commercial demolition materials not generated by the disaster, sediment, everyday household trash and items such as old tires.

Local jurisdictions, TDEM and federal partners conduct joint Preliminary Damage Assessments (PDA) to validate damages in affected counties, including the amount of disaster related debris. PDAs must be conducted within 30 days of the conclusion of the incident period and should be coordinated with all disaster affected local governments, tribal organizations, school districts, regional authorities, private non-profits and houses of worship.

Local jurisdictions should pre-identify damage locations that the PDA teams will assess and provide a plan for visiting each site. The list of damaged sites should include street addresses or Global Positioning System (GPS) locations, cost estimates for sites or equipment and insurance policies for each. This information should be provided to the PDA team before the assessment begins. Debris impacts will be validated during the PDA and eligible damages will be applied to both the county and state public assistance damage threshold.

Debris Management Sites

Debris management sites are used during debris operations to temporarily stage and process disaster generated debris. This sites pose a multitude of health and safety concerns. These concerns include the unstable nature of the site, the potential of hazardous substances being present and the type of work being performed.

TCEQ has developed a <u>form</u>, in cooperation with FEMA, which jurisdictions can use to request TCEQ approval of temporary debris management sites for debris resulting from a declared state or federal disaster.

Texas Historical Commission (THC) has developed a form, in cooperation with FEMA, which can be submitted to review of effects on historic building and archeological sites. A copy of the form is in Attachment C Texas Historical Commission Disposal Site Evaluation and Registry.

The following criteria are used when selecting a debris management site: ownership, size, location, and environmental and historic concerns. Public lands are to be considered first to reduce the need for a private land lease expense. If no public lands are available, the use of private property leasing agreements shall be reviewed by local jurisdictions. The site must be large enough to accommodate the volume of incoming debris and types of debris to be stored. The site must be able to accommodate heavy trucks and have accessibility that does not impact major roadways. The site will need to comply with local, state and federal environmental requirements. Historic or archeologically sensitive sites shall be avoided and compliance with local and state historic preservations measures is necessary. Typically, these sites receive vegetative, construction and demolition debris. The vegetative debris may be reduced in volume by grinding and burning. Construction and demolition debris is processed for recyclable or recoverable materials and transported to a final disposal location. All these activities require compliance with environmental regulations. TCEQ has developed an authorization process for debris management sites.

TCEQ will inspect the sites on a regular basis to ensure proper handling and disposal of materials. TCEQ provides an inspection checklist and a tracking spreadsheet to document the results of staff field visits. TCEQ will coordinate with the Environmental Protection Agency as the incident requires. TCEQ provides a guide for managing debris from declared disasters.

Private Property Debris Removal

Debris removal from private property will be a rare occurrence and limited ONLY to those situations where there is a clear danger (present/imminent/potential) to life, safety and/or public health. This debris removal must be in the public interest, not merely benefiting an individual or a limited group of individuals within the community. The written request must be provided by the local jurisdiction providing a bases for a public interest determination.

Examples include but are not limited to:

- Dangerously leaning/damaged trees or limbs over public rights-of-way or other public spaces.
- Partially or totally collapsed structures that could endanger the public.
- Debris that poses a clear and present fire danger.

- Debris that negatively impacts critical infrastructure and/or services.
- Hazardous household waste which, if left unaddressed, poses an imminent threat to public health and/or safety.

Debris that does not meet these (or similar) circumstances is the responsibility of individual property owners. Private debris brought to the roadway right-of-way and/or taken to established collection centers, in accordance with published guidelines, will be removed by designated debris clearance teams.

FEMA Recovery Policies 9523.4 and 9523.13 provide guidance regarding federal Public Assistance Grant Program (PAGP) reimbursement for the removal of debris from private property. These policies and other guidance can be found in the <u>Public Assistance Program and Policy Guide</u>.

Additional helpful guidance can be found in <u>Attachment D</u>, <u>Debris Removal from Private Property Special Considerations</u>. Decisions regarding specific private property debris removal issues will be made by the state and local debris managers if the situation cannot be handled by debris monitors in the field.

Trench Burning

One method to remove vegetative debris and clean lumber is the use of trench burning (air curtain incinerator). Trench burning (air curtain incinerator) Title 30 Tex. Admin. Code § 106.496, authorizes the use of air curtain incinerators (ACIs) in the disposal of debris during emergency cleanup operations such as the removal and disposal of debris. For more legal information, refer to Texas Commission on Environmental Quality (TCEQ).

