

**THE BOARD OF COUNTY COMMISSIONERS
OF THE COUNTY OF DOUGLAS, COLORADO**

**RESOLUTION APPROVING THE ADOPTION OF THE COUNTY ALL-HAZARDS
DEBRIS MANAGEMENT PLAN.**

WHEREAS, the board of County Commissioners of the County of Douglas (the "County") adopted Board Policy #1, which identified basic foundations to County government services, including Personal and Public Safety, Multi-modal Transportation, Economic Foundations, Natural Resources, and Community Services, but all of which could be severely degraded by a disaster; and

WHEREAS, Pursuant to Board Policy #3.7.1 regarding Emergency Preparedness, the County Manager shall "Have in place adequate plans to prevent and/or respond to emergencies and/or disasters;" and

WHEREAS, the Board and the Sheriff have determined the need to develop a County All-Hazards Debris Management Plan so that the County will recover and restore vital services to its citizens and businesses as quickly as is possible; and

WHEREAS, the development of the County All-Hazards Debris Management Plan required participation from various County offices, departments, and divisions along with Partnership of Douglas County entities as well as other local, state, and national entities.

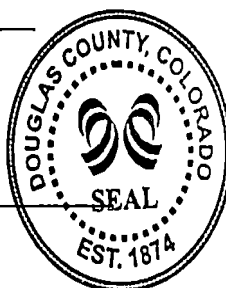
BE IT RESOLVED, BY THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF DOUGLAS, STATE OF COLORADO, that the County All-Hazards Debris Management Plan is adopted for use during and after disasters to ensure that vital County services are restored as quickly and effectively as possible for our citizens following a disaster.

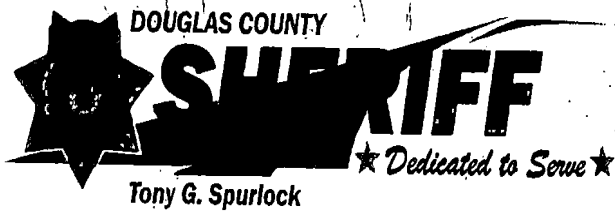
PASSED AND ADOPTED this 4th day of December 2018, in Castle Rock, Douglas County, Colorado.

**THE BOARD OF COUNTY COMMISSIONERS
OF THE COUNTY OF DOUGLAS, COLORADO**

BY: Lora L. Thomas
LORA L. THOMAS, Chair

ATTEST: Emily Wrenn
EMILY WRENN, Clerk to the Board





Commissioners
Business Meeting
Agenda Item

AGENDA ITEM:

MEETING DATE: December 4, 2018


**STAFF PERSON
RESPONSIBLE:** Tim Johnson, Director of Emergency Management 

DESCRIPTION: Douglas County All-Hazards Debris Management Plan

SUMMARY: The need for Douglas County to develop an All-Hazards Debris Management Plan was identified during the Recovery Plan development and Hazard Mitigation Plan update. The purpose of the Plan is to provide for coordination of efforts in the clean-up, removal, and disposal of debris following a major emergency or disaster. The plan contains guidance regarding organization, responsibilities, documentation, contracting, activation of the County plan, temporary debris storage sites, informational fact sheets, and templates needed during an emergency incident to enhance the County's ability to receive reimbursement from all possible funding sources.

The development team for the All-Hazards Debris Management Plan included representatives from local municipalities, Tri-County Health Department, State of Colorado and Douglas County departments and divisions.

**BOARD ACTION
RECOMMENDED:** Adoption

**APPROVED FOR
AGENDA:** Tony Spurlock, Sheriff 

**REVIEWED FOR
FISCAL CONTENT:** Andrew Copland, Director of Finance

**REVIEWED BY
THE COUNTY
MANAGER:** Douglas DeBord, County Manager

Douglas County
All-Hazards Debris Management Plan

Adopted by the Board of County Commissioners

December 4, 2018

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Appendix B	Public Information Sample Documents
Appendix C	Samples of Checklists, Forms and Documents
Appendix D	Debris Clearing, Removal and Disposal Guidelines
Appendix E	Douglas County Emergency and Disaster Finance Policy
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Schedule for Review

The Douglas County Public Works Operations Department (PW Operations) will review and revise this plan as needed when areas of improvement are identified following major events or exercises.

Record of Changes

When changes are made to this plan, the following procedures will be followed:

- Changes will be issued by PW Operations and transmitted to agencies, personnel, and other designees specified by PW Operations.

When a specific change is made, an entry will be made on the following log.

Change Number	Date Entered	Pages or Section Changes	Entered by

DOUGLAS COUNTY ALL-HAZARDS DEBRIS MANAGEMENT PLAN

I. Authority

This Plan is developed, promulgated, and maintained under the following state and federal statutes and regulations, and local plans:

- Public Law 93-288 as amended by Public Law 100-107, the Stafford Disaster Relief and Emergency Assistance Act and in this plan as “the Stafford Act.”
- Public Law 81-920, Federal Civil Defense Act of 1950, as amended.
- CFR, Title 44, Part 200 et seq.
- Douglas County Emergency Operations Plan
- Douglas County Emergency Recovery Plan
- Douglas County Local Hazard Mitigation Plan

II. Overview

A. Background

Douglas County presents opportunities for several potential natural and manmade disasters or emergencies. The Douglas County Office of Emergency Management (DCOEM) is responsible for planning and emergency preparedness, response and recovery, and mitigation activities and working in close collaboration with all departments and divisions within Douglas County Government.

Douglas County OEM subscribes to the guidance in the Emergency Operations Plan (EOP) developed through coordinated efforts of all responsible agencies. The EOP establishes responsibilities for each county government agency and sets forth lines of authority and organizational relationships that are essential for the protection of the public. The EOP also establishes the concepts and policies under which all elements of the county government will operate during disasters and emergencies by providing for the integration of those resources.

While the EOP is a job product of DCOEM, the Recovery Plan and the All-Hazards Debris Management Plan are job products of Facilities, Fleet and Emergency Support Services and Public Works Operations, respectively. These job products are based on guidance provided by Douglas County department heads and procedures outlined in the EOP. This plan focuses on the types of activities that are likely to be required during a disruption or emergency, without regard to the type or cause of that disruption or emergency.

B. Purpose

This Plan has been developed to provide the framework for county government and other entities to clear and remove debris generated during a public emergency within the jurisdictional limits of Douglas County. This plan unifies the efforts of public and private organizations for a comprehensive and effective approach to:

- Provide organizational structure, guidance, and standardized guidelines for the clearance, removal, and disposal of debris caused by a major debris-generating event.
- Establish the most efficient and cost-effective methods to resolve disaster debris removal and disposal issues.
- Initiate and coordinate private sector debris removal and disposal contracts to maximize cleanup efficiencies when deemed appropriate by Douglas County officials.
- Expedite debris removal and disposal efforts that provide visible signs of recovery designed to mitigate the threat to the health, safety, and welfare of citizens.
- Coordinate partnering relationships through communications and pre-planning with local, state, and federal agencies that have debris management responsibilities.
- Communicate with and guide citizen actions for clearing private properties.

PRIORITY. This plan establishes an overall priority for response, consistent with the county's EOP. The post-disaster debris priorities will follow the county's EOP priorities for life safety for people, protection of property (which includes companion, service and large domestic animals); and protection of the environment. In addition, debris management has the following priorities.

- Clear critical roads, facilities, and infrastructure
- Open debris management sites (DMSs) for debris storage
- Address legal, environmental, and health issues
- Document damage and costs
- Normalize operations for routine and long-term removal, recycle, and disposal activities

C. General Approach

Douglas County is vulnerable to numerous natural and manmade hazards, including severe weather and hazardous materials spills as defined in the Douglas County Local Hazard Mitigation Plan. Wildland fire, blizzard, severe weather, and flooding pose the highest natural threats to the County. Critical government and private facilities are potential targets for terrorist attack. The County can manage many disaster situations with internal resources. However, there are potential debris-generating events that may overwhelm the available assets and capabilities.

This plan establishes the framework within which the county will respond and coordinate the removal and disposal of debris generated by potential natural and manmade disasters. This plan will also address the potential role that state and federal agencies and other groups will take in a debris operation.

This plan defines the roles and responsibilities of local emergency managers with respect to debris planning prior to an event and actions following a major debris-generating event.

D. Planning Basis and Assumptions

Natural disasters such as wildland fire, blizzard, severe weather, and flooding precipitate a variety of debris that includes, but is not limited to, trees and other vegetative organic matter, construction materials, appliances, personal property, mud, and sediment. Man-made disasters such as terrorist attacks may result in a large number of casualties and heavy damage to buildings and basic infrastructure. Crime scene constraints may hinder normal debris management operations, and contaminated debris may require special handling. These factors will necessitate close coordination with local, state and federal law enforcement, health, and environmental officials.

This plan takes an all-hazards approach to identifying and responding to the following hazards that may pose a threat to Douglas County:

- Natural Hazards – Wildland fires, blizzards, severe weather, flooding, ice storms, tornadoes, hail, or earthquakes
- Human-caused Events and Hazards – Wildland and urban fires, special events, civil disorder, or transportation accidents
- Terrorist Incidents – bomb threats or attacks.
- Incidents including chemical, biological, radiological, nuclear, and/or explosives (CBRNE)

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed will have a direct impact on the type of removal and disposal methods utilized, the associated costs, and the speed with which the problem can be addressed. Further, the quantity and type of debris generated from any particular disaster will be a result of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

For planning purposes and for pre-positioning response assets, this plan assumes that the magnitude of the event may exceed the capabilities of Douglas County.

The fact that this plan is based on an event that may exceed Douglas County's capabilities in no way diminishes the value of the plan for use in response to other types and categories of events. This plan establishes a general framework that can, with minor modifications, be used in any debris-generating event.

This plan addresses the clearing, removal, and disposal of debris generated by the above hazards based on the following assumptions:

- A major natural or man-made disaster that requires the removal of debris from public lands and waters could occur at any time.
- The amount of debris resulting from a major natural or man-made disaster will exceed Douglas County's in-house removal and disposal capabilities.
- Douglas County will contract for additional resources to assist in the debris removal, reduction, and disposal processes.
- For the purpose of preparedness, Douglas County has pre-qualified independent

contractors who are able to address the removal needs for a large debris generating event. These contractors were selected through the standard Douglas County contracting/procurement procedures and in accordance with the FEMA Debris Removal Applicant's Contracting Checklist (see Appendix A).

- State and possible federal assistance may be requested to supplement debris removal capabilities in coordination with the Debris Management Team.

E. State/Federal Assistance

If the emergency is of sufficient magnitude and all county resources are expended, the Douglas County EOC will contact the Colorado Division of Homeland Security and Emergency Management (CDHSEM) to request additional resources or assistance.

The Board of County Commissioners (BOCC) Chair may declare a disaster, and request assistance through the Governor's office. The Governor can request a Presidential Declaration of a major disaster if conditions so warrant. Such a request will be based on a damage assessment and will indicate the degree of commitment of local and state resources in attempting to cope with the situation.

III. Debris Management Organization and Staff Responsibilities

A. Debris Response and Recovery Organization and Responsibilities

This section of the plan provides a listing of primary debris-related responsibilities for directors and managers, as well as debris-specific assignments for tasks and issues that normally arise during debris operations.

1. Debris Manager

The Director of Public Works Operations or his/her designee will assume the role of the County Debris Manager. His/her responsibilities include, but are not limited to, the following with respect to all debris management issues:

- Overall control of the Debris Management Center (DMC). The DMC is organized to provide a central location for the coordination and control of all debris management requirements.
- The Debris Manager will activate the DMC and fully implement the debris plan upon notification by the Douglas County OEM. This will likely occur during Type I and Type II incidents.
- Manage any debris-removal operations including any contractors.

Type IV Incident

Involves an event likely to be within the capabilities of local government. Typical daily activities continue while the event is monitored. Notification is limited to those agencies that have normal day-to-day emergency responsibilities or regulatory requirements. EOC personnel may monitor the incident and respond to resource requirements, as needed.

Event Type	Localized
Total Expected CYs	Less than 5,000 CYs
Number of DMS	0
Requested Resources	Internal, County Owned Resources
Number of Hauling Equipment	5 ea., 10-24 CY Trucks
Estimated Project Timeline	20 Days

Type III Incident

Involves an event that has the potential to develop into a major emergency or disaster and will likely require the assistance of numerous county agencies as well as state resources. A limited staff may be in place in the EOC with county EM personnel and those agencies essential to the response. Twenty-four-hour staffing may be required. Daily activities are altered to accommodate the situation. All applicable state agencies are alerted.

Event Type	County-wide
Total Expected CYs	5,000-15,000 CYs
Number of DMS	1, Possibly
Requested Resources	Internal, County Owned Resources
Number of Hauling Equipment	10-15 ea., 10-24 CY Trucks
Estimated Project Timeline	20 Days

Type II Incident

Involves an event which has become, or is becoming, a major emergency or disaster and requires significant county and state response (local government capabilities clearly exceeded). The direction and control, primary resources, mass care, and environmental and natural resources groups are at least partially staffed on a 24-hour basis in the EOC. Support agencies are alerted, and most county EM personnel are assigned to emergency/disaster functions.

Event Type	County-wide, significant
Total Expected CYs	15,000-30,000 CYs
Number of DMS	1, Possibly
Requested Resources	Local Contractors
Number of Hauling Equipment	20 ea., 10-24 CY Trucks
Estimated Project Timeline	20-30 Days

Type I Incident

Involves a declared disaster, which requires an extensive county and state response where the state and local governments are clearly overwhelmed. The Douglas County EOC is fully staffed for 24-hour operations by all of the primary agencies. The state requests

implementation of the Federal Response Plan and the presence of the FEMA Region 8 State Liaison and a FEMA Disaster Response Team (DRT).

Event Type	County-wide, catastrophic
Total Expected CYs	Greater than 30,000 CYs
Number of DMS	1 – 3, depending on quantity and dispersion
Requested Resources	Any Available
Number of Hauling Equipment	10-20, 10-30 CY trucks
Estimated Project Timeline	20-30 Days

Responsibilities of the DMC in a Type I incident may include:

- Receive regular updates from the County Debris Coordinators regarding cleanup progress and any problems encountered or expected.
- Identify agency staff members for debris management monitoring duties (Roving, Load Site, and Disposal Site Monitors).
- Communicate timely information to the County Manager, BOCC, and the County EOC staff regarding the status of the debris clearing, removal, and disposal operations.
- Assure that the county is represented at all meetings with other government and private agencies involved with the debris cleanup operation.
- Coordinate with appropriate local, state, and federal agencies, including FEMA, US Army Corps of Engineers (USACE), and others as appropriate.
- Notify appropriate staff as to where and when they will report for duty. This will be incumbent upon each county department to activate and implement their emergency notification system.

2. Debris Coordinators

The Debris Manager will be supported by debris coordinators made up of personnel from Douglas County Public Works, Special Districts, the County Parks and Trails Division (“Parks”), and the County Division of Open Space and Natural Resources (“Open Space”). These coordinators will constitute the daily operating element of the DMC.

- The Debris Coordinators are responsible for daily operational control of the DMC staff. They will receive current information on the severity of the disaster from the EOC. All requests for debris removal or disposal from the emergency response staff will go through the EOC to the Debris Coordinators. Requests for debris removal from public facilities and roadways will be reviewed and approved by the Debris Manager before being carried out.
- The Debris Coordinators will appraise the extent of damage and resulting debris and issue directives to execute the tasking as defined by their department’s Standard Operating Procedures.

- The Debris Coordinators will keep the Debris Manager and DMC staff informed on all ongoing debris management operations through, at a minimum, daily meetings and/or reports.
- The Debris Coordinators will maintain a daily journal/Form 214 and file on all debris-related documents and issues.
- The Debris Coordinators will obtain all necessary regulatory permits for collection, reduction, temporary storage, and final disposal of debris.

3. Debris Management Center Staff

The DMC is organized to provide a central location for the coordination and control of all debris management requirements.

