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CITY OF SPRINGFIELD EMERGENCY MANAGEMENT PLAN**11. ANNEX E: Debris Management**

→Lead Department: Development Services, Public Works
→Lead ICS Section: Operations/Public Works Branch

11.1 PURPOSE

This Annex describes procedures to be followed in the removal and recovery of debris resulting from natural and technological disasters or other major incidents. A coordinated effort will be necessary for the removal, collection, and disposal of debris generated from a large event. The goal will be to use existing solid waste best practice strategies and methods to reduce, reuse, recycle, or recover, with landfill as a final option. Initial debris assessment will determine if a disaster event is of significance to request assistance from outside resources. Debris Management staff will help establish priorities for the allocation of resources, collaborate with damage assessment team needs, physically remove debris, open transportation routes, and, if needed, locate temporary storage sites for the collection and recovery of debris.

11.2 SITUATION AND ASSUMPTIONS**11.2.1 Situation**

Disaster events such as windstorms, floods, earthquakes, and other natural and technological emergencies have the potential for causing extensive damage to public and private property. In order to facilitate a return to normalcy, the safety and appearance of the environment is of utmost importance. A planned debris removal and recovery procedure is essential for quickly opening major transportation arteries, providing access to critical facilities, and for removing debris-related threats to public health and safety.

Debris management needs will depend on the size and character of the event. Localized events may present challenges associated with the collection of hazardous materials and construction and demolition type debris. Natural events, such as floods, snow storms, and windstorms may present more organic material accumulations. The nature of the event will require that debris management procedures be flexible and dynamic. Substantial amounts of contaminated debris will result in the need for innovative solutions and decision-making.

The City of Springfield regulates the collection of garbage and recyclables within the city limits through a franchise agreement with a private collection firm. In a disaster

debris event, their responsibility will be to supply collection containers and to transport debris to appropriate processing facilities and regional landfills.

Lane County operates the current debris transfer station in Glenwood and the Short Mountain Landfill site south of Goshen. Lane County is responsible for disposal of solid waste generated within the county. Lane County's responsibilities include:

- Disposal of solid wastes at the Short Mountain Landfill;
- Operation of regional transfer stations;
- Hauling of solid waste from transfer stations to the Short Mountain Landfill site;
- Collection and processing of household hazardous wastes;
- Managing a public information program that provides options for disposal of a broad range of solid wastes (including reuse, recovery, recycling, composting, and landfill disposal).

11.2.2 Assumptions

- Information by initial damage assessment teams will be helpful in determining the amounts and types of debris as well as priorities for emergency debris removal;
- A large-scale disaster event will likely impact the lives of many local response staff to a degree that they may not be available for immediate emergency debris removal;
- Damage to City facilities and equipment may hamper initial emergency debris removal efforts;
- During most disasters, electricity will be lost for a period of time and communications systems will be lost or overloaded;
- Roads, bridges, and overpasses may be damaged, limiting access for debris removal;
- A local disaster will be declared. A State and Federal disaster may be declared;
- Emergency powers may be enacted during a declared disaster to prevent price gouging, to temporarily suspend codes and relax permit and zoning processes, and to streamline purchasing procedures;
- Contracts with private sector partners will be necessary to augment public efforts;
- Assume that debris may be contaminated with chemical and/or biological agents unless determined otherwise;
- In the event that debris sites are crime scenes, evidence procurement will take precedence over debris removal;
- Human and/or animal remains may be located within debris; see Care and Management of the Deceased Annex;
- The solid waste hierarchy for removing debris will be to reuse, recycle, compost, recover energy, and, finally, landfill.

11.3 GENERAL PROCEDURES AND RESPONSIBILITIES**11.3.1 Definition**

Debris management is a Planning Section/Public Works Section responsibility. The Public Works Director may appoint a Debris Management Director to coordinate all the phases of debris management.

The City of Springfield has distinct programs that will be brought together to coordinate disaster debris management.

11.3.2 Public Works/Maintenance Division

Public Works/Maintenance Division – Responsible for labor, dispatch, and equipment necessary for debris removal, storage, and recycling operations. Depending on the size of the disaster, staff will interface with private contractors operating collection equipment and managing recycling and disposal sites or may carry out these activities independently;

11.3.3 Public Works

Public Works Maintenance, Solid Waste and Recycling – Responsible for contract development, community education, and storage site plan. Staff will interface with the PIO, Oregon Department of Environmental Quality (DEQ), and the Federal Emergency Management Agency (FEMA).

Debris management consists of five phases:

- Damage assessment (carried out under Damage Assessment Annex);
- Debris forecasting/estimating;
- Public information activities;
- Debris removal;
- Temporary debris storage site operations.

11.3.4 Debris Forecasting/Estimating

Debris forecasting is crucial to determining the size of the response needed. In general, the following formula may be used to determine the amount of material that will be encountered from any building after the disaster event:

$$\frac{L \times W \times H}{27} \times .33 = \text{cubic yards of material}$$

Aerial and surface photos may be useful after a disaster event to assist in calculating the amount of debris generated. News reports should be constantly reviewed in order

to identify affected areas. The amounts and locations of debris generated will determine the size of the response necessary. For any event that results in more than 100 cubic yards of material being generated, assume that outside assistance will be required and that a temporary debris storage site may be necessary.