Air Curtain Incinerator

An Air Curtain Incinerator (ACI) is an incinerator that operates by projecting a curtain of air a cross an open chamber or pit in which combustion occurs. Incinerators of this type can be constructed above or below ground and with or without refractory walls and floor.

Trench burning is an operation of an ACI using a trench and air manifold system.

The only debris that can be burned in an ACI includes trees, brush, other vegetative matter and clean lumber. Do not burn wood that has been painted, stained or pressure treated with chemicals and do not store materials stockpiled to be burned closer than 75 feet from the firebox/trench.

ACIs used in the cleanup of approved debris from a declared disaster are exempt from registration requirements. Verbal notification to your local TCEQ regional office prior to burning is highly encouraged. No permit is necessary.

In efforts to reduce the potential of nuisance conditions, each ACI must be at least 300 feet from the nearest property line. If the distance requirement cannot be met, contact the TCEQ regional office.

Portable ACI facilities temporarily located at a site can operate for up to 180 consecutive calendar days or 600 hours, whichever occurs first. However, federal requirements apply after eight weeks of use. If operation of the ACI is necessary for

a longer period of time, the jurisdictions conducting ACI operations must contact their TCEQ regional office to request an extension. Once the ACI is no longer in operation, it must be removed from the site.

Ash Disposal

The ash generated from an ACI can be used in the following ways:

- Buried on-site in an ACI trench, if the deed is recorded and a copy of the document provided as required by 30 TAC §330.7 of this title.
- Sent to a Type I landfill, if the ash is containerized and no hot coals are present.
- Beneficially used, if the use is determined to be acceptable in accordance with §330.8 of this title.

The ash generated from an ACI can be disposed of in a municipal waste landfill. If a trench burner is used the ash can be disposed of in the burn trench in accordance with 106.496. However, a separate trench cannot be created for ash disposal.

Record Requirements

The operation of an ACI should be recorded, including a run time meter, written record or log of the hours of operation, operational or location requirements, and any operating instructions being followed by the operator. Ash from the trench burning which is left in place must be deed recorded.

Wet Debris Management

Wet debris management involves the removal of eligible obstructions, debris and vessels from waterways impacted by an incident. The debris removal boundaries are within the waterway and include the shorelines of the waterway itself. Strict eligibility requirements exist to determine which debris may be removed and from which waterways.

No local jurisdiction should undertake wet debris management independently. Wet debris management involves close and extensive coordination between local jurisdictions, state agencies and federal agencies (to include but not limited to FEMA, U.S. Coast Guard, U.S. Army Corp of Engineers, U.S. Environmental Protection Agency and the National Resources Conservation Service of the U.S. Department of Agriculture).

If any local jurisdiction determines it may need to conduct wet debris removal, the local jurisdiction should coordinate with their TDEM district coordinator and wait to proceed until the proper coordination can be conducted.

Public Assistance Funds

The state and its agencies are eligible applicants of the FEMA Public Assistance (PA) Program and are encouraged to maintain documentation supporting all emergency and permanent work undertaken to restore their facilities to full functioning status post-disaster. Because disaster-related work activities are conducted at many facilities; generating, capturing and compiling all the necessary documentation is

critical to a successful conclusion of all operations and to the reimbursement outcomes. Regardless of where the activity occurs, all documentation must be gathered and compiled into the project management files and organized by project type. For more information visit the FEMA PA program site.

Objective 5: Summary of Responsibilities

Some stakeholders provide personnel and/or equipment, while others offer knowledge and expertise in working with response agencies, the vendor community, commercial organizations or associations that supply or restore services.

The following tables show stakeholder responsibilities organized by phase of emergency management. Stakeholders are listed with the primary agency listed first.

Agency Responsibilities

Primary Agency: Texas Division of Emergency Management

Phase	Responsibilities
Response	Reviews Disaster Summary Outlines and State of Texas Assistance Requests submitted by local jurisdictions to determine debris management needs of the communities affected by the disaster.
	Coordinates the establishment of emergency coordination facilities necessary to effectively manage the disaster or emergency situation.
	Coordinates with local authorities having jurisdictions, other state agencies, FEMA and the governor's office as needed.
	Works with local authority having jurisdiction's public information officer and public information officers from all supporting agencies and organizations to develop an incident-specific public information plan for debris management operations.
	Coordinates the development and release of all information related to debris management.
	Requests federal technical and disaster relief assistance as required.