Specific DMC staff actions will include the following:

- Making recommendations for Douglas County force account and contractor work assignments and priorities based on the county's Debris Control Zones, which are also the Douglas County Snow Removal Zones. The current maps of these zones can be requested directly from the Douglas County Public Works Operations Department.
- Reporting on debris removal and disposal progress and preparing status briefings.
- Providing input to the EOC PIO on debris removal and disposal activities.
- Coordinating with the state on debris issues affecting adjacent counties.
- Coordinating county debris removal and disposal operations with environmental regulators from the county and state.
- Coordinating with state and federal agencies as required in the event of a major natural or manmade debris generating disaster that exceeds the county's capabilities.

4. County Public Information Officer (PIO)

The role of public information after an incident is crucial. If residents and businesses lack reliable information during this time, it can lead to frustration. It is imperative that the County go beyond minimal efforts to keep the public aware and informed. It will therefore include provision of timely, reliable, and regular information via multiple media channels (including print, broadcast, news/social media, community organizations and networks, direct outreach, etc.). All efforts will be made to keep residents and businesses informed of what they can expect and where/how they can access resources and information relating to their debris disposal (See Appendix B).

The County Public Information Officer (PIO) located in the County Public Affairs Department serves as the official spokesperson for County efforts surrounding debris management and disposal. The County PIO is responsible for responding to all media and public inquiries. This includes the identification of alternate methods and alternate formats for communication in the event traditional methods are insufficient because of utility outages or the communicated needs of people with functional needs and/or disabilities.

The County PIO is responsible for the development of a public communications and messaging plan in the early stages of the debris management effort.

The County PIO coordinates his/her activities with the DCSO PIO Team and external PIOs. For large incidents that require coordination with city, state and federal agencies, the PIO will establish a Joint Information Center (JIC) and will lead its operations.

Public information channels must be quickly established to receive incoming questions, referrals, etc. via news/social media, hotlines, or in-person visits. Communication with residents and businesses that may have been displaced within or outside the county will also be addressed.

The County PIO should have pre-established relationships with media and community organizations. Additional support staff may be assigned from the County or affected cities as appropriate.

B. Debris Response and Recovery Primary and Support Agencies

One of the primary functions of this plan is to clearly delineate a basic organization and assign specific responsibilities. During debris operations, many issues will arise that are not specifically mentioned in this plan. However, responsibilities are sufficiently defined so that unexpected issues can be assigned and resolved efficiently.

Specific responsibilities of the various primary and supporting agencies are shown in the sections that follow:

1. County Public Works Operations

Douglas County Public Works Operations responsibilities include, but are not limited to, the following with respect to any and all debris management issues:

- Designate a Debris Manager to oversee debris clearance and removal operations in the County.
- Provide a Debris Coordinator or coordinators to the Debris Management Center (DMC), referenced on page 16, to coordinate all County debris assignments.
- Provide personnel and equipment to assist in clearing County roadways and waterways.
- Provide personnel and equipment to operate and staff the Debris Contractor Oversight Team (DCOT), referenced on page 20, element of the DMC, including communications equipment, transportation, etc.
- Provide personnel and equipment to remove and dispose of debris.
- Ensure the DMC is provided all needed administrative staff and equipment support, including administrative support personnel, computers, desks, chairs, etc.

2. County Parks and Trails Division

The Douglas County Parks and Trails Division responsibilities include, but are not limited to, the following with respect to all debris management activities:

- Provide County Parks and Trails Division Debris Coordinators to the DMC staff to coordinate all park and open space debris assignments.
- Provide personnel and equipment to assist in clearing major evacuation routes and access to critical facilities (Phase I).
- Provide personnel and equipment to assist in the removal and disposal of debris (Phase II) as directed by the Debris Manager through the County Parks and Trails Division Debris Coordinators.
- Provide specialized equipment and trained operators to assist in the clearing and removal of woody vegetation from along critical rights-of-way.
- Ensure that debris removal from parks and recreational facilities is coordinated through and approved by the Debris Manager through the County Parks and Trails Division Debris Coordinators.
- Ensure that the County Parks and Trails Debris Coordinators are provided all needed logistical support, including cell phones, transportation, etc.
- Ensure that the County Parks and Trails Division Debris Coordinators keep the Debris Manager informed of cleanup progress and any problems encountered or expected.
- Assist in debris management site investigations.
- Coordinate with the Debris Manager for the removal, storage, burning, and disposal of debris at debris collection/management sites.

3. County Department of Open Space & Natural Resources

The Douglas County Department of Open Space & Natural Resources responsibilities include, but are not limited to, the following with respect to all debris management activities:

- Provide County Department of Open Space & Natural Resources Debris Coordinators to the DMC staff to coordinate all open space debris assignments.
- Ensure that debris removal from open space is coordinated through and approved by the Debris Manager through the County Department of Open Space & Natural Resources Debris Coordinators.
- Ensure that the County Department of Open Space & Natural Resources Debris Coordinators are provided all needed logistical support, including cell phones, transportation, etc.
- Ensure that the County Department of Open Space & Natural Resources Debris

Coordinators keep the Debris Manager informed of cleanup progress and any problems encountered or expected.

- Assist in debris management site investigations.

4. County GIS

- Provide digital map files of all identified parks or open space properties greater than 10 acres.

5. Fire and Emergency Medical Services (Coordinated with other local agencies as needed)

- Respond to fire and other emergencies at debris management sites.
- Respond to requests to investigate and handle hazardous materials incidents.
- Approve debris management burn sites in accordance with appropriate local requirements to ensure safe burning.
- Issue bans on open burning based upon assessment of local conditions and ensure dissemination of information to the public.
- Supervise burn sites in accordance with all appropriate local requirements to ensure safe burning; subject to amendments by the health department and/or fire marshal.
- Participate, as necessary, with Rapid Needs Assessments and Windshield Surveys.

6. Sheriff's Office

- Provide security at sites and traffic control as needed during debris management and removal emergencies and incidents.
- Assist in monitoring debris management sites to ensure compliance with local traffic regulations.
- Assist in investigating illegal dumping activities by the public.
- Participate, as necessary, with Rapid Needs Assessments and Windshield Surveys.

7. Tri-County Health Department

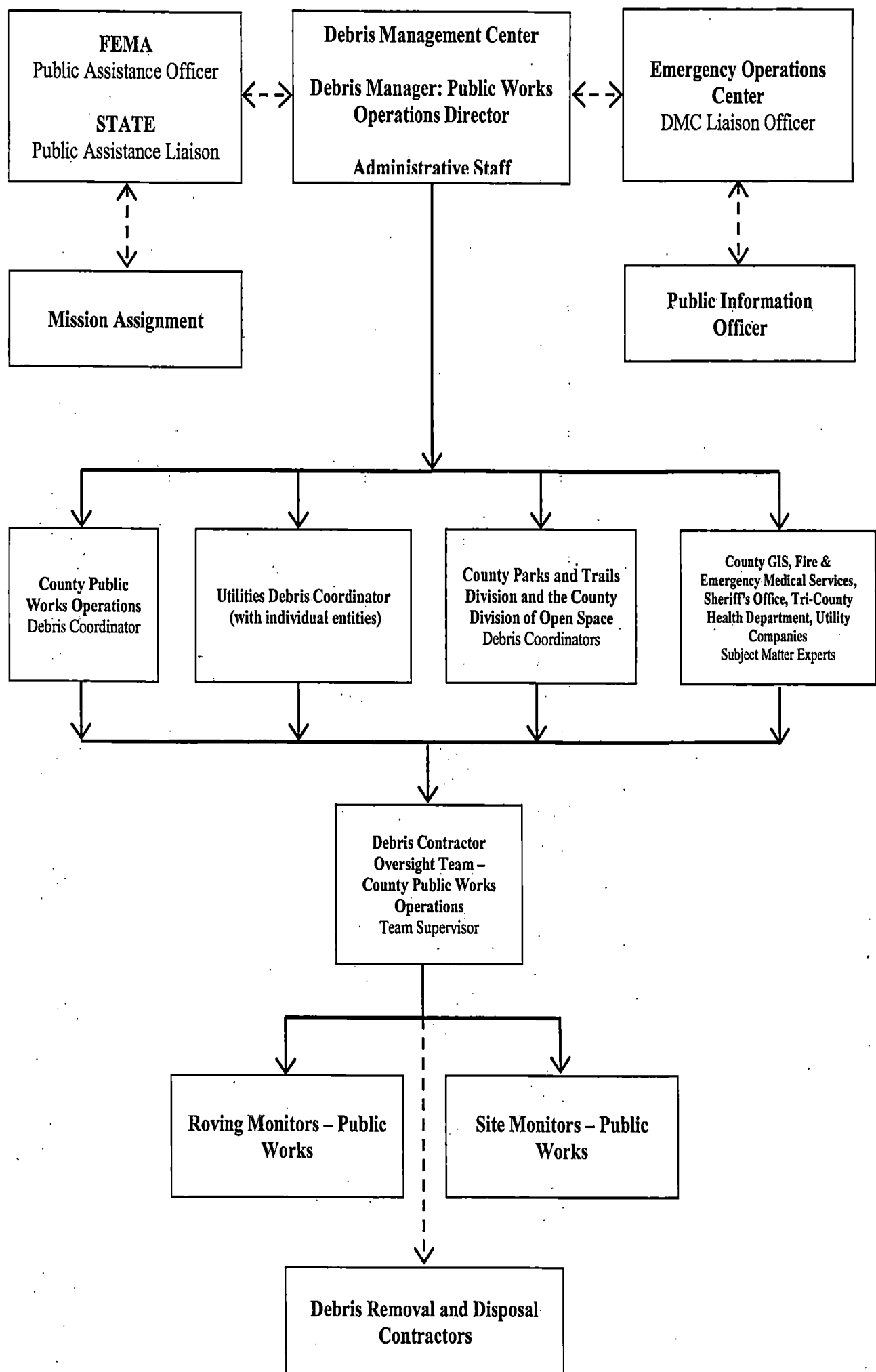
- Ensure appropriate health and medical considerations are addressed.
- Provide Emergency Management the appropriate public health messaging regarding safety and precautions based on the debris removal needs created by the incident.
- Serve as the liaison between Douglas County and CDPHE in addressing public health and environment issues, which can include providing guidance for emergency disposal of different types of waste (i.e. asbestos, fire-damaged debris, etc.).
- Coordinate guidance for health and medical partners regarding the disposal of incident related medical waste.

- Utilize Public Health Authority to provide a Declaration of Immediate Public Health Threat, if appropriate, to support the response and recovery efforts of an incident.

8. Utility Companies (Coordinated with individual entities as needed)

- Provide a Utilities Debris Coordinator to the DMC.
- Coordinate with the Debris Manager about debris removal along utility service easements and rights-of-way.
- Provide regulatory advice and assistance regarding Debris Management Sites and concerns.
- Coordinate with the Debris Manager to clear and remove debris affecting public utilities.
- Provide information, maps, sites, and other pertinent data, as needed.

Figure 1 – Debris Management Center Organizational Chart



IV. Debris Management Response and Recovery Operations

The Debris Manager will be the point of contact to coordinate and control all personnel and equipment responding to a major debris-generating event. This plan provides guidance for the efficient and effective control and coordination of initial debris assessments through debris clearance, removal, and disposal operations.

A. Rapid Needs and Damage Assessment Teams

The Debris Manager is responsible for coordinating debris impact assessment for all County public structures, equipment, and debris clearance immediately following a large-scale disaster. Impact Assessments are performed by Rapid Needs Assessment (RNA) and Damage Assessment Teams (DATs) and used to prioritize impacted areas and resource needs. The teams will be composed of personnel from Douglas County Search and Rescue (DCSAR) Douglas County Public Works Engineering, Douglas County Public Works Operations, Douglas County Building Division, Tri-County Health Department, Douglas County Parks, local law enforcement, fire departments/districts and any other departments or agencies deemed necessary for a comprehensive assessment.

The DMC Debris Coordinator(s) will have the primary mission of coordinating the efforts of department personnel to identify debris impacts on critical roads and make initial estimates of debris quantities. Based on this prioritization, the Debris Manager will issue urgent assignments to clear debris from at least one lane on all evacuation routes and identified primary and secondary roads to expedite the movement of emergency service vehicles such as fire, police, and medical responders.

Based on first responder initial size-up and windshield surveys, RNA Teams will conduct initial zone-by-zone Rapid Needs Assessments to identify the type of debris and to estimate amounts of debris on the roadways and on private and public property. The results of the Rapid Needs Assessments will be provided to the Debris Manager and to the DMC Liaison Officer located at the EOC. Subsequent and more detailed assessments will be conducted by DATs. Further detail and checklists are provided in the County's Rapid Needs Assessment Plan and Damage Assessment Plans.

The Debris Manager will establish initial priority for debris clearance based upon the following ranking as provided by the RNA and DAT Teams:

- Life-safety and extrication of people.
- Ingress/egress for Emergency Services.
- Ingress to hospitals and special care units.
- Major traffic routes.
- Major flood drainage ways.
- Access for utility restoration.
- Supply distribution points and mutual aid assembly areas.

- Government facilities.
- Public Safety communications towers.
- American Red Cross shelters.
- Secondary roads to neighborhood collection points.
- Neighborhood streets.
- Private property adversely affecting public welfare.

During the debris clearance and removal process, the DMC staff will be responsible for coordinating with the Debris Coordinator and Utility Coordinator as appropriate to ensure that power lines do not pose a hazard to emergency work crews.

B. Phase I – Initial Response

For ease of control and coordination, debris management operations are divided into two phases.

Phase I will be implemented immediately after a debris-generating event to open emergency evacuation routes and roadways to critical facilities and affected neighborhoods. The major emphasis during this phase is to simply push debris from the traveled way to the right-of-way or curb. This activity is commonly referred to as Debris Clearance. Little or no effort is made to remove debris from the right-of-way.

The Debris Manager and Douglas County Public Works Operations will be responsible for implementing all Phase I activities with support as required from the EOC.

Phase I activities include:

- Implementation of the All-Hazards Debris Management Plan.
- Determination of incident-specific debris management responsibilities.
- Establishment of priorities based on evacuation needs and prediction models.
- Activation of pre-authorized contracts, if necessary to support Phase I clearance operations and debris management.
- Activation of pre-established temporary debris reduction/storage sites as needed.
- Implementation of Public Information Plan.
- Coordination and tracking of resources.
- Formal documentation of costs.

C. Phase II - Recovery

Phase II may be implemented as early as possible following the Phase I response of a major debris generating event and will encompass the processes of debris removal and disposal. Some delay is normal and allows time for affected citizens to return to their homes and begin the cleanup process.

Generally, debris removal from private property following a disaster is the responsibility of the property owner. However, large-scale disasters may deposit enormous quantities of debris on private property over a large area resulting in widespread immediate threats to the public-at-large. In these cases, local government may choose to assist property owners in removing debris to:

- eliminate immediate threats to life,
- eliminate immediate threats to public health and safety;
- eliminate immediate threats of significant damage to improved property; and/or
- ensure economic recovery of the affected community to the benefit of the community-at-large.

Debris must be brought to the rights-of-way or curb for removal. Only disaster-generated debris is eligible. For further details reference the FEMA document 9523.13 Debris Removal from Private Property on the FEMA.gov website. Every attempt will be made to communicate with citizens on how to separate debris at the curb via the PIO and the public information plan (Appendix B).

The Debris Manager will be responsible for implementing all Phase II activities with assistance as required from all supporting agencies. All debris removal and disposal operations will be coordinated by the Debris Manager located at the DMC. Phase II may be quite lengthy as disaster recovery continues until pre-disaster conditions are restored.

Phase II activities include:

- Activation of pre-approved contracts to support Phase II operations.
- Notification to citizens of debris removal procedures.
- Identification, procurement, and activation of additional debris management sites.
- Removal of debris from rights-of-way and critical public facilities.
- Removal of sediment from debris basins and channels.
- Movement of debris from debris management sites to permanent landfills.
- Final documentation of costs for reimbursement, as applicable.

D. Phase II Debris Removal and Disposal Overview

The general concept of debris removal operations includes multiple, scheduled passes by each critical site, location, or right-of-way. This manner of scheduling debris removal allows residents

to return to their properties and bring debris to the edge of the right-of-way as property restoration proceeds.

The County has been divided into Debris Control Zones, also referred to as the Douglas County Snow Removal Zones, to control and expedite debris removal and disposal operations. The current maps of these zones can be requested directly from the Douglas County Public Works Operations Department.