Debris forecasting activities will require special considerations in the event of a disaster that claims human or animal life. All debris should be evaluated for possible hazardous waste. Other considerations include historically sensitive structures, environmentally sensitive locations, salvageable items, crime scene integrity, and victim memorials. Safety consideration for debris removal personnel should at all times be paramount.

Debris estimates should be grouped into the following categories whenever possible in order to ascertain the collection equipment most appropriate to be dispatched:

- Putrescible (stinky stuff);
- Woody Recyclables;
- Non-Woody Recyclables;
- Miscellaneous Dry Waste;
- Hazardous Waste;
- Privately owned property (vehicles) on public roadways;
- Electronics Equipment;
- Dead Bodies.

11.3.5 Debris Storage Sites

Debris storage sites will be identified by the site selection teams from the County and City's Public Works agencies with assistance from local municipalities. Technical assistance may also be available from the State or Army Corps of Engineers.

Sites may need to be established where debris from residential buildings is temporarily stored by address. The owners or tenants of that address would be permitted to search the debris pile to salvage possessions, valuables, and family heirlooms.

The site selection size and area should comply with all applicable County, State, and Federal rules and regulations, including Fish and Wildlife, Forestry, Fire Conservation, Historical Preservation, State Department of Environmental Quality (DEQ) permitting, and the Endangered Species Act. Temporary storage/reduction site size should be appropriate size acreage.

The DEQ, Land Quality Division, Regional Environmental Solutions Section, permits disposal facilities within the state. In the event of a large disaster, this agency will be the contact for permits to establish temporary storage sites for debris. In the City of Springfield, the key position is the Waste Reduction Analyst. The permit application process will be expedited in the event of a disaster event.

The sites used in this Plan may be temporary or permanent. Sites may be restricted for one type of material or may be a multi-use site. The priority land ownership will be county, local, special district, state, federal, and, finally, private property, taking into consideration road condition and access.

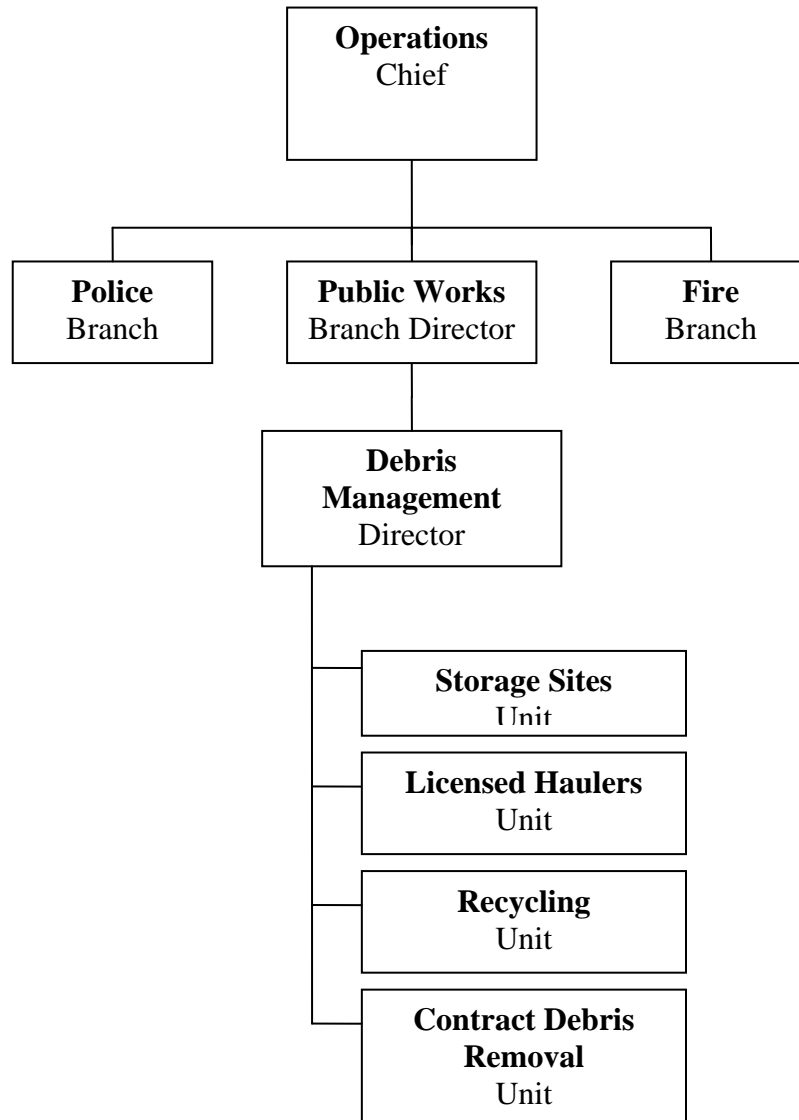
Sites selected and identified as potential areas in case of a disaster will be inventoried. The inventory of potential sites is kept in the Resource Guide. Prior to use of a site, the following activities will be completed at a minimum:

- Site survey;
- Documentation;
- Photos/video of area;
- Condition of roads;
- Soil samples;
- Water samples;
- Land stability samples.