Texas A&M AgriLife Extension Service

Phase	Responsibilities
Response	Provides support to debris-burning operations by identifying potential burn sites.
Recovery	Liaises with and between other state agencies and local jurisdictions to ensure communication and coordination to facilitate burning operations.

Texas General Land Office

Phase	Responsibilities
Response	Coordinates debris removal from publicly owned beaches and state-owned submerged lands.

Texas Animal Health Commission

Phase	Responsibilities
Response	Coordinates with the United States Department of Agriculture (USDA) regarding the disposition of dead animals.

Texas Commission on Environmental Quality

Phase	Responsibilities
Response	Minimizes environmental impact from disaster debris by providing technical expertise to local authority having jurisdiction and all involved entities regarding proper debris reduction, staging, and disposal methods in accordance with established laws and regulations.
	Expedites required environmental permitting processes (to the extent possible) to accommodate post-incident debris management operations that pose a threat to public health and/or safety.
	Coordinates and approves disaster management site selections, closure, and environmental input.
	Monitors debris-burning sites.
	Issues permits and waivers in support of vegetative debrisburning operations.

Texas Department of Transportation

Phase	Responsibilities
Response	Coordinates emergency road-clearing activities immediately following an incident.
	Coordinates "first pass" debris removal from all state and federal roads.
	Provides resources and technical expertise to support debris management operations.

	Establishes and provides oversight of debris-burning operations in support of local authority having jurisdiction.
Recovery	Conducts statewide initial damage assessments on federal roads, state roads and bridges.
	Serves as lead agency for contractors conducting grinding operations.

Texas A&M Engineering Extension Service

Phase	Responsibilities
Response	Establishes and provides oversight of debris burning operations in support of local authority having jurisdiction.

Texas A&M Forest Service

Phase	Responsibilities
Response	Coordinates technical assistance and guidance on burning operations.
	Establishes and provides oversight of debris-burning operations in support of local authority having jurisdiction.

Texas Historical Commission

Phase	Responsibilities
Response	Coordinates post-event disaster management site application to ensure compliance with Section 106 of the National Historic Preservation Act as administered through Title 36 of the Code of Federal Regulations and compliance with the Antiquities Code of Texas and its implementing regulations.

Texas Parks and Wildlife Department

Phase	Responsibilities
Recovery	Conducts statewide initial damage assessments on park system roadways and facilities.

Authority

The laws, rules and/or policies that provide general authority for the missions and activities described in the Catastrophic Debris Annex can be found in the Basic Plan. Additional authorities specific to this annex, if any, are listed below.

Source	Relevance	Link
Texas Government Code Chapter 418	Provides authority and mechanisms to clarify and strengthen key roles, as well as authorize and provide for cooperation and coordination of an emergency management system embodying all aspects of pre-disaster preparedness and post-disaster response.	http://www.statu tes.legis.state.tx. us/Docs/GV/htm /GV.418.htm
Texas Government Code Section 418.050	Provides guidelines for reentry of areas previously evacuated because of a disaster or threat of disaster.	http://www.statu tes.legis.state.tx. us/Docs/GV/htm /GV.418.htm#41 8.050
Texas Government Code Section 418.11	Describes the Texas Statewide Mutual Aid System.	http://www.statu tes.legis.state.tx. us/Docs/GV/htm /GV.418.htm#41 8.018

Record of Changes

The TDEM Chief/TEMC Chair authorizes and issues changes to this document until such time as it is superseded. This document and all attachments are living documents. TEMC members are responsible for participating in plan reviews and are required to provide information concerning capability changes that impact their emergency management responsibilities. TDEM coordinates the plan-updating process and maintains the plan after receiving feedback and updates from partner agencies.

Lead and support agencies must ensure all records necessary for emergency management operations are available and that duplicate records are held at alternate locations.

Use the table below to record the following information:

- Change number, in sequence, beginning with 1
- Date change was made to the document
- Description of change and rationale if applicable
- Initials of person who made the change

Number	Date	Description	Initials

Attachment A: Debris Categories and Forecasting

The quantity and type of debris generated is a function of the type of disaster, its location and its magnitude, duration and intensity. The quantity and type of debris generated, its location and the size of the area over which it is dispersed directly impacts the collection and disposal methods used to address the debris problem, associated costs incurred and the speed with which the problem can be addressed.