E. Phase II Debris Removal and Disposal Operations

The Debris Manager and DMC staff will coordinate debris removal and disposal operations for all portions of Douglas County. Phase II operations involve the removal and disposal of curbside debris by County personnel and/or contractor crews.

Under this plan, mixed debris will be collected and hauled from assigned Debris Control Zones to County-designated debris management sites or to designated landfill locations. Clean woody debris will be hauled to the nearest designated vegetative debris management site for eventual burning or grinding. A listing of possible temporary debris reduction/storage sites can be requested by calling the Douglas County Public Works Operations Department.

The primary tracking mechanism for all debris loaded, hauled, and disposed of under this plan will be the Load Ticket, which can be requested by calling the Douglas County Public Works Operations Department. Load tickets will be initiated at pick-up sites and closed-out upon drop-off of each load at a debris management site or permanent landfill and are to be used to document both County force account and contracted haulers. Load tickets will serve as supporting documentation for contractor payment as well as for requests for reimbursement from federal grant programs (FEMA) and mutual aid recipients.

1. Debris Contractor Oversight Team (DCOT)

The DCOT is responsible for the coordination, oversight, and monitoring of all debris removal and disposal operations performed by private contractors. The DCOT will be trained and knowledgeable on debris types, County removal operations, disposal facilities, environmental constraints, and contract performance parameters to ensure adequate Quality Assurance of debris operations.

The DCOT supervisor and team members may be detailed from Douglas County Public Works Operations as well as from other County departments as required. The DCOT team may also be supplemented with, or stand-alone, contracted inspectors as needed. The County Finance Department will maintain and manage all outside contracts.

The DCOT team supervisor will be located at the DMC and will provide for roving monitors, load site monitors, and disposal site monitors described below. Specific responsibilities include the following:

- Planning and conducting debris management site inspections, quality control, and other contractor oversight functions.
- Receiving and reviewing all debris load tickets that have been verified by a Disposal Site Monitor (see description below).

- Making recommendations to the Debris Manager regarding distribution of force account and contractor work assignments and priorities.
- Reporting on progress and preparation of status briefings.
- Providing input to the DMC PIO on debris cleanup activities and pick-up schedules.

The DCOT Supervisor will oversee the activities of the following three types of monitors. The functions and responsibilities of the field monitors are described below.

a. Roving Monitors

Two-person teams of Roving Monitors will be assigned to specific Debris Control Zones or to a specific contractor depending upon the distribution of work assignments. The Roving Monitors' mission is to act as the "eyes and ears" for the Debris Manager and DCOT Supervisor to ensure that all contract requirements, including safety, are properly implemented and enforced.

Staff to fulfill the Roving Monitor positions will be provided by Douglas County Public Works Operations or oversight contractors. Roving Monitors will have the authority to monitor contractor operations and to report any problems back to the DCOT Supervisor. Roving Monitors may request contract compliance, but do not have the authority to otherwise direct contractor operations or to modify the contract scope of work.

Roving Monitors will monitor debris operations on a full-time basis and make unannounced visits to all loading and disposal sites within their assigned debris management zone(s). In addition, Roving Monitors shall do the following:

- Assist in the measuring of all contractor trucks and trailers with the contractor's representative and take photographs of all trucks and trailers.
- Obtain and become familiar with all debris removal and disposal contracts for which they are providing oversight.
- Observe all phases of debris management operation, to include loading sites, debris management sites, and final landfill sites.
- Prepare a daily written report of all contractor activities observed to include photographs.
- Periodically monitor each debris management site to ensure that operations are being followed as specified in the applicable debris removal and disposal contract with respect to local and Federal regulations and the Debris Clearing, Removal and Disposal Guidelines (Appendix D).

Roving Monitors will also submit daily written reports to the DCOT supervisor outlining their observations with respect to the following:

- Ensure the contractor is using the site properly with respect to layout and environmental considerations.

- Ensure the contractor established lined temporary storage areas for ash, household hazardous wastes, and other materials that can contaminate soil and groundwater.
- Ensure the contractor established environmental controls in equipment staging areas, fueling, and equipment repair areas to prevent and mitigate spills of petroleum products and hydraulic fluids.
- Ensure plastic liners are in place under stationary equipment such as generators and mobile lighting plants.
- Verify the contractor established appropriate rodent control measures.
- Ensure burn sites are constructed and operating in accordance with the plans and requirements.
- Ensure the contractor established procedures to mitigate smoke, dust, noise, and traffic flow.

Roving Monitors reports will also include written observations at loading sites, disposal sites, and the locations of any illegal dumping sites. If the monitor sees a problem they are to notify the DMC immediately and take photographs of the site.

b. Load Site Monitors

Load Site Monitors will be stationed at designated contractor debris loading sites. The Load Site Monitors' primary function is to verify that debris being picked up is eligible under the terms of the contract. Prior to performing duties, Load Site Monitors will be familiar with contract vendor requirements, as provided by the County Finance Department.

Load Site Monitor positions may be staffed from Douglas County Public Works Operations and other County departments as well as potentially contracted inspectors depending on the magnitude of the debris-generating event. Load Site Monitors will be assigned to each contractor's debris loading site within designated Debris Control Zones and will initiate and sign load tickets as verification that the debris being picked up is eligible.

c. Disposal Site Monitors

Disposal Site Monitors will be located at both debris management sites and landfill sites as identified by the DMC throughout the recovery process. The Disposal Site Monitors' primary function is to ensure that accurate load quantities are being properly recorded on pre-printed load tickets. Prior to performing duties, Disposal Site Monitors will be familiar with contract vendor requirements, as provided by the county Finance Department.

At each debris management site and landfill disposal site, the contractor will be required to construct and maintain a monitoring station tower for use by the Disposal Site Monitor. The contractor will construct the monitoring station towers

with a floor elevation that affords the Disposal Site Monitor a complete view of the load bed of each piece of equipment being utilized to haul debris. The contractor will also provide each site with chairs, table, and portable sanitary facilities.

The Disposal Site Monitor will estimate the quantity (in cubic yards) of debris in each truck/trailer entering the contractor's selected temporary debris management site or landfill disposal site and will record the estimated quantity on pre-numbered debris load tickets. The contractor will only be paid based on the number of cubic yards of material deposited at the disposal site as recorded on debris load tickets. This is to be done on all types of debris removal contracts and force account vehicles.

The Disposal Site Monitors will be stationed at all debris management sites and landfill disposal sites for verifying the quantity of material being hauled by the contractor. The Disposal Site Monitor will be responsible for closing out and signing each load ticket and returning a copy to the DCOT Supervisor at the end of each day.

2. Garbage Contractors

Garbage contractors will continue to pick up refuse in accordance with current procedures, routes, and removal schedules. They will not haul disaster debris unless expressly authorized by the Debris Manager.

3. Household Hazardous Waste and White Goods

The Debris Manager will identify one or more Household Hazardous Waste (HHW) drop-off locations within the County. Contractors will be encouraged to separate HHW at the curb and not haul it to a Debris Management Site. Residents will be encouraged to separate and transport HHW to pre-identified drop-off points. The Debris Manager will coordinate with Tri-County Health Department for the collection of eligible industrial or commercial hazardous waste resulting from the disaster.

White goods are defined as discarded household appliances including, refrigerators, freezers, air conditioners, heat pumps, ovens, ranges, washing machines, clothes dryers, water heaters, etc. Refrigerants and other machine fluids are regulated and will only be reclaimed by certified technicians and disposed of at a permitted facility. To avoid the releases of refrigerants or oils, the collection of white goods will be accomplished carefully by manually placing the appliance on trucks or by using lifting equipment that will not damage the elements that contain refrigerants or regulated oils. Residents will be required to segregate these materials from other types of debris.

4. Equipment Assets

A list of equipment that Douglas County currently has in inventory which may be used to assist with debris removal is on file through the Department of Public Works Operations.

5. Contractor Debris Removal and Disposal Operations

Douglas County recognizes that disasters may generate debris of types and quantities that exceed the County's capabilities. Thus, Douglas County will implement a pre-positioned

contracting process to have contractors on stand-by to respond within a pre-determined period to assist in requested aspects of the debris operation.

The Debris Manager or authorized County personnel will contact the firm(s) holding pre-positioned debris removal and disposal contract(s) and advise them of impending conditions. The scope of the pre-positioned contract provides for the removal and lawful disposal of all natural and man-made disaster-generated debris, excepting household, industrial, or commercial hazardous waste. Debris removal will be limited to County-maintained streets, roads, and other public rights-of-way based on the extent of the disaster. Debris removal will be limited to disaster related material placed at or immediately adjacent to the edge of the rights-of-way by residents within designated Debris Control Zones.

Each contractor, upon receipt of notice to proceed, will mobilize such personnel and equipment as necessary to conduct the debris removal and disposal operations detailed in the contractor's general operations plan (required by the debris removal and disposal contract). All contractor operations will be subject to review by the Debris Manager.

The contractor will make multiple, scheduled passes of each site, location, or area impacted by the disaster according to assigned Debris Control Zones and as directed by the Debris Manager. Schedules will be provided to the DMC PIO for publication and notification by the news media.

The load ticket, coupled with inspections by Roving, Load Site, and Disposal Site Monitors, will be the primary mechanism for monitoring contractor performance and tracking quantities for pay purposes.

Federal support will be requested if the incident is beyond the county and state's capabilities and contractors. The US Army Corps of Engineers (USACE) may be tasked by FEMA through the mission assignment process to provide the necessary support to the County.

If tasked by FEMA, USACE will respond by providing trained and experienced Debris Planning Response Teams that are responsible for managing the debris mission from removal to final disposal. These tasks are accomplished utilizing pre-awarded contracts to private industry contractors experienced in debris removal operations. The USACE also has Debris Subject Matter Experts available to provide advice and support to the contractor and the DMC staff.

6. Temporary Debris Management and Landfill Sites

The County recognizes the economic benefits of debris volume reduction and will realize this benefit using local debris management sites for processing of clean woody debris. Douglas County has identified pre-designated vegetative debris management sites for the sole purpose of temporarily storing and reducing clean woody debris through either burning or grinding. A listing of temporary debris staging, and reduction sites can be requested through the Douglas County Public Works Operations Department.

Contractors will operate the debris management sites made available by the County. Each contractor will be responsible for all site setup, site operations, rodent control, closeout and remediation costs at each of its sites. The contractor is also responsible for the lawful

disposal of all by-products of debris reduction that may be generated.

The contractor will restore the debris management sites as close to the original condition as is practical so that it does not impair future land uses. All sites are to be restored to the satisfaction of the Debris Manager with the intent of maintaining the utility of each site. Contractors are also expected to haul and manage construction and demolition (C&D) waste. C&D materials will be hauled to debris management sites for temporary sorting and storage and reduction until final disposal arrangements are made.

It is important to note that all material deposited at debris management sites will eventually be taken to a properly permitted landfill or recycling site for final disposal. Under certain circumstances, the Debris Manager may direct contractors to bypass C&D debris management sites and approve the hauling of mixed C&D debris directly to a properly permitted landfill for disposal.

While residents will be encouraged to segregate HHW at curbside, small amounts of HHW may be mixed in with material deposited at the debris management sites. Therefore, the contractor must be prepared to place any HHW in a separate enclosed and lined area for temporary storage and must report any accumulation of HHW at the debris management sites to the DCOT staff. The DCOT staff will notify the Debris Coordinators, who will coordinate for removal and disposal.

7. Load Ticket Disposition

The Load Ticket will be a 5-part pre-printed form or equivalent.

At initiation of each load, the Load Site Monitor will fill out all items in Section 1 of the Load Ticket and will retain Part 1 (White Copy). The remaining copies will be given to the driver and carried with the load to the disposal site.

Upon arrival at the disposal site, the driver will give all four copies to the Disposal Site Monitor. The Disposal Site Monitor will complete Section 2 of the Load Ticket and retain Part 2 (Green). Parts 3, 4, and 5 will be given either to the contractor's on-site representative or to the truck driver for subsequent distribution.

All trucks will be measured by the contractor and Roving or Load Site Monitors before the operation begins and periodically rechecked throughout the operation.

The contractor will be paid based on the number of cubic yards of eligible debris hauled per truckload. Payment for hauling debris will only be approved upon presentation of Part 4 (Canary and Blue) of the Load Ticket with the contractor's invoice.

Load tickets will also be completed and retained for County force account vehicles as a primary mechanism for tracking debris quantities deposited at debris management sites.

A sample of the Load Ticket can be requested through the Douglas County Public Works Operations Department.

8. Temporary Debris Management Site Setup and Closeout Procedures

The contractor will be responsible for preparing and closing out a temporary debris

management site in accordance with the specifications in the debris removal and disposal contract and guidance provided by the selected contractor.

9. Private Property Debris Disposal

Dangerous structures are the responsibility of the owner to demolish in order to protect the health and safety of adjacent residents. However, experience has shown that unsafe structures will often remain in place due to lack of insurance or absentee landlords. Care must be exercised to ensure that the County properly identifies structures listed for demolition.

The Debris Manager will coordinate with local jurisdictions, state and FEMA Public Assistance Officers regarding:

- Demolition of private structures.
- Removing debris from private property.
- Local law and/or code enforcement requirements.
- Historic and archaeological sites restrictions.
- Qualified environmental contractors to remove hazardous materials such as asbestos and lead-based paint.
- Execution of right-of-entry/hold harmless agreements with landowners; a sample right-of-entry/hold harmless agreement can be found in Appendix D.

10. Recycling Storm Debris

The intent is to recycle as much of the storm generated debris as feasible:

- **Vegetative Debris** – volume reduced, processed yard trash/vegetative storm debris will be transported to agricultural fields for use as a soil amendment in accordance with policies for use of such materials and/or to cogeneration power plants for use as boiler fuel.
- **Non-Vegetative, Non-Hazardous Debris** – These materials commonly referred to as C/D (construction demolition debris) will attempt to be recycled or reduced if financially feasible and if volumes do not exceed the handling capacity of the County Debris Management System or Temporary Debris Staging and Reduction (TDSR) sites.

11. Permitting

All environmental and land-use variance permits necessary to establish temporary debris management sites shall be obtained by the Debris Manager or his/her designee. Debris operations will comply with all federal, state, and local regulations. Several agencies may be involved in issuing permits.

The following is a list of potential permits that may be required in debris operations:

- Waste processing and recycling operations permit.
- Temporary land-use variances or permits.
- Traffic or entrance permits.
- Air quality permits (Colorado Department of Health and Environment).
- Water quality permits.
- Household Hazardous Waste permits.
- Fire department permits.
- Freon removal from white goods.
- Drainage, erosion and sediment control.

12. Environmental Requirements

Following a disaster event, compliance with environmental protection laws and regulations is required. federal, state, and local agencies such as the U.S. Environmental Protection Agency, the Colorado Department of Public Health and Environment, the U.S. Army Corps of Engineers, and the Tri-County Health Department, among other agencies, should be consulted for applicable regulatory requirements. The Department of Public Works Engineering reviews all stormwater and drainage projects.

All debris-related activities shall be coordinated with federal, state, and local agencies to ensure compliance with environmental and historic preservation laws/regulations/policies and determining environmental monitoring and reporting requirements for TDSR's. Refer to Appendix D for Debris Clearing, Removal, and Disposal Guidelines.

13. Health and Safety

The contractor will be required to provide Douglas County with a comprehensive Health and Safety Plan.

The Health and Safety Plan enables the agency and their contractors to avoid accidents during debris recovery operations and to protect workers from exposure to hazardous materials. The health and safety strategy establish minimum safety standards for the agency and contractor personnel to follow.

The agency and contractor will disseminate safety information and how the agency will monitor compliance with the minimum safety standards to all contracted workers. The plan also includes specific corrective actions to be taken if workers do not comply with the minimum safety standards.

Debris operations involve the use of heavy equipment to move and process various types of debris. Many of these actions can pose safety hazards to emergency response personnel,

recovery personnel, and the public. In addition to those safety hazards, exposure to certain types of debris, such as building materials that contain asbestos and mixed debris that contains hazardous materials, can pose potential health risks to all workers.