11.3.6 Debris Management Annex Organizational Chart

See organizational chart on the following page.

CHAIN OF COMMAND
Debris Management Annex
Organizational Chart



11.4 PHASES OF EMERGENCY MANAGEMENT

11.4.1 Preparedness

→Departments Involved: PW, Development Svcs, Fire & Life Safety, Police

- Maintain list of potential sites for temporary storage and recycling activities (see Resource Guide);
- Maintain list of licensed hauling and removal contractors for removal activities (see Resource Guide);
- Maintain list of recycling processes (see Resource Guide);
- Maintain sample contracts for debris removal activities;
- Periodically review debris removal plans of other jurisdictions;
- Maintain a file of professional journal articles concerning debris removal;
- Periodically communicate with State and County officials regarding debris removal planning;
- Maintain public information information regarding debris removal.

11.4.2 Response

→Departments Involved: PW, Development Svcs, Fire & Life Safety, Police

11.4.2.1 Debris Management Director

Position:	Debris Management Director
Responsible Department/Division:	Public Works/Development Services
Emergency Supervisor (title):	Public Works Branch Director
Reports to (location):	Public Works
Applicable ICS Section:	Operations

- Oversee all phases of debris removal;
- Provide debris removal information to PIO;
- Coordinate FEMA reimbursement recordkeeping process and ensure documentation requirements are met;
- Work with PW Branch Director to establish debris removal priority areas;
- Ensure damage assessment activities are completed prior to debris removal;
- Coordinate debris removal with police and fire operations;
- Coordinate with state and regional officials regarding permits and disposal procedure;
- Establish recycling, reuse, and disposal priorities;
- Identify equipment needs;
- Determine City involvement, i.e., decide when to bring in private contractors;

- Staff EOC as needed;
- Maintain unit log.

11.4.2.2 Storage Site Unit Supervisor

Position:	Storage Site Unit Supervisor
Responsible Department/Division:	Public Works/Development Services
Emergency Supervisor (title):	Debris Management Director
Reports to (location):	Public Works
Applicable ICS Section:	Operations

- Oversee all activities related to operation of temporary storage sites;
- Determine storage site location(s);
- Communicate storage site location(s) to contractors, City staff, EOC, PIO;
- Prioritize and delegate activities at storage site(s);
- Document initial condition of storage site(s), adjacent properties, and entry/exit roads;
- Document ongoing operations;
- Document volumes and types of materials handled;
- Develop signage for site(s);
- Ensure site security;
- Prioritize recycling, reuse, and disposal activities in coordination with Unit Director;
- Secure necessary state permits for site(s);
- Maintain unit log.

11.4.2.3 Recycling Unit Supervisor

Position:	Recycling Unit Supervisor
Responsible Department/Division:	Public Works/Development Services
Emergency Supervisor (title):	Debris Management Director
Reports to (location):	Public Works
Applicable ICS Section:	Operations

- Oversee all aspects of recycling operations related to debris removal;
- Prioritize recycling, reuse, and disposal activities; ensure maximum use of recycling and reuse opportunities;
- Develop contracts with processors;
- Coordinate recycling locations with licensed hauler unit supervisor;
- Document recovery volumes;
- Coordinate hazardous waste removal and processing;
- Work with Volunteer Coordinator to utilize volunteers for recycling efforts;
- Maintain unit log.

11.4.2.4 Licensed Hauler Unit Supervisor

Position:	Licensed Hauler Unit Supervisor
Responsible Department/Division:	Public Works/Development Services
Emergency Supervisor (title):	Debris Management Director
Reports to (location):	Public Works
Applicable ICS Section:	Operations

- Oversee all licensed hauler activities related to debris removal;
- Develop and administer contracts with licensed haulers;
- Document expenses;
- Communicate debris removal priorities for recycling, reuse, and disposal;
- Develop driver authorization documents;
- Provide routing information;
- Provide maps and information on storage site locations;
- Coordinate community collection information with PIO;
- Coordinate garbage and recycling services for mass care facilities;
- Maintain unit log.

11.4.2.5 Contract Debris Removal Unit Supervisor

Position:	Contract Debris Removal Unit Supervisor
Responsible Department/Division:	Public Works/Development Services
Emergency Supervisor (title):	Debris Management Director
Reports to (location):	Public Works
Applicable ICS Section:	Operations

- Develop and administer contracts with vendors for debris removal (sample debris removal contracts available at Public Works Maintenance);
- Document debris removal by type and volume;
- Document conditions of contract equipment prior to proceeding with any work;
- Maintain unit log.

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