The following is a list of the disasters in Texas that are most likely to generate a significant quantity of debris and the type of debris that is likely to be generated.

Major Categories of Disaster Debris in Texas

	Construction and Demolition (C&D)	Vegetative Materials	Ash and Charred Wood			
Flood	Х	Х		Х	Х	X
Hurricane	x	Х		Х	X	X
Ice Storm		Х				х
Plant or Animal Disease		х				х
Tornado Severe Weather	x	X		х	х	х
Wildfire	Х		Х		Х	
Human- Caused Incidents	Х	Х	Х	Х	Х	х

Debris Characteristics of Texas Disasters

The following tables identify the characteristics of the debris associated with the primary debris-generating disasters in Texas. Many of these debris types will be generated by more than one type of disaster. The magnitude and mix of debris will vary considerably between disasters.

Construction and Demolition (C&D)	
Debris Includes:	Building construction materials (wood, drywall, shingles, flooring, etc.); building contents and personal property (furnishings, clothing, appliances, personal items, vehicles, tires, etc.); utility poles, wires and equipment (telephone, electric, cable TV, etc.).
Generated From:	Can be present in many disasters. In Texas, C&D debris occurs primarily with tornadoes, severe storms, floods, wildfires and ice storms. It may also occur with human – caused incidents that result in physical damage (e.g. bombings).
Considerations:	C&D debris must be evaluated to consider the potential presence of asbestos and other potentially hazardous materials. If materials are to be recycled, certain materials (e.g., metals, wood, concrete, tires, etc.) can be separated first from the general C&D debris.

Vegetative Materials	
Debris Includes:	Trees, limbs, brush, leaves, etc.
Generated From:	Occurs primarily with tornadoes, severe storms, floods, ice storms, widespread plant disease outbreaks and widespread insect infestations.
Considerations:	Debris within streets must be cleared quickly to allow emergency vehicle access. Much of the clean waste can be re-used through grinding, chipping, shredding, composting, etc.

	White Goods
Debris Includes:	Window frames, sheet metal siding and roofing, cast iron tubs/sinks, railings, mobile home frames, metal parts from cars, metal furnishings (e.g., chairs, tables, file cabinets, etc.), appliances (e.g., washers, dryers, refrigerators, stoves, etc.—also known as "white metals" or "white goods"), bed frames, metal pipes, personal belongings that are metal (e.g., tools, picture frames, etc.).

White Goods	
Generated From:	Occurs primarily with tornadoes, severe storms, floods, wildfires, and human-caused incidents that result in physical damage.
Considerations:	Some metals might be suitable for recycling and should be separated first. Care must be exercised to ensure that fluorocarbon refrigerants are removed from cooling units of refrigerators and freezers.

	Animal Carcasses
Debris Includes:	Farm animals, wild animals (wildlife), domestic animals.
Generated From:	Occurs primarily with tornadoes, severe storms, floods and widespread animal disease outbreaks.
Considerations:	Depending on the circumstances, it may be necessary to work with state/local health officials to develop advisories to protect the health and safety of the public.

Но	ousehold Hazardous Waste (HHW)
Debris Includes:	Paints, cleaners, oils, batteries, pesticides, propane tanks, etc.
Generated From:	Occurs primarily with tornadoes, severe storms, floods, wildfires and human-caused incidents that result in physical damage.
Considerations:	HHW items contain potentially hazardous ingredients that require special care when they are collected, stored and disposed of. Improper disposal of these wastes can pollute the environment and pose a threat to human health. HHW should be separated at the source and managed separately to avoid contaminating the non-hazardous debris. HHW should be collected using a separate collection process, if possible. Certain types of HHW may have to be hauled to a licensed hazardous waste treatment, storage, or disposal facility in accordance with applicable TCEQ regulations.

Ir	Industrial Hazardous Waste (IHW)		
Debris Includes:	Industrial chemicals, paints, solvents, cleaners, oils, fluids, batteries, pesticides, etc.		
Generated From:	Occurs primarily with tornadoes, severe storms, floods, wildfires and human-caused incidents that result in physical damage.		
Considerations:	See HHW note above. Most IHW must be hauled to a licensed hazardous waste treatment, storage, or disposal facility in accordance with applicable TCEQ regulations. Certain types of IHW can be extremely hazardous to public health and may pose a danger to public safety as well.		