The Health and Safety Plan provides contracted workers with information on how to identify hazardous conditions and specific guidelines on the appropriate and proper use of personal protective equipment.

14. Utility Company Property

In coordination with the Debris Manager and contractors, utilities will remove and dispose of all utility-related debris such as power transformers, utility poles, cable, and other utility company material.

V. Weapons of Mass Destruction/Terrorism Event

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

Normally, a WMD or terrorism event will, by its very nature, require all available assets and involve many more federal and adjacent state and county departments and agencies. The nature of the waste stream as well as whether the debris is contaminated will dictate the necessary cleanup and disposal actions. Debris handling considerations that are unique to this type of event include:

- Much of the affected area will likely be a crime scene. Therefore, debris may be directed to a controlled debris management site by state and/or federal law enforcement officials for further analysis.
- The debris may be contaminated by chemical, biological, or radiological contaminants. If the debris is contaminated, it will have to be stabilized, neutralized, containerized, etc., prior to disposal. In such an occurrence, the operations may be under the supervision and direction of a Federal agency and one or more specialty contractors retained by that agency. The presence of contamination will influence the need for pretreatment (decontamination), packaging, and transportation.
- The type of contaminant will dictate the required capabilities of the personnel working with the debris. Certain contaminants may preclude deployment of resources that are not properly trained or equipped.
- The Debris Manager will continue to be the single point of contact for all debris removal and disposal issues within the County. Coordination will be exercised through the USACE ESF #3 Branch located at the designated FEMA Disaster Field Office.

VI. Administration, Finance and Logistics

The Emergency and Disaster Finance Policy was originally approved September 2011 and revised October 2018 to ensure the proper and efficient process of specific governmental functions relating to emergency procurement. This policy addresses the delegation of procurement, contracts, purchasing cards limits, employee's overtime or other wage compensation and allocation of funds

requirements during emergency/disaster incidents. The full Emergency and Disaster Finance Policy can be found in Appendix E.

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

Per County job descriptions, all County personnel supporting debris operations "...will be expected to make every effort to be available to assist the County Manager, Elected/Appointed Officials and Department Directors to ensure the continued operation of any and all necessary County functions. This may mean being available to perform additional duties and hours beyond what is normally required. In the event that an exempt employee does work more than 40 hours a week in support of County operations during an emergency, such employee may receive overtime or other appropriate wage compensation in accordance with existing County policies or at the discretion of the County."

All County departments are responsible for the review of this plan in conjunction with updates to the County EOP and the County Recovery Plan. It will be the responsibility of each tasked department and agency to update its respective portion of the plan and ensure any limitations and shortfalls are identified and documented, and work-around procedures developed, if necessary.

The review will consider such items as:

- Changes in mission.
- Changes in concept of operations.
- Changes in organization.
- Changes in responsibility.
- Changes in desired contracts.
- Changes in pre-approved contracts.
- Changes in priorities.

This Plan may also be updated as necessary to ensure a coordinated response as other plans are developed. Surrounding cities may also develop All-Hazards Debris Management Plans that should be coordinated with the county's Plan and other plans. This coordination is especially important with respect to allocation of resources such as temporary staging areas and disposal facilities.

APPENDIX A
FEMA Debris Removal
The Applicant's Contracting Checklist



FEMA

RECOVERY DIVISION

FACT SHEET

RP9580.201

DEBRIS REMOVAL APPLICANT'S CONTRACTING CHECKLIST

Overview

To be eligible for reimbursement under the Public Assistance Program, contracts for debris removal must meet rules for Federal grants, as provided for in 44 CFR Part 13.36 *Procurement* (http://www.access.gpo.gov/nara/cfr/waisidx_04/44cfr13_04.html). Public Assistance applicants should comply with their own procurement procedures in accordance with applicable State and local laws and regulations, provided that they conform to applicable Federal laws and standards identified in Part 13. The following guidance is provided to assist Public Assistance applicants in the procurement process.

Contracting Process Checklist

- ☐ Use competitive bidding procedures. Complete and document a cost analysis to demonstrate price reasonableness on any contract or contract modification where adequate price competition is lacking, as detailed in 44 CFR 13.36(f).
- ☐ Provide a clear and definitive scope of work and monitoring requirements in the request for proposals/bids. Use acceptable emergency contracting procedures that include an expedited competitive bid process only if time does not allow for more stringent procedures.
- ☐ Require bidders to provide copies of references, licenses, financial records, and proof of insurance and bonding.
- ☐ Obtain review from your legal representative of your procurement process and any contract to be awarded to ensure they are in compliance with all Federal, State, and local requirements.
- ☐ Document procedures used to obtain/award contracts (procurement information, bid requests and tabulations, etc).
- ☐ Use load ticket requirement to record with specificity (e.g., street address) where debris is picked up and the amount picked up, hauled, reduced and disposed of.

FEMA will, when requested by applicants, assist in the review of debris removal contracts. However, such a review does not constitute approval.



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FACT SHEET

RP9580.201

DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Contract Provisions Checklist

All contracts must contain/reflect the following provisions:

- ☐ All payment provisions must be based on unit prices.
- ☐ No payments may be based on time and material costs unless limited to work performed during the first 70 hours of actual work following a disaster event.
- ☐ That payment will be made only for debris that FEMA determines eligible, referencing FEMA regulations and Public Assistance guides and fact sheets. (This is an optional provision to protect the applicant, and is used only following a major disaster declaration.)
- ☐ An invoice provision requiring contractors to submit invoices regularly and for no more than 30-day periods.
- ☐ A "Termination for Convenience" clause allowing contract termination at any time for any reason.
- ☐ A reasonable 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 limiting use of subcontractors to only those you approve.
- ☐ The preference that the contractor use mechanical equipment to load and reasonably compact debris into the trucks and trailers.
- ☐ The requirement that the contractor provide a safe working environment, including properly constructed monitoring towers.
- ☐ Option of a unit price for extracting from ground and removing FEMA-eligible stumps (only for stumps with diameters larger than 24 inches, measured 24 inches above the ground, and with 50% or more of the root ball exposed), or including all stumps in the unit price.



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FACT SHEET

RP9580.201

DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Contract Provisions Checklist - Continued

All contracts must contain/reflect the following provisions:

Requirement that all contract amendments and modifications be in writing.

Requirement that contractor obtain adequate payment and performance bonds and insurance coverage.

Pre-Disaster and Stand-By Contracts Checklist

It is recommended that you pre-qualify contractors prior to an event and solicit bid prices from this list of contractors once an event has occurred.

The solicitation for pre-qualifying contractors must adequately define in the proposed scope of work all the potential types of debris, typical haul distances, and size of events for which a contract may be activated.

To ensure reasonable debris removal costs, award debris removal contracts based on unit prices (volume or weight).

If the contract is awarded on a time and material basis, it should be limited to no more than 70 hours of actual clearance and removal operations.

After the initial 70-hour period, payment should be on a unit price basis (volume or weight).



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FACT SHEET

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DEBRIS REMOVAL

APPLICANT'S CONTRACTING CHECKLIST

Avoidance Checklist

- DONOT** Award a debris removal contract on a sole-source basis.
- DONOT** Sign a contract (including one provided by a contractor) until it has been thoroughly reviewed by your legal representative.
- DONOT** Allow any contractor to make eligibility determinations, since only FEMA has that authority.
- DONOT** Accept any contractor's claim that it is "FEMA certified." FEMA does not certify, credential, or recommend debris contractors.
- DONOT** Award a contract to develop and manage debris processing sites unless you know it is necessary, and have contacted the State for technical assistance concerning the need for such operations. Temporary debris storage and reduction sites are not always necessary.
- DONOT** Allow separate line item payment for stumps 24 inches and smaller in diameter; these should be treated as normal debris.
- DONOT** "Piggyback" or utilize a contract awarded by another entity. Piggybacking may be legal under applicable state law; however, the use of such a contract may jeopardize FEMA funding.
- DONOT** Award pre-disaster/stand-by contracts with mobilization costs or unit costs that are significantly higher than what they would be if the contract were awarded post-disaster. Such contracts should have variable mobilization costs depending upon the size of the debris work that may be encountered.

APPENDIX B

Public Information Sample Documents

The County may create television and radio advisories 24-48 hours preceding a forecasted event and immediately following the event to be broadcasted at regular intervals. Immediately prior to a forecasted event, the County may release a one-page list of disaster debris waste reduction strategies to the community. A few recommendations include:

- The County may assist citizens by collecting ONLY storm-generated debris
- Move fuels, oils and other chemicals out of potential flood paths
- Store HHW above the expected flood level in a doubled trash bag
- Understand your properties drainage patterns to prevent localized flooding on the property and other social media announcements will be used to encourage public cooperation for such activities as:
 - Separating burnable and non-burnable debris;
 - Segregating Household Hazardous Waste (HHW);
 - Informing the public on what to do with disaster debris;
 - Keeping debris piles away from fire hydrants and utility shut-off valves;
 - Reporting locations of illegal dump sites or incidents of illegal dumping;
 - Segregating recyclable materials and white goods (household appliances)
 - Disseminating cleanup schedules through the local news media.

Additionally, the County may develop two separate categories of information detailing:

1. The status of the immediate Response Phase
2. The status of the long term recovery phase and providing a conservative timeline of events

Released through social media, radio and television, local newspapers, posted at pivotal high traffic locations throughout the County or printed as door hangers, the County's goal is to inform residents of post-event operations in an effort to provide greater transparency and compliance. Information outlining segregation of debris at curbside and the reporting of private property damage will be released via numerous media avenues to educate citizens on the process of recovery. Lastly, the County will develop a link to additional debris management information which will be posted on the County website.

Working under the direction of the EOC Director, the County Communications Office systematically and continuously communicates with area media using all available communications tools and methods. Considerations include:

- Publicity: frequent media announcements will help to control information and alleviate citizen concern
- Media Outlets
- Media Monitoring: a PIO is assigned to monitor media to gauge information being shared with the community; any misinformation is corrected immediately
- Web Site: utilize www.douglas.co.us to communicate with citizens online and to send out target emails to subscribers
- Social Media: place stories on the County's Facebook and Twitter sites
- Citizens with foreign language requirements
- Publicity: whenever deemed appropriate by OEM, translate emergency news releases into Spanish (the most populous foreign language population in Douglas County) and

distribute to local Spanish language publications and television and radio broadcast stations.

- Communication with Citizens who are members of special needs populations
- Access and Functional Needs citizens
 - Web Site: post all emergency preparation news releases on the County's website so the access functional population may take advantage of the Americans with Disabilities Act (ADA)-approved technologies.
 - Social Media: "push" communications out using Facebook and Twitter
 - Encourage local broadcasters to include American Sign Language interpreters and closed captioning into their news coverage efforts.
- Citizens with age-related challenges that make communications difficult
 - Distribute emergency preparedness news releases to all senior publications in the area.
- Communication with Elected Officials
 - Alert all County and County elected officials by sending information directly to their email accounts.
- Communication with County Department Heads and County employees
 - Post introductory information and links to recovery releases on the County's Intranet page
 - Alert all department heads and employees by sending information directly to their email.
- Communication with State staff members
 - Send regular email updates and post introductory information and links to
- County website.
- To communicate with citizens of neighboring communities, email information to peer public information officers

The sample radio address is as follows:

The County has adopted regulations for the removal of disaster-generated debris. We have established an efficient and effective system in coordination with our debris contractor, so you, the citizen, will know what to expect and how to have your disaster-generated debris removed successfully.

Contractors are working seven (7) days a week, twelve (12) hours a day to collect ONLY debris.

The County Debris Manager has divided the County into multiple debris collection zones. All zones are being worked simultaneously with the goal of a coordinated, safe and efficient recovery. Debris contractors are collecting all the disaster-generated debris moved to the curb from one subdivision/street/block in a zone before moving to the next. Your cooperation and patience is much appreciated during this trying time.

Three collection passes will be made.

From the _____ to the _____ day after the storm, a first pass will be made in your neighborhood. The debris collected will include vegetative debris and bulky material, large construction material, white goods and items that pose a health and safety risk.

A second pass will be made from the _____ to the _____ day after the storm. The debris collected will include large and small vegetative debris and large and small construction debris.

A third and final pass will take place between the _____ to the _____ day after the storm. Any and all remaining debris will be collected as designated and inspected by County Officials. Any debris placed out for collection after the FINAL PASS will not be collected by the County.

Fellow Citizens, as you prepare to place your debris curbside for collection, please adhere to the following guidelines.

1. Do not place debris on top of utilities, for example: cable, phone, electrical, storm drain boxes, or fire hydrants.
 2. Please do not place debris in front of or around your mailbox.
 3. Please do not place debris in front of or around your driveway, as emergency vehicles may need to enter the area.
 4. Please drive with extreme caution in areas with large debris.
 5. Please do not block or dump any debris into the storm drains or ditches. This will cause a flood hazard.
 6. Please aid contractors by sweeping excess and loose debris from the street in front of your house.
 7. Report damages that occur to your personal property to the Contractor Hotline, 1-866-111-2222.
 8. Report drainage problems to Douglas County Public Works Operations at 303-660-7480.
- We are a community, and we shall recover as a community. We appreciate your cooperation and assistance as we undertake this monumental clean-up effort.

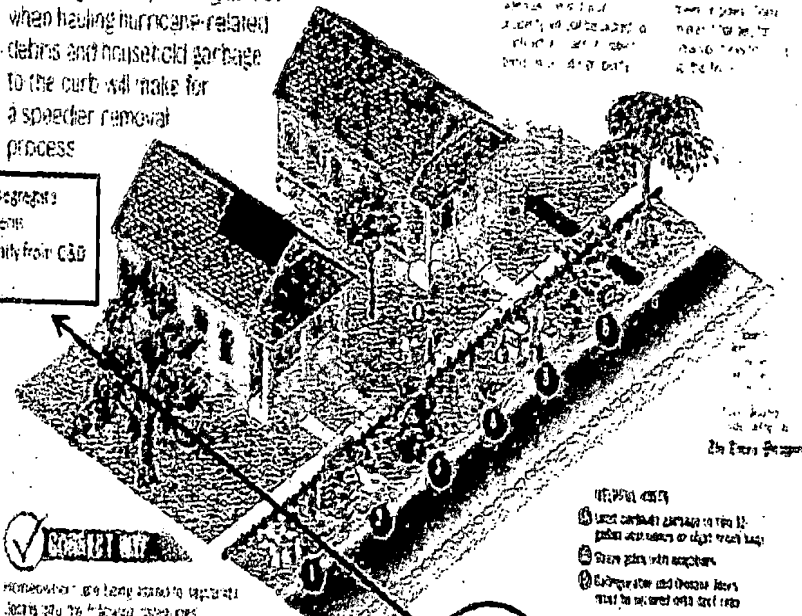
For additional information, please call _____ or visit us at _____.

Citizen Actions Visual Aide

Debris Stream ROW Segregation Guidelines: "Picking Up the Pieces"

Following these specific guidelines when hauling hurricane-related debris and household garbage to the curb will make for a smoother removal process.

Please segregate these items specifically from C&D piles.



NO PARKING

DEBRIS STREAM

PERMITTED

Debris Stream: Debris from the house, garage, and other structures. Debris from the yard, including trees, shrubs, and other landscaping. Debris from the street, including trees, shrubs, and other landscaping. Debris from the sidewalk, including trees, shrubs, and other landscaping.

NO PARKING

Household items are being moved to separate debris stream from C&D piles.

DEBRIS STREAM

1. Load debris into the 10 cubic yard limit or 10 cubic yard bag.
2. Place debris in the debris stream.
3. Separate and remove items that are not allowed into the stream.

1. HOUSEHOLD DEBRIS

- ▶ Appliances
- ▶ A/C units
- ▶ Dishwashers
- ▶ Freezers
- ▶ Stoves
- ▶ Washers
- ▶ Dryers

2. CONSTRUCTION DEBRIS

- ▶ Building materials
- ▶ Gravel
- ▶ Lumber
- ▶ Siding
- ▶ Windows
- ▶ Doors

3. AUTOMOBILE DEBRIS

- ▶ Tires
- ▶ Engines
- ▶ Seats

4. REFRIGERATED/HAZARDOUS WASTE

- ▶ Air conditioning units
- ▶ Freezers
- ▶ Stoves
- ▶ Dishwashers
- ▶ Washers
- ▶ Dryers

5. WHITE GOODS

- ▶ Refrigerators
- ▶ Freezers
- ▶ Stoves
- ▶ Dishwashers
- ▶ Washers
- ▶ Dryers

6. ELECTRONICS

- ▶ Televisions
- ▶ Computers
- ▶ Radios
- ▶ Stereo systems
- ▶ Video cameras
- ▶ Video recorders

APPENDIX C

Samples of Checklists, Forms & Documents

Samples of Checklists, Forms & Documents

- 1. Debris Loading Site Monitoring Checklist**
- 2. Debris Disposal Site Monitoring Checklist**
- 3. Stockpiled Debris Field Survey Form**
- 4. Debris Estimating Formulas**
- 5. Debris Load Ticket**
- 6. Truck Certification Form – General Information**
- 7. Truck Certification Form – Dump Truck**
- 8. Truck Log – Single Daily**
- 9. Summary Daily Log**
- 10. Small Motorized Engine (SME) Tracking Form**
- 11. Demo Decommissioning – E-Waste/SME Tracking Form**
- 12. Demo Decommissioning Tracking Form**
- 13. Demo Decommissioning – White Goods Tracking Form**

Debris Loading Site Monitoring Checklist

Date: _____
Arrival Time: _____ Departure Time: _____ Weather Conditions: _____
Loading Site Location: _____
(Street address or nearest intersection)
GPS Location: N _____; W _____
Loading Site Monitor's Name _____
(Print Name)
Roving Monitor's Name: _____
(Print Name)

(Signature)

Loading Site

1. Is the Site Monitor filling out the Load Ticket properly? YES ☐ NO ☐
If NO, explain actions taken: _____

2. Is the Contractor loading eligible debris from the designated right-of way (approximately 15' from curb)? YES ☐ NO ☐
If NO, explain actions taken: _____

3. Is the Contractor loading trucks to capacity? YES ☐ NO ☐
If NO, explain actions taken: _____

4. Identify Contractor's truck numbers observed while on site:
_____; _____; _____; _____; _____; _____; _____; _____
_____; _____; _____; _____; _____; _____; _____; _____
5. Were photographs taken at the loading site? YES ☐ NO ☐
If YES, list photo log numbers: _____; _____; _____; _____

General Notes and Comments: (Include observations within the general area as to overall cleanup activities)

_____ (Use reverse side if necessary)

Debris Loading Site Monitoring Checklist

Date: _____
Arrival Time: _____ Departure Time: _____ Weather Conditions: _____

Loading Site Location: _____
(Street address or nearest intersection)

GPS Location: _____

Loading Site Monitor's Name _____

Roving Monitor's Name & _____

Signature: _____

Loading Site

1. Is the Site Monitor filling out the Load Ticket properly?

If NO, explain actions taken:

2. Is the Contractor loading eligible debris from the designated right-of way (approximately 15' from curb)?

If NO, explain actions taken:

If NO, explain actions taken:

4. Identify Contractor's truck numbers observed while on site:

5. Were photographs taken at the loading site?

If YES, list photo log numbers: _____

General Notes and Comments: (Include observations within the general area as to overall cleanup activities)

Debris Disposal Site Monitoring Checklist

Date: _____
Arrival Time: _____ Departure Time: _____ Weather Conditions: _____
Disposal Site Location: _____
(Street address or nearest intersection)
GPS Location: N _____; W _____
Disposal Site Monitor's Name _____
(Print Name)
Roving Monitor's Name: _____
(Print Name)

(Signature)

Disposal Site

1. Is the Disposal Monitor filling out the Load Ticket properly? YES ☐ NO ☐
If NO, explain actions taken:

2. Is the Disposal Monitor attaching a copy of the Weight Ticket to the Load Ticket? YES ☐ NO ☐
If NO, explain actions taken:

3. Are the Contractor's trucks loaded to capacity? YES ☐ NO ☐
If NO, explain actions taken:

4. Identify Contractor's truck numbers observed while on site:

5. Were photographs taken at the loading site? YES ☐ NO ☐
If YES, list photo log numbers: _____; _____; _____

General Notes and Comments: (Include observations of operations at the landfill)

(Use reverse side if necessary)

Stockpiled Debris Field Survey Form

Stockpiled Debris Field Survey Form

Type of Material:
Clean Vegetative___ Mixed___ C&D___ Mulch___ Other___

Stockpile Location: _____ Date:_____

Average Length of Stockpile: _____ Feet

Average Width of Stockpile: _____ Feet

Average Height of Stockpile: _____ Feet

Total Cubic Feet : _____ Cubic Feet

Total Cubic Yards:(Cubic Feet divided by 27) _____ Cubic Yards

Contractor's Representative: _____ Date _____

Government's Representative: _____ Date _____

Remarks: _____

See Sketch of Site on Reverse Side

Stockpiled Debris Field Survey Form

Stockpile Location: _____

Width _____ Feet

Length _____ Feet

Height _____ Feet

Height _____ Feet

Height _____ Feet

Width _____ Feet

$$\frac{L \times W \times H}{27} = \text{CY}$$

Length _____ Feet

Remarks: _____

Stockpiled Debris Field Survey Form

Stockpiled Debris Field Survey Form

Type of Material:

Clean Vegetative_ Mixed_____ C&D_ Mulch_____ Other_____

Stockpile Location: _____ Average _____ Date: _____

Length of Stockpile: _____, Feet

Average Width of Stockpile: _____ Feet

Average Height of Stockpile: _____ Feet

Total Cubic Feet : _____ Cubic Feet

Total Cubic Yards: (Cubic Feet divided by 27) _____ Cubic Yards

Contractor's Representative: _____ Date _____ Government's

Representative: _____ Date _____

Remarks: _____

See Sketch of Site on Reverse Side

Stockpiled Debris Field Survey Form

Stockpile Location: _____

Width _____ Feet

Height _____ Feet

Length _____ Feet Height _____ Feet Length _____ Feet

Remarks: _____

L'x W'x H' = CY Height _____ Feet _____

27 _____

Width _____ Feet _____

Debris Estimating Formulas

Estimating Rule of Thumb:

- 15 trees, 8 inches in diameter = 40 CY
- Single wide mobile home = 290 CY
- Double wide mobile home = 415 CY
- Root system (8'-10' dia.) = One flat bed trailer to move
- Treat debris piles as a cube, not a cone, when performing estimates.
- Average pace = 2' 6"

Formulas

Conversions:

- 27 cubic feet = 1 cubic yard
- One mile = 5280 feet or 1760 yards

Building formula:

$L' \times W' \text{ (building footprint)} \times \text{No. of Stories} \times 0.2 = \underline{\hspace{2cm}}$ Cubic Yards of debris

Debris pile formula:

$L' \times W' \times H' = \underline{\hspace{2cm}}$ Cubic Yards of debris.

27

Conversion Factors from Cubic Yards to Tons

- Mixed Construction & Demolition Debris = 500 LBS/CY or $CY \times 0.25 = \text{Tons}$
- Yard Vegetation = 300 LBS/CY or $CY \times 0.15 = \text{Tons}$
- Mulch = 500 LBS/CY or $CY \times 0.25 = \text{Tons}$
- Regular Trash = 300 LBS/CY or $CY \times 0.15 = \text{Tons}$
- Concrete = 2000 LBS/CY or $CY \times 1.0 = \text{Tons}$
- Sand = 2600 LBS/CY or $CY \times 1.3 = \text{Tons}$
- Land Clearing (Root balls with dirt) 1500 LBS/CY or $CY \times 0.75 = \text{Tons}$

Estimates for Douglas County

[illegible]

No. 23883

Applicant:		Date:	
Contractor:			
Placard No.:		Capacity: CY	
Loading Site: <i>Street or Intersection</i>		<i>City</i>	
		<i>County</i>	
When Using GPS Coordinates use Decimal Degrees (N xx.xxxxx)			
GPS	N	W	
Road Classification <input type="checkbox"/> FHWA ON <input type="checkbox"/> FEMA (Local) <input type="checkbox"/> FHWA OFF <input type="checkbox"/> Private Property		Pass Classification <input type="checkbox"/> First Pass <input type="checkbox"/> Subsequent Pass _____	
Load Classification: (<i>check one</i>) <input type="checkbox"/> C & D <input type="checkbox"/> White Goods <input type="checkbox"/> HHW <input type="checkbox"/> Vegetative/Woody <input type="checkbox"/> Mixed <input type="checkbox"/> Other (specify):			
Driver's Name (<i>print</i>)			
Departure Time:		AM PM	Odometer:
Load Monitor (Print)		Signature:	
Disposal Site Location:			
Arrival Time:		AM PM	Date: Odometer:
Capacity (CY)		x	% Loaded = Volume Hauled (CY)
		x	=
Total Weight (Ton)	Tare Weight (Ton)		Load Weight (Ton)
Disposal Monitor (Print)		Signature:	
Contractor Monitor (Print)		Signature:	
Notes:			

White	Canary & Blue	Pink	Green	Gold	Tan
Agency	Contractor		Driver	Disposal Site	Loading Site Monitor

TRUCK CERTIFICATION FORM

General Information

Applicant: _____ Monitor: _____
 Contractor: _____ Date: _____
 Measurement Location: _____ County: _____
 Declaration Number: _____

Truck Information

Make	Year	Color	License

Truck Measurements

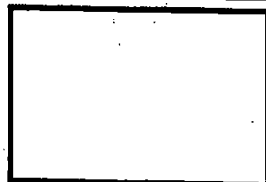
Performed By: _____ Date: _____
 Volume Calculated By: _____ Date: _____
 Both Checked by: _____ Date: _____

Driver Information

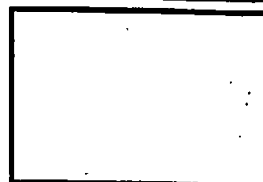
Name: _____
 Address: _____
 Phone Number: _____

Owner Information

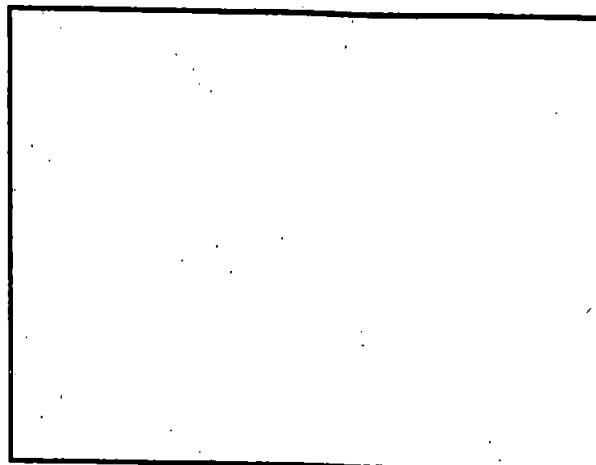
Name: _____
 Address: _____
 Phone Number: _____



Truck Identification



Truck Capacity



Photo

(See reverse for calculation worksheet)

TRUCK CERTIFICATION FORM

DUMP TRUCK

Measurements

Truck Measurements:

Length (L):

Width (W):

Height (H):

Wheel Measurement:

Length (L₁):

Width (W₁):

Height (H₁):

Radius:

Radius (R):

Length (L₂):

Calculations

Box Volume (Base):

$0.375 \times L \times W$

=

cu yd

Wheel Volume:

$0.14 \times L_1 \times W_1 \times H_1$

=

cu yd

Radius Volume:

$0.14 \times L_2 \times R^2$

=

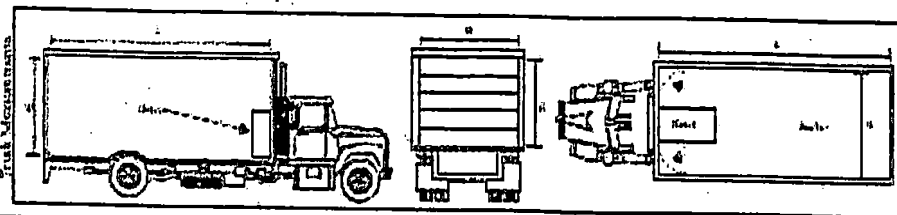
cu yd

Total:

=

cu yd

Cubic Yards



EXTRA TRAILER

Measurements

Truck Measurements (Base):

Length (L):

Width (W):

Height (H):

Wheel Measurement:

Length (L₁):

Width (W₁):

Height (H₁):

Radius:

Radius (R):

Length (L₂):

Calculations

Box Volume (Base):

$0.375 \times L \times W$

=

cu yd

Wheel Volume:

$0.14 \times L_1 \times W_1 \times H_1$

=

cu yd

Radius Volume:

$0.14 \times L_2 \times R^2$

=

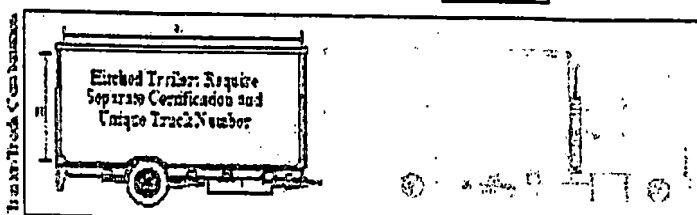
cu yd

Total:

=

cu yd

Cubic Yards



ROUND BOTTOM TRUCK

Measurements

Truck Measurements:

Length (L):

Radius (R):

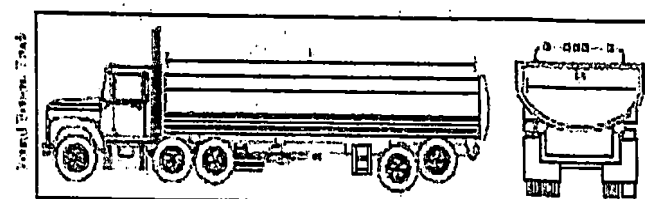
Calculations

Approximate Volume: $0.11 \times L \times R^2 \times 1.12$

=

cu yd (based on dump tray volume)

Cubic Yards



TRUCK LOG, SINGLE DAILY

CONTRACT OWNER

CONTRACTOR

DATE TRUCK NUMBER TOTAL HOURS WORKED TODAY

MODEL MFG

CUBIC YARDS

Load No.	Pickup time	Pickup location	Dump time	Dump location	Material	Eligible? Y/N	CY
NA	Example: 7:00 a.m.	Example: 150 Main St.	Example: 7:48 a.m.	Example: Park St dump	Example: Veg debris	Example Y	Exam: 55 cy
1							
2							
3							
4							
5							
6							
7							
8							

DRIVER NAME (PRINTED)

DRIVER SIGNATURE

STREET/ADDRESS OF DAYS LAST LOAD

SUMMARY DAILY LOG

CONTRACT OWNER

CONTRACTOR

DATE _____

[illegible]

Small Motorized Engine (SME) Tracking Form

PICK-UP DATE: _____

PIECE COUNT

	ROE #	ADDRESS	Chain Saws	Weed Eaters	Lawn Mowers	Compressors	Blowers	Other	TOTALS
1									
2									
3									
4									
5									

LIST OTHER _____

QC Signature _____ DROP-OFF SITE _____

CONTRACTOR _____ Signature - DROP-OFF SITE _____

CONTRACTOR Signature _____ DROP-OFF DATE _____

[illegible]

QC Signature _____

Signature - DROP-OFF SITE

CONTRACTOR

DROP-OFF DATE

CONTRACTOR Signature _____

[illegible]

REPRESENTATIVE - DROP-OFF SITE _____

CONTRACTOR Signature _____

APPENDIX D

Debris Clearing, Removal and Disposal Guidelines

Document List

- Right of Entry / Hold Harmless Agreement
- TDSR Site Setup and Closeout Guidelines
- Temporary Construction and Demolition Staging / Transfer Site Guidelines
- Temporary Vegetative TDSR Site Guidelines
- Air Curtain Burner Site Location and Operations
- Environmental Checklist for Air Curtain Pit Burners
- Land Application of Wood Ash from Storm Debris Burn Sites Guidelines
- Reducing the Potential for Spontaneous Combustion in Compost or Mulch Piles Guidelines

LICENSE TO ENTER UPON REAL PROPERTY

_____ (hereinafter "Owner") hereby grants unto The Board of County Commissioners of the County of Douglas, State of Colorado, whose address is 100 Third Street, Castle Rock, Colorado 80104 (hereinafter "Licensee"), its employees, authorized agents and contractors, a non-exclusive, revocable license and right to enter upon the Owner's real property located at _____ (hereinafter "Property") for the sole and exclusive purpose of _____. The Property is depicted on Exhibit A, attached hereto and incorporated herein.