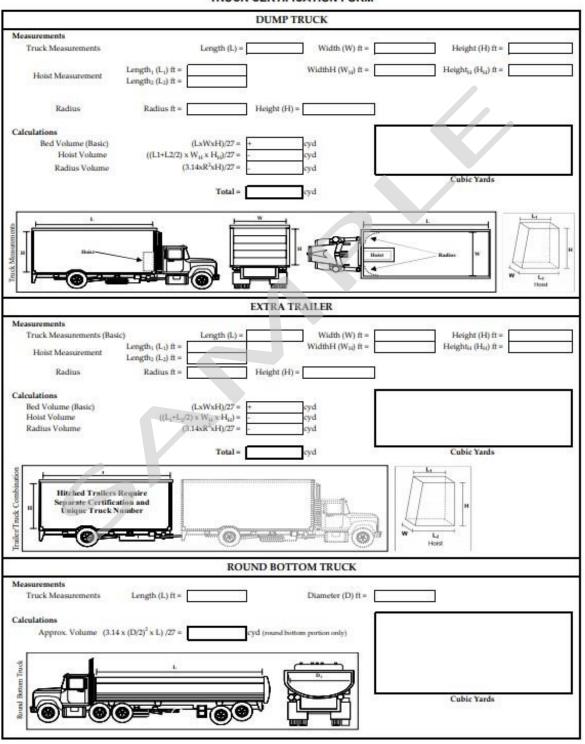
Attachment B: Sample Monitoring Forms

Load Ticket		Ticket	Ticket No. 0012345		
Municipality (Applica	funicipality (Applicant)		me Contractor		
		Su	b-Contractor		
Truck No	Tru	ick Inform	ation Capacity		
Truck Driver (print le	egibly)	8			
	Load	ding Inform	nation		
Loading	Time	Date		spector/Monitor	
(5.5)	GPS Coordin	100000	ecimal Degrees	(N xx.xxxxxx)	
N	Hele	W			
Debris Classification		eding Info		or Actual Weight	
Use Vegetation C&D White Goods HHW Other* See Be	low		7		
70	Time	Date	Ins	spector/Monitor	
Unloading					
DMS Name and Loc	ation				
*Other Debris Explar	nation		Original: Copy 1: Copy 2:	Applicant	

TRUCK CERTIFICATION FORM

	General Info	ormation	
Applicant:		Monitor:	
Contractor;		Date:	
Measurement Location:		County:	
Declaration Number:			
	Truck Info	rmation	
Make	Year	Color	License
Truck Measurements			
Performed By:		Date:	
Volume Calculated By:		Date:	
Both Checked by:		Date:	-
REACTARD PROPERTY STATES TO STATES			
	Driver Info	rmation	
Name:			
Address:			
Phone Number:			
	Owner Info	rmation	(0)
Name:	0111101		
Address:			(3)
Phone Number:			-
Phone Number:	-	-	
		1	
Truck Identification	70	-	Truck Capacity
		- 50	
	Phot	9	
	(See reverse for calcul		

TRUCK CERTIFICATION FORM



Attachment C: Texas Historical Commission Disposal Site Evaluation and Registry

TEXAS HISTORICAL COMMISSION

DISPOSAL SITE EVALUATION AND REGISTRY

FEMA-4332-DR-TX

Applicants are responsible to fill out the top part of this form in its entirety and *email* this form and a topographical map identifying the location to the Texas Historical Commission (THC) for certification and receive THC's response *before* debris work begins. Attach the signed form to the project worksheet.