The term of this License shall be from the date of execution by both parties for a period of _____ days.

Neither Licensee nor its employees, authorized agents or contractors shall make any physical alterations to the Property beyond those necessary to fulfill the above purposes and shall return the Property to substantially the same condition as it was prior to the operations of Licensee pursuant to this License.

Owner hereby waives and releases any claims it may have against Licensee or Licensee's employees, authorized agents, officers, contractors, employees, or successors and assigns for losses, damage or injury to person or property sustained by Owner as a result of Licensee's use of the Property.

Any and all financial obligations imposed by this License on Licensee is subject to appropriation of funds, pursuant to Section 29-1-110, C.R.S.

For the purposes of this License, Licensee is not waiving the protection provided by the Colorado Governmental Immunity Act, Sections 24-10-101, *et seq.*, C.R.S.

DATED this _____, 20_____.

LICENSEE:

BOARD OF COUNTY COMMISSIONERS
OF THE COUNTY OF DOUGLAS COUNTY

OWNER:

By: _____
Rod Meredith, PW Operations Director

By: _____
Owner

APPROVED AS TO LEGAL FORM:

Christopher Pratt, Asst. County Attorney

APPROVED AS TO FISCAL CONTENT:

Andrew Copland, Director of Finance

Temporary Debris Storage and Reduction Site Setup and Closeout Guidelines

TDSR Site Setup

The topography and soil/substrate conditions should be evaluated to determine best site layout. When planning site preparation, think of ways to make restoration easier. For example, if the local soils are very thin, the topsoil can be scraped to bedrock and stockpiled in perimeter berms. Upon site closeout, the uncontaminated soil can be spread to preserve the integrity of the tillable soils.

The following site baseline data checklist should be used to evaluate a site before a contractor begins operations and used during and after to ensure that site conditions are properly documented.

TDSR Site Baseline Data Checklist

A. Before Activities Begin

- ☐ Take ground or aerial photographs and/or video.
- ☐ Note important features, such as structures, fences, culverts, and landscaping.
- ☐ Take random soil samples.
- ☐ Take random groundwater samples.
- ☐ Take water samples from existing wells.
- ☐ Check the site for volatile organic compounds.

B. After Activities Begin

- ☐ Establish groundwater-monitoring wells.
- ☐ Take groundwater samples.
- ☐ Take spot soil samples at household hazardous waste, ash, and fuel storage areas.

C. Progressive Updates

- ☐ Update videos/photographs.
- ☐ Update maps/sketches of site layout.
- ☐ Update quality assurance reports, fuel spill reports, etc.

TDSR Site Operations

Lined temporary storage areas should be established for ash, household hazardous waste, fuels, and other materials that may contaminate soils and groundwater. Plastic liners should be placed under stationary equipment such as generators and mobile lighting plants. These actions should be included as a requirement in the contract scope of work. If the site is also an equipment storage area, fueling and equipment repair should be monitored to prevent and mitigate spills of petroleum products and hydraulic fluids. Be aware of and lessen the effects of operations that might irritate occupants of neighboring areas. Establishment of a buffer zone can abate concerns over smoke, dust, noise, and traffic.

Consider on-site traffic patterns and segregate materials based on planned volume reduction methods. Operations that modify the landscape, such as substrate compaction and over excavation of soils when loading debris for final disposal, will adversely affect landscape restoration.

Debris removal/disposal should be viewed as a multi-staged operation with continuous volume reduction. There should be no significant accumulation of debris at temporary storage sites. Instead, debris should be constantly flowing to burners and grinders, or recycled with the residue and mixed construction and demolition materials going to a landfill.

TDSR Site Closeout

Each TDSR site will eventually be emptied of all material and be restored to its previous condition and use. The Contractor is required to remove and dispose of all mixed debris, construction and demolition debris, and debris residue to approved landfills. Appropriate Douglas County inspectors will monitor all closeout activities to ensure that the Contractor complies with the Debris Removal and Disposal Contract. Additional measures may be necessary to meet local, State, and Federal environmental requirements because of the nature of the TDSR site operation(s).

A. TDSR Site Closeout Planning

The Contractor must assure the Debris Manager that all TDSR sites are properly remediated. There will be significant costs associated with this operation as well as close scrutiny by the local press and environmental groups. Site remediation will go smoothly if baseline data collection and site operation procedures are followed. Closeout or re-approval of a TDSR site should be accomplished within 30 days of receiving the last load of debris.

B. TDSR Site Closeout Steps

1. Contractor is responsible for removing all debris from the site.
2. Contractor conducts an environmental assessment with the Debris Manager and landowner.
3. Contractor develops a remediation plan.

4. Remediation plan reviewed by the Debris Manager, landowner, and appropriate environmental agency.
5. Remediation plan approved by the appropriate environmental agency.
6. Contractor executes the plan.
7. Contractor obtains acceptance from the Debris Manager, appropriate environmental agency, and the landowner.

C. TDSR Site Closeout Coordination

The Contractor will coordinate the following closeout requirements through the DCOT staff:

- Coordinate with local and State officials responsible for construction, real estate, contracting, project management, and legal counsel regarding requirements and support for implementation of a site remediation plan.
- Establish an independent testing and monitoring program. The Contractor is responsible for environmental restoration of both public and leased sites. The Contractor will also remove all debris from sites for final disposal at landfills prior to closure.
- Refer to appropriate and applicable environmental regulations.
- Prioritize site closures.
- Schedule closeout activities.
- Determine separate protocols for ash, soil and water testing.
- Develop decision criteria for certifying satisfactory closure based on limited baseline information.
- Develop administrative procedures and contractual arrangements for closure phase.
- Inform local and State environmental agencies regarding acceptability of program and established requirements.
- Designate approving authority to review and evaluate Contractor closure activities and progress.
- Retain staff during closure phase to develop site-specific remediation for sites, as needed, based on information obtained from the closure checklist shown below.

D. Material Removal

1. All processed and unprocessed vegetative material shall be removed to a properly approved solid waste management site.
2. Tires must be disposed of at a scrap tire collection/processing facility; white goods and other scrap metal should be separated for recycling.
3. Burn residues shall be removed to a properly approved solid waste management site or land applied in accordance with these guidelines.
4. All other materials, unrecoverable metals, insulation, wallboard, plastics, roofing material, painted wood, and other material from demolished buildings that is not inert debris (see #1 above) as well as inter debris that is mixed with such materials shall be removed to a properly permitted C&D recycling facility, C&D landfill, or municipal solid waste landfill.

E. TDSR Site Remediation

During the debris removal process and after the material has been removed from each of the TDSR sites, environmental monitoring will be needed to close each of the sites. This is to ensure that no long-term environmental contamination is left on the site. The monitoring should be done on three different media: ash, soil, and groundwater.

Ash: The monitoring of the ash should consist of chemical testing to determine the suitability of the material

for either agricultural use or as a landfill cover material.

Soil: Monitoring of the soils should be by portable inspection methods to determine if any of the soils are contaminated by volatile hydrocarbons. The Contractors may do this if it is determined that hazardous material, such as oil or diesel fuel was spilled on the site. This phase of the monitoring should be done after the stockpiles are removed from the site.

Ground Water: The monitoring of the groundwater should be done to determine the probable effects of rainfall leaching through either the ash areas or the stockpile areas.

F. TDSR Site Closure Checklist

- ☐ Site number and location
- ☐ Date closure complete
- ☐ Household hazardous waste removed
- ☐ Contractor equipment and temporary structures removed
- ☐ Contractor petroleum spills remediated
- ☐ Ash piles removed
- ☐ Comparison of baseline information to conditions after the contractor has vacated the temporary site

G. Site Re-approval

Sites that were approved as TDSR sites will require re-approval for long-term storage, continuing reduction processing, and permanent disposal if site is not closed out in accordance with guidelines stated here. Sites shall be managed and monitored in accordance with the Health Department requirements and to prevent threats to the environment or public health.

Temporary Construction and Demolition Staging / Transfer Site Guidelines

General

The following guidelines should be considered when establishing staging/transfer sites for Construction & Demolition (C&D) and C&D recycling treatment and processing facilities.

These guidelines apply only to sites for staging/transferring C&D storm debris (roof shingles/roofing materials, carpet, insulation, wallboard, treated and painted lumber, etc.). Arrangements should be made to screen out unsuitable materials, such as household garbage, white goods, asbestos containing materials (ACM's), and household hazardous waste.

Selecting Temporary Staging / Transferring Sites

Locating sites for staging/transferring C&D waste can be accomplished by evaluating potential sites and by revisiting sites used in the past to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site. The following guidelines are presented in locating a site for "staging/transferring" and are considered "minimum standards" for selecting a site for use:

- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your County to verify these areas. Due to heavy rains and saturated conditions that result, flooding may occur more frequently than normally expected.
- Unloading areas for incoming C&D debris material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings, structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
- Materials separated from incoming C&D debris (white goods, scrap metal, etc.) shall be at least 50 feet from site property lines. Other non-transferable C&D wastes (household garbage, larger containers of liquid, household hazardous waste) shall be placed in containers and transported to the appropriate facilities as soon as possible.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
- Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
- Sites should be secure after operating hours to prevent unauthorized access to the site.
- Temporary measures to limit access to the site could be the use of trucks or equipment to block entry.
- Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks.
- When possible, Site management will install signs to inform haulers and the general public on

- types of waste accepted, hours of operation, and who to contact in case of after-hours emergency.
- Final written approval is required to consider any TDSR site to be closed. Closeout of processing/recycling sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the State may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closeout of sites shall be in accordance with the closeout and restoration of TDSR sites guidelines.

C&D Treatment & Processing/Recycling Sites

Management of C&D debris and source separated materials to be recycled shall be in accordance with the following additional conditions:

- Contact the County Health Department for information on managing asbestos containing materials (ACM's) or materials that are considered regulated asbestos containing materials.
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your County to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected.
- Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site verification by the local Corps of Engineers office or will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Storage areas for incoming C&D debris shall be at least 100 feet from the site property boundaries, on-site buildings, structures, and septic tanks with leach fields or at least 250 feet from off-site residential dwellings, commercial or public structures, and potable water supply wells, whichever is greater.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks / trailers used to haul debris and the intense heat generated by the air curtain burner (ACB) device. Underground utilities need to be identified prior to digging pits for using the ACB device.
- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also include information as to whether only commercial haulers or the general public may deposit waste.

- Final written approval is required to consider any TDSR site to be closed. Closeout of processing / recycling sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site by the State may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.

Temporary Vegetative TDSR Site Guidelines

General

When preparing temporary facilities for handling debris resulting from the clean-up efforts due to disaster damage, the following guidelines should be considered when establishing Temporary TDSR sites.

These guidelines apply only to sites for staging or burning vegetative storm debris (yard waste, trees, limbs, stumps, branches, and untreated or unpainted wood). Arrangements should be made to screen out unsuitable materials.

The two method (s) of managing vegetative and land clearing storm debris is "chipping/grinding" for use in landscape mulch, compost preparation, and industrial boiler fuel or using an "air curtain burner (ACB)", with the resulting ash being land applied as a liming agent or incorporated into a finished compost product as needed.

Chipping and Grinding Sites

Locating sites for chipping/grinding of vegetative and land clearing debris will require a detailed evaluation of potential sites and possible revisits at future dates to see if site conditions have changed or if the surrounding areas have changed significantly to alter the use of the site.

The following guidelines are presented in locating a site for "chipping/grinding" and are considered "minimum standards" for selecting a site for use:

- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your County to verify these areas. Due to heavy rains and saturated conditions that result, flooding may occur more frequently than normally expected.
- Storage areas for incoming debris and processed material should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris and processed material shall be at least 100 feet from the site property boundaries and on-site buildings/structures. Management of processed material shall be in accordance with the guidelines for reducing the potential for spontaneous combustion in compost/mulch piles.
- Storage areas for incoming debris shall be located at least 100 feet from residential dwellings, commercial or public structures, potable water supply wells, and septic tanks with leach fields.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris, and underground utilities need to be identified due to the potential for site disturbance by truck/equipment traffic and possible site grading.
- Sites shall have an attendant(s) during operating hours to minimize the acceptance of unapproved materials and to provide directions to haulers and private citizens bringing in debris.
- Sites should be secure after operating hours to prevent unauthorized access to the site. Temporary measures to limit access to the site could be the use of trucks or equipment to block entry. Gates, cables, or swing pipes should be installed as soon as possible for permanent access control, if a site is to be used longer than two weeks. Sites should have

adequate access that prohibits traffic from backing onto public rights-of-way or blocking primary and/or secondary roads to the site.

- When possible, signs should be installed to inform haulers and the general public on types of waste accepted, hours of operation, and who to contact in case of an after-hours emergency.
- Grinding of clean wood waste such as pallets and segregated non-painted/non-treated dimensional lumber is allowed.
- Final written approval is required to consider any TDSR site to be closed. Closeout of staging and processing sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed. Closeout of sites shall be in accordance with the closeout and restoration guidelines for TDSR sites.

Air Curtain Burner Site Location and Operations

Locating sites that are intended for air curtain burning (ACB) operations is a coordinated effort between Douglas County and the State of Colorado for evaluating the surrounding areas and to reevaluate potential sites used in the past.

The following guidelines are presented for selecting an ACB site and operational requirements once a site is in use:

- Contact the local fire marshal or fire department for input into site selection in order to minimize the potential for fire hazards, other potential problems related to firefighting that could be presented by the location of the site, and to ensure that adequate fire protection resources are available in the event of an emergency.
- The requirements for ACB device(s), in accordance with Air Quality rules require the following buffers: a minimum of 500 feet from the ACB device to homes, dwellings and other structures and 250 feet from roadways. Contact the Colorado Department of Natural Resources for updates or changes to their requirements.
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the location in your County to verify these areas. Due to heavy rains associated with hurricanes and saturated conditions that result, flooding may occur more frequently than normally expected. If ACB pit devices are utilized, a minimum two-foot separation to the seasonal high water table is recommended. A larger buffer to the seasonal high water table may be necessary due to on-site soil conditions and topography.
- Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. "Waters of the state" includes but is not limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Air Curtain Burners in use should be located at least 200 feet from on-site storage areas for incoming debris, on-site dwellings and other structures, potable water supply wells, and septic tanks and leaching fields.
- Wood ash stored on-site shall be located at least 200 feet from storage areas for incoming debris, processed mulch or tub grinders (if a grinding site and ACB site is located on the same property). Wood ash shall be wetted prior to removal from the ACB device or earth pit and placed in storage. If the wood ash is to be stored prior to removal from the site, then rewetting may be necessary to minimize airborne emissions.
- Wood ash to be land applied on site or off site shall be managed in accordance with the guidelines for the land application of wood ash from storm debris burn sites. The ash shall be incorporated into the soil by the end of the operational day or sooner if the wood ash becomes dry and airborne.
- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged, and a 100-foot buffer shall be maintained for all activities on-going at the site.

- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris and the intense heat generated by the ACB device. Underground utilities need to be identified prior to digging pits for using the ACB device.
- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also, include information as to whether only commercial haulers or the general public may deposit waste.
- Closeout of air curtain burner sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.

Air Curtain Burner Site Location and Operations

Locating sites that are intended for air curtain burning (ACB) operations is a coordinated effort between Douglas County and affected agencies for the purposes of evaluating the surrounding areas and to reevaluate potential sites used in the past.

The following guidelines are presented for selecting an ACB site and operational requirements once a site is in use:

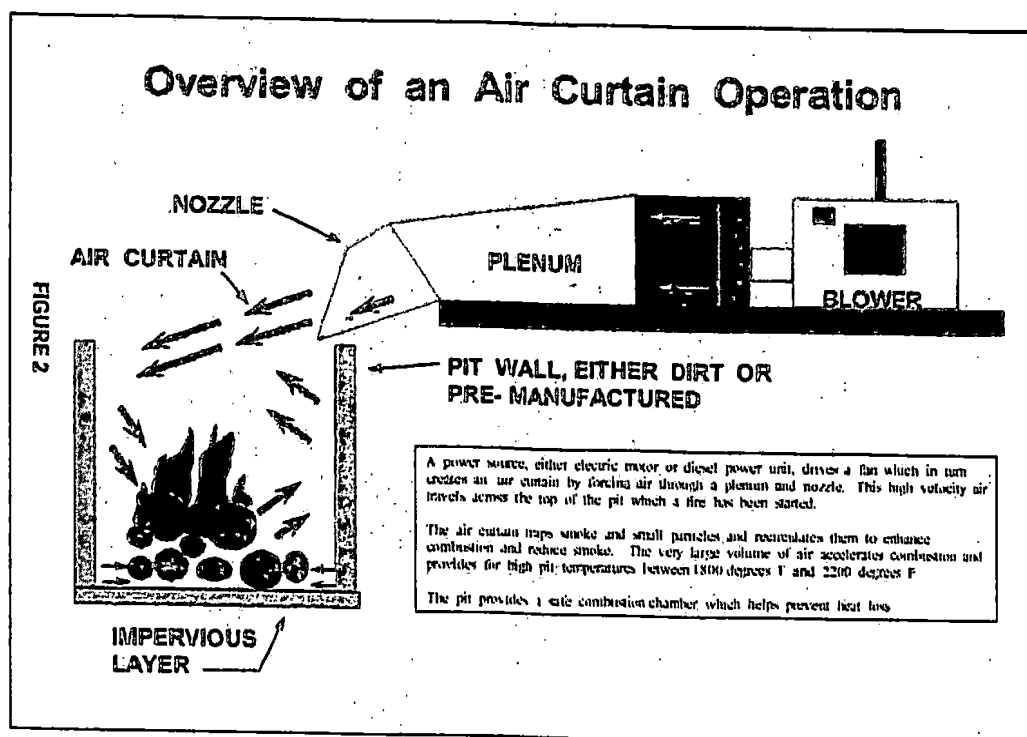
- Contact the local fire marshal or fire department for input into site selection in order to minimize the potential for fire hazards, other potential problems related to firefighting that could be presented by the location of the site, and to ensure that adequate fire protection resources are available in the event of an emergency.
- The requirements for ACB device(s), in accordance with Air Quality rules require the following buffers:
 - A minimum of 500 feet from the ACB device to homes, dwellings and other structures
 - A minimum of 250 feet from roadways

Contact the Colorado Department of Natural Resources for updates or changes to their requirements.

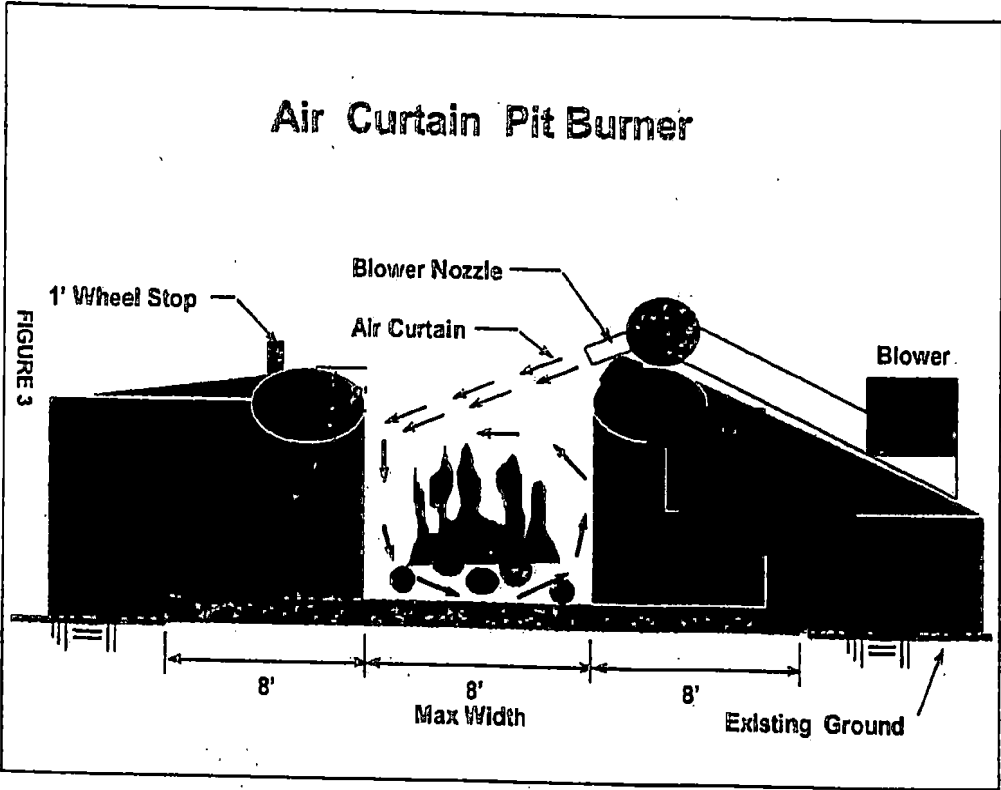
- Sites should be located outside of identifiable or known floodplain and flood prone areas; consult the Flood Insurance Rate Map for the selected location for verification of these areas. Due to heavy rains and saturated conditions, flooding may occur more frequently than normally expected. If ACB pit devices are utilized, a minimum two-foot separation to the seasonal high water table is recommended. A larger buffer to the seasonal high water table may be necessary due to the on-site soil conditions and topography.
- Storage areas for incoming debris should be at a minimum 100 feet from all surface waters of the state. Waters of the state includes but is no limited to small creeks, streams, watercourses, ditches that maintain seasonal groundwater levels, ponds, wetlands, etc.
- Storage areas for incoming debris shall be located at least 100 feet from property boundaries and on-site buildings/structures.
- Air Curtain Burners in use should be located at least 200 feet from on-site storage areas for incoming debris, on-site dwellings and other structures, potable water supply wells, and septic tanks and leaching fields.
- Wood ash stored on-site shall be located at least 200 feet from storage areas for incoming debris, processed mulch or tub grinders (if a grinding site and ACB site is located on the same property). Wood ash shall be wetted prior to removal from the ACB device or earth pit and placed in storage. If the wood ash is to be stored prior to removal from the site, then rewetting may be necessary to minimize airborne emissions.
- Wood ash to be land applied on-site or off-site shall be managed in accordance with the guidelines for the land application of wood ash from storm debris burn sites. The ash shall be incorporated into the soil by the end of the operational day or sooner if the wood ash becomes dry and airborne.

- Sites that have identified wetlands should be avoided, if possible. If wetlands exist or wetland features appear at a potential site, verification by the local Corps of Engineers office will be necessary to delineate areas of concern. Once areas are delineated, the areas shall be flagged, and a 100-foot buffer shall be maintained for all activities on-going at the site.
- Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks/trailers used to haul debris and the intense heat generated by the ACB device. Underground utilities need to be identified prior to digging pits for using the ACB device.
- Provisions should be made to prevent unauthorized access to facilities when not open for use. As a temporary measure, access can be secured by blocking drives or entrances with trucks or other equipment when the facilities are closed. Gates, cables, or other more standard types of access control should be installed as soon as possible.
- When possible, post signs with operating hours and information about what types of clean up waste may be accepted. Also, include information as to whether only commercial haulers or the general public may deposit waste.

Closeout of air curtain burner sites shall be within one (1) year of receiving waste. If site operations will be necessary beyond this time frame, permitting of the site may be required. If conditions at the site become injurious to public health and the environment, then the site shall be closed until conditions are corrected or permanently closed.



Based on FEMA 325, *Debris Management Guide*, Appendix H, Figure 2, 1999.



Based on FEMA 325, *Debris Management Guide*, Appendix H, Figure 3, 1999.

Environmental Checklist for Air Curtain Pit Burners

Incineration site inspections will also include an assessment of the environmental controls being used by the Contractor. Environmental controls are essential for all incineration methods, and the following will be monitored.

- ☐ A setback of at least 1,000 feet should be maintained between the debris piles and the incineration area. Keep at least 1,000 feet between the incineration area and the nearest building. Contractor should use fencing and warning signs to keep the public away from the incineration area.
- ☐ The fire should be extinguished approximately two hours before anticipated removal of the ash mound. The ash mound should be removed when it reaches 2 feet below the lip of the incineration pit.
- ☐ The incineration area should be placed in an aboveground or below ground pit that is no wider than 8 feet and between 9 and 14 feet deep.
- ☐ Above ground incineration pits should be constructed with limestone and reinforced with earth anchors or wire mesh to support the weight of the loaders. There should be a 1-foot impervious layer of clay or limestone on the bottom of the pit to seal the ash from the aquifer.
- ☐ The ends of the pits should be sealed with dirt or ash to a height of 4 feet.
- ☐ A 12-inch dirt seal should be placed on the lip of the incineration pit area to seal the blower nozzle. The nozzle should overlap the pit edge by 3 to 6 inches.
- ☐ There should be 1-foot high, unburnable warning stops along the edge of the pit's length to prevent the loader from damaging the lip of the incineration pit.
- ☐ Hazardous or contaminated ignitable material should not be placed in the pit. This is to prevent contained explosions.
- ☐ The airflow should hit the wall of the pit about 2 feet below the top edge of the pit, and the debris should not break the path of the airflow except during dumping.
- ☐ The pit should be no longer than the length of the blower system and the pit should be loaded uniformly along its length.

Land Application of Wood Ash from Storm Debris Burn Sites Guidelines

- Whenever possible, soil test data and waste analysis of the ash should be available to determine appropriate application rate.
- In the absence of test data to indicate agronomic rates, application should be limited to 2 to 4 tons per acre/one-time event. If additional applications are necessary, due to the volume of ash generated and time frame in which the ash is generated, then an ash management plan will be needed.
- Ash should be land applied in a similar manner as agricultural limestone.
- Ash should not be land applied during periods of high wind to avoid the ash blowing off the application sites.
- Ash should not be land applied within 25 feet of surface waters or within 5 feet of drainage ways or ditches on sites that are stabilized with vegetation. These distances should be doubled on sites that are not vegetated and the ash should be promptly incorporated into the soil.
- Records should be maintained to indicate where ash is applied and the approximate quantities of ash applied.
- As an option to land application, ash may be managed at a permitted municipal solid waste landfill after cooling to prevent possible fire.
- Assistance in obtaining soil test data and waste analysis of ash should be available through Colorado Department of Natural Resources.

Reducing the Potential for Spontaneous Combustion in Compost or Mulch Piles Guidelines

- When ground organic debris is put into piles, microorganisms can very quickly begin to decompose the organic materials. The microorganisms generate heat and volatile gases as a result of the decomposition process. Temperatures in these piles can easily rise to more than 160 degrees Fahrenheit. Spontaneous combustion can occur in these situations.
- Spontaneous combustion is more likely to occur in larger piles of debris because of a greater possibility of volatile gases building up in the piles and being ignited by the high temperatures. If wind rows can be maintained 5 feet to 6 feet high and 8 feet to 10 feet wide, volatile gases have a better chance of escaping the piles; and the possibility of spontaneous combustion will be reduced.
- Turning piles when temperatures reach 160 degrees can also reduce the potential for spontaneous combustion. Pile turning provides an opportunity for gases to escape and for the contents of the pile to cool. Adding moisture during turning will increase cooling. Controlling the amount of nitrogen-bearing (green) wastes in piles will also help to reduce the risk of fire. The less nitrogen in the piles the slower the decomposition process and consequently the less heat generated and gases released.
- Large piles should be kept away from wooded areas and structures and should be accessible to fire fighting equipment, if a fire were to occur. Efforts should be made to avoid driving or operating heavy equipment on large piles because the compaction will increase the amount of heat build-up, which could increase the possibility of spontaneous combustion.

APPENDIX E

Douglas County Emergency and Disaster Finance Policy

**DOUGLAS COUNTY
ADMINISTRATIVE POLICIES AND PROCEDURES**

TITLE: Emergency and Disaster Finance Policy	
POLICY CUSTODIAN Finance	APPROVAL DATE: September 2011
	REVISION DATE: October 2018

PURPOSE: To ensure the proper and efficient process of specific governmental functions relating to the procurement transactions, contracts, purchasing cards limits and approval authority for allocation of funds when required during an emergency/disaster situation as defined by the Colorado Disaster Emergency Act of 1992, (Part 21 of Article 32, Title 24 of the Colorado Revised Statutes, 1996 as amended).

**DEPARTMENT
RESPONSIBLE:** Finance

**DEPARTMENT(S)
AFFECTED:** All

POLICY:

Delegation of Procurement, Contracts, Purchasing Cards Limits, Employees Overtime or Other Wage Compensation and Allocation of Funds Requirements during Emergency/Disaster Incident:

An emergency/disaster may create the immediate and serious need for supplies, equipment, materials, and services that can not be met through normal procurement methods and the lack of which would threaten the function of County government, or the health, safety or welfare of County residents. A need for an emergency procurement shall waive all existing procurement requirements and shall be limited only to the quantity of those supplies, equipment, materials, or services necessary to meet the emergency/disaster. All emergency procurement shall be made with as much transparency and competitive bid process that is practical under the circumstances.

An emergency/disaster may create the immediate need for contracted services or other resources that cannot meet all the requirements of the County's Contract Policy. Under emergency/disaster circumstances, the inability to have a contract or agreement would threaten the operation of County government, or the health, safety and welfare of County residents. The normal County's Contract Policy requires that contracts and agreements receive legal and fiscal review and approval prior to execution. This would still apply to the extent possible but could be waived if critical to ensure the success of the management of the emergency/disaster incident.

When requested during an emergency/disaster incident, the purchasing card amounts for designated employees may be increased and to be limited only to the quantity of those supplies, equipment, materials or services necessary to meet the emergency/disaster.

In the event of an emergency/disaster in or near the County, all County employees are expected to make every effort be available to assist the County Manager, Elected/Appointed Officials and Department Directors ensure the continued operation of any and all necessary County functions. This may mean being available to perform additional duties and hours beyond what is normally required. In the event that an employee does work more than 40 hours a week in support of County operations during an emergency, or are otherwise eligible, then they may receive overtime or other appropriate wage compensation in accordance with existing County policies."

Under normal operations, the spending levels of authority apply to commitments made per vendor are:

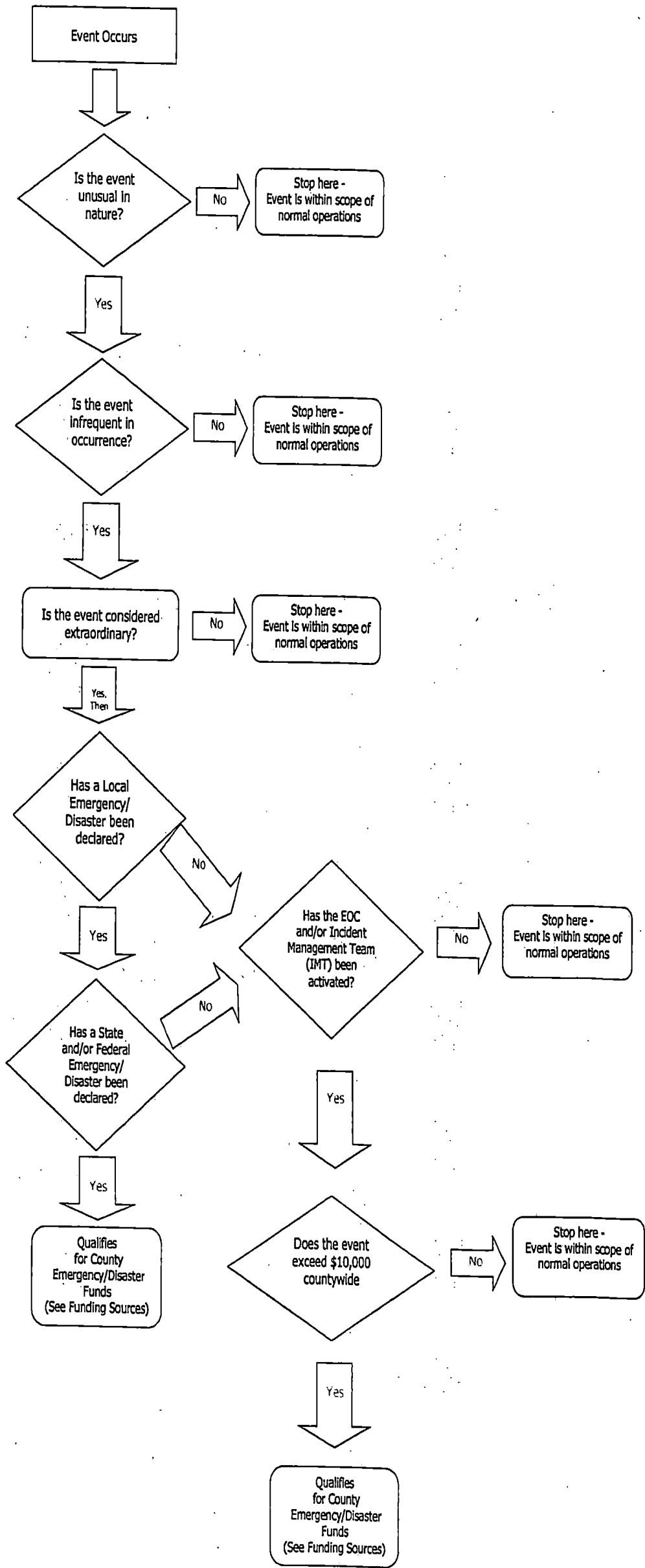
- Up to and including \$25,000 may be approved by Elected Official or Department Director
- Up to and including \$100,000 may be approved by County Manager or Deputy County Manager
- Over \$100,000 must be approved by the Board at a public hearing.