☐ Staging/Stockpiling S	RATION AS A (check all that ap ite ☐ Emergency Burial Site		Site Wood Chipping Site
APPLICANT:			
	City:		Zip Code:
Telephone:	Cell:	Fax:	County:
_	AND LAT/LONG OF EMERGE		
Township:	Range: Se	ection:	Quarter-section(s):
	Longitude:		
	r Town must control the site th		rship or a legal access agreement):
	d to access a staging or burn site,		o information:
		•	Longitude
shall notify FEMA and deposit until the applica mains are present, comp secure all the findings, 8882 and TDEM. TDE mains are Native American Applicant signature certifications	FEMA will consult with THC. In the is notified by TDEM. In the obliance with the Texas Antiquitie restrict access to the area and call M shall notify FEMA and FEMA can. Work cannot resume at or notified they read the above clause	Work may not resure event that an unmarks Code is required. I local law enforcem A will consult with layer the site until the analysis.	Date
Email to: Bill Martin at	bill.martin@thc.state.tx.us befor	e beginning debris re	emoval work.
You may reach him at (512) 463-5867 with questions.		
THC certifies that the al	oove referenced site:		
Will not adver	sely affect a historic property		
Is located on a	n archeological site and an alterr	nate area must be con	sidered
Texas Historical Commi	ssion Official		Date
Aft	er completing this form, please	e return it to the Cit	y or Town listed above.

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Attachment D: Debris Removal from Private Property Special Considerations

Debris removal from private property is the responsibility of the individual property owner, aided by insurance settlements and assistance from volunteer agencies. The city normally has responsibility for picking up and disposing of debris from private property placed on the curb or street side. Energy and utility companies will clear trees and other yard debris to reach and stabilize the power distribution network.

Debris removal from private property, including demolishing condemned structures, is generally the responsibility of the property owner. The cost of debris removal and disposal may be wholly or partly covered by insurance.

If debris on private property is so widespread that public health, safety or the economic recovery of the community is threatened, the local jurisdiction, at the direction of the senior executive officer, may consider debris removal, including building demolition on private property.

Homeowners and their insurance companies are primarily responsible for the removal of damaged property. The property may be transported to a landfill and/or it may be placed on the curb for city pickup.

Most insurance policies have specific coverage for debris removal and demolition of heavily damaged structures. FEMA assistance is not available to reimburse private property owners for the cost of removing debris from their property; however, an eligible local or state government may pick up and dispose of disaster-related debris placed at the curb by those private property owners. Generally, the extent and duration of this type of work is carefully controlled. FEMA, state and local officials will agree on a time frame during which pick-up from the curb will be eligible for Public Assistance funding.

If the debris on private business property is so widespread that public health, safety or the economic recovery of the community is threatened, the actual removal of debris from the private property may be eligible. In these situations, the work normally must be done or be contracted for by an eligible applicant.

Debris Eligible for Public Assistance Funds

Debris that may be eligible for clearance, removal and disposal includes trees, sand, gravel, building wreckage, vehicles and personal property. The debris must be a direct result of the declared event, must occur within the designated disaster area and must be the responsibility of the applicant at the time of the disaster. Debris removal may be eligible when it:

- Eliminates immediate threats to lives, public health and safety.
- Eliminates immediate threats of significant damage to improved public or private property.
- Ensures economic recovery of the affected areas to the benefit of the community-at-large.

Private Property Demolition

Communities in disaster-prone areas should have copies of ordinances necessary to condemn privately owned structures as part of their local emergency management plan. Demolition of private property invariable presents significant coordination problems. FEMA provides special checklists to guide the process.

Demolishing or securing remaining structures that threaten the health and safety of adjacent businesses or residents should be the responsibility of the owner or local government; however, experience has shown that unsafe structures will remain because of lack of insurance, absentee landlords or understaffed and underequipped local governments. Consequently, ensuring the demolition of these structures may become the responsibility of the local designated debris manager and staff, which requires complete cooperation of numerous local and state government officials and my require resources from any or all of the following: tax office, local law and/or code enforcement agencies, state historical preservation office, environmental contractor qualified to remove asbestos and lead-based paint, field teams to photograph and document the sites before and after demolition.

Debris Removal from Private Property

Disaster-related debris may be removed from private property 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 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 applicant. That time period will be established by FEMA in coordination with the state. (The cost of picking up reconstruction debris and normal garbage/trash pick-up is not eligible for FEMA reimbursement).

Debris removal from private property will require the complete cooperation of numerous local and state government officials and may require resources from any or all of the following: real estate offices, local law and/or code enforcement agencies, State historic preservation office, qualified contractors to remove household hazardous waste, asbestos and lead-based paint, and field teams to photograph the sites before and after demolition.

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Prepared by the Texas Division of Emergency Management, Preparedness Section. For more information, visit the Texas Emergency Management Preparedness website at https://www.tdem.texas.gov .
Texas Catastrophic Debris Management Annex