Based upon the Use of Emergency Funds Criteria Flowchart, Figure 1, when it becomes necessary to utilize emergency funds, approval authority shall be as follows:

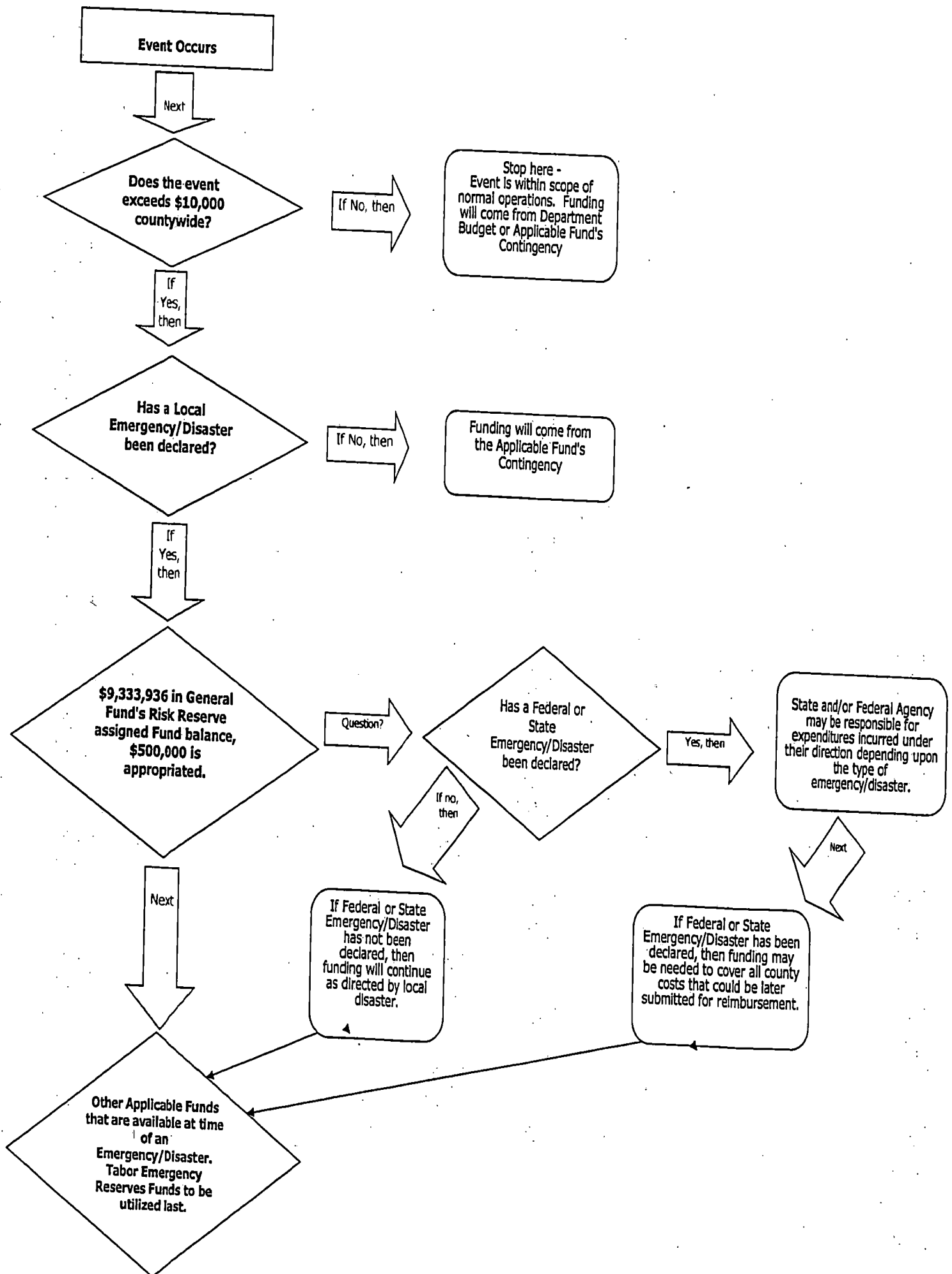
- In accordance with the EDAR, authorizes, in the absence of the County Manager, that the Deputy County Manager, and then the Director of Finance, and then the Director of Facilities, Fleet and Emergency Services, in that successive order, will have access to the emergency funds up to and including \$100,000 that apply to commitments made per vendor during the emergency/disaster period.
- In accordance with the EDAR, authorizes the County Manager, in the absence of the Board of County Commissioners, to act with the full authority of the Board of County Commissioners during a State of Emergency and/or Local Disaster.
- Resources shall be ordered in accordance with appropriate channels to ensure tracking by Finance.
- The appropriation of emergency funds from fund balance requires approval through a supplement budget at a public meeting that is noticed in the local paper. During an emergency/disaster funding can be obtained from non-restricted appropriated operating and/or capital funds until the supplemental budget can be approved at which time these operating or capital funds can be repaid with emergency funds as referenced in the Source of Funding – Emergency/Disaster Flowchart, Figure 2.

TABOR Emergency Reserves are to be used “for declared emergencies only”. “Emergency” for using TABOR emergency reserves shall be strictly limited as defined herein. TABOR Emergency Reserves should be repaid whenever possible within the year. The County should use funds in a sequence that leaves utilizing the TABOR Emergency Reserve as a last resort after exhausting other available funds.

Use of Emergency Funds Criteria



Sources of Funding - Emergency/Disaster



APPENDIX F

Acronyms and Definitions

LIST OF ACRONYMS

AC	Acre
ACI	Advance Contracting Initiative (USACE)
C&D	Construction and Demolition
CDPHE	Colorado Department of Public Health and Environment
CY	Cubic Yard
DCOT	Debris Contractor Oversight Team
TCHD	Tri-County Health Department
DM	Debris Manager
DDM	Deputy Debris Manager
DMC	Debris Management Center
DMS	Debris Management Site
DPW	Department of Public Works
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
GSA	General Services Administration
HHW	Household Hazardous Waste
OEM	Office of Emergency Management
PIO	Public Information Officer
PRT	Planning and Response Team
SWS	Solid Waste Services
TDSR	Temporary Debris Staging and Reduction
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
WMD	Weapons of Mass Destruction

DEFINITIONS

Burning – Reduction of woody debris by controlled burning. Woody debris can be reduced in volume by approximately 95% through burning. Air curtain burners are recommended because they can be operated in a manner to comply with clean-air standards.

Chipping or Mulching – Reducing wood related material by mechanical means into small pieces to be used as mulch or fuel. Woody debris can be reduced in volume by approximately 75%, based on data obtained during reduction operations. The terms “chipping” and “mulching” are often used interchangeably.

Construction, Demolition and Land-Clearing Wastes – Any type of solid waste resulting from land-clearing operations, the construction of new buildings or remodeling structures, or the demolition of any building or structure.

Debris - Items and materials broken, destroyed, or displaced by a natural or man-made disaster. Examples: trees, construction and demolition material, personal property, and sediment.

Debris Clearance – Clearing the major road arteries by pushing debris to the roadside to accommodate emergency traffic.

Debris Management Site (DMS) – A location where debris is sorted, processed, reduced in volume, and/or disposed of (if debris management activities take place at a permanent disposal site).

Debris Removal – Picking up debris and taking it to a temporary storage site or permanent landfill.

Department of Public Works (DPW) – Department typically responsible for clearing debris from the roads and rights-of-way.

Federal Response Plan – A plan that describes the mechanism and structure by which the Federal government mobilizes resources and conducts activities to address the consequences of any major disaster or emergency that overwhelms the capabilities of State and local governments.

Final Debris Disposal – Placing mixed debris and/or residue from volume reduction operations into an approved landfill.

Force Account Labor – In this context, State, tribal or local government employees engaged in debris removal activities within their own jurisdiction.

Garbage – Waste that is normally picked up by a designated department or contractor. Examples: food, plastics, wrapping, papers.

Hazardous Waste – Any waste or combination of wastes of a solid, liquid, contained gaseous or semisolid form which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Also includes material and products from institutional, commercial, recreational, industrial and agricultural sources that contain certain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive; and/or 4) Reactive. Such wastes may include, but are not limited to, those that are persistent in nature, assimilated, or concentrated in tissue or which generate pressure through decomposition, heat, or other means. The term does not include solid or dissolved materials in domestic sewage or solid dissolved materials in irrigation return flows, or industrial discharges, which are point sources subject to state or federal permits.

Household Hazardous Waste (HHW) – Used or leftover contents of consumer products that contain chemicals with one or more of the following characteristics, as defined by the Environmental Protection Agency: 1) Toxic, 2) Flammable, 3) Corrosive and/or 4) Reactive. Examples of household hazardous waste include small quantities of normal household cleaning and maintenance products, latex and oil based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, and propane gas cylinders.

Hot Spots – Illegal dumpsites that may pose health and safety threats.

Illegal Dumping – Dumping garbage and rubbish, etc., on open lots is prohibited. No garbage, refuse, abandoned junk, solid waste or other offensive material shall be dumped, thrown onto, or allowed to remain on any lot or space within the County.

Industrial Waste – Any liquid, gaseous, solid, or other waste substance, or a combination thereof resulting from any process of industry, manufacturing, trade, or business or from the development of any natural resources.

Monitoring – Actions taken to ensure that a Contractor complies with the contract scope of work.

Mutual Aid Agreement – A written understanding between communities, states, or other government entities delineating the process of providing assistance during a disaster or emergency. (See FEMA Response and Recovery Directorate Policy Number 9523.6, "Mutual Aid Agreements for Public Assistance", dated August 17, 1999.)

Recycling – The recovery and reuse of metals, soils, and construction materials that may have a residual monetary value: The County encourages the voluntary participation of all of its residents to reduce the waste stream through recycling. Residents are strongly encouraged to recycle all items that are recyclable and throw away for ultimate landfill disposal only those items, which cannot be recycled. Special containers are provided at numerous manned recycling and solid waste centers for the storage and collection of:

- Newspapers
- Green glass
- Brown glass
- Clear glass
- Aluminum and bi-metal beverage cans
- PET plastic milk jugs
- HDPE plastic drink bottles
- Used motor oil
- Lead acid batteries
- Scrap metals and appliances including refrigerators, stoves, water heaters, etc.
- Composts including leaves, limbs, brush, and yard wastes

Rights-of-Way – The portions of land over which facilities such as highways, railroads, or power lines are built. Includes land on both sides of the facility up to the private property line.

Scale/Weigh Station – A scale used to weigh trucks as they enter and leave a landfill. The difference in weight determines the tonnage dumped and a tipping fee may be charged accordingly. Also may be used to determine the quantity of debris picked-up and hauled.

Sweeps – The number of times a contractor passes through a community to collect all disaster-related debris from the rights-of-way. Usually limited to three passes through the community.

Temporary Debris Storage and Reduction (TDSR) Site – A location where debris is temporarily stored until it is sorted, processed, and reduced in volume and/or taken to a permanent landfill.

Tipping Fee – A fee based on weight or volume of debris dumped that is charged by landfills or other waste management facilities to cover their operating and maintenance costs. The fee also may include amounts to cover the cost of closing the current facility and/or opening a new facility.

Trash – Non-disaster related yard waste, white metals, or household furnishings placed on the curbside for pickup by local solid waste management personnel. Not synonymous with garbage.

United States Army Corps of Engineers (USACE) – The primary missions of the USACE are the design and management of construction projects for the Army and Air Force, and to oversee various flood control and navigation projects. The USACE may be tasked by FEMA to direct various aspects of debris operations when direct Federal assistance, issued through a mission assignment, is needed.

Volume Reduction Operations – Any of several processes used to reduce the volume of debris brought to a temporary debris storage and reduction site. It includes chipping and mulching of woody debris, shredding and baling of metals, air curtain burning, etc.

White Metals/Goods – Household appliances such as refrigerators, washers, dryers, and freezers.

Windshield Survey – Initial and cursory assessment, conducted by first responders and Damage Assessors, to understand the magnitude and scope of damages (and debris) for setting priorities and compiling an Initial Damage Assessment report.



COLORADO EMERGENCY MANAGEMENT ASSOCIATION

EOC Logistics Section Chief Task Book Evaluation Form

Date Evaluated: _____

Candidate Name: _____

Position: _____

Phone #: _____ Email: _____

1. Task Book Information

- ☐ Name of Candidate - *completed!*
- ☐ Final Evaluator - *completed!*
- ☐ Evaluation Records – Recommendations for Certification - *completed!*

2. Critical Performance Overview

- ☐ Assume Position Responsibilities - *completed!*
- ☐ Common Operative Picture – *completed!*
- ☐ EOC Processes and Support Systems – *completed!*
- ☐ Leadership / Accountability – *completed!*
- ☐ Work Group Supervision – *completed!*
- ☐ Operational Requirements – *completed!*
- ☐ Meeting, EOC Briefings, and Debriefings – *completed!*
- ☐ End of Operational Period / Transitions / Demobilization – *completed!*

3. Mandatory Prerequisites – Certificates Required for FEMA Courses!

- ☐ IS-100 (Intro to ICS) – *attached!*
- ☐ IS-200 (ICS for Single Resources & Initial Attack Incidents) – *attached!*
- ☐ IS-700.x (Intro to NIMS) – *attached!*
- ☐ IS-800.x (National Response Framework) – *attached!*
- ☐ IS-807.x (Logistics Management & Resource Annex – ESF-7) – *attached!*
- ☐ EOC Operations Manual Review / Knowledge – *completed!*
- ☐ Local Emergency Operations Plan Review / Knowledge – *completed!*
- ☐ WebEOC Review / Knowledge - *completed!*

4. Desired Prerequisites

- ☐ IS-230.x (Fundamentals of Emergency Management) – *attached!*
- ☐ IS-235.x (Emergency Planning)
- ☐ IS-241.x (Decision-Making & Problem-Solving) – *attached!*
- ☐ IS-244.x (Developing & Managing Volunteers) – *attached!*
- ☐ IS-703.x (NIMS Resource Management) – *attached!*
- ☐ ICS-300 (Intermediate ICS for Expanding Events) – *attached!*
- ☐ G-775 (EOC Management & Operations) – *attached!*
- ☐ E/L-967 (All-Hazards Logistics Section Chief) – *attached!*

Comments:

Recommendation:

- ☐ All required items were shown to be completed. The candidate should be considered for certification.
- ☐ All required items were **not** shown to be completed. The task book should be returned to the applicant for completion of required tasks or for additional documentation as noted above.

Signatures:

EOC Position Task Book Review Committee Member

Date Reviewed

EOC Position Task Book Review Committee Chair

Date Received