



Planning Ahead for Municipal Disaster Debris Management

Background

The Maine Department of Environmental Protection (Department) is providing this guidance to help you plan ahead for management of disaster debris. Disaster debris includes vegetative wastes, and limited amounts of demolition debris and MSW resulting from extreme weather events like ice storms, snow storms, or heavy rains. During and after a disaster, there may be the need to quickly remove trash, damaged furnishings, appliances, building debris or woody material from residences, businesses, roadways and open spaces, and temporarily store that debris at a pre-selected site before being able to transfer it to an appropriate disposal facility(ies).

Selecting appropriate site(s) for temporary management of disaster debris and having a plan in place before disaster strikes will help you manage large quantities of debris more safely, more efficiently, and in a more environmentally sound manner. Although you do not need to license temporary disaster debris storage sites, the Department can provide pre-authorization of sites that meet standards to avoid impacts to public health or the environment. This guidance builds on lessons learned from natural disasters we have already experienced in Maine and our region.

Pre-planning

For your initial site selection process, the Department recommends that you consider areas in your municipality that may be suitable for temporary debris storage, sorting, and processing during or after a disaster when quantities may exceed the capacity of your existing waste management infrastructure. When you have identified one or more possible sites, contact Department staff for feedback and guidance to help you confirm the most appropriate site.

To ensure debris storage sites meet FEMA requirements when Federal funding may be available for disaster expense reimbursement, the Department will provide written pre-authorization for temporary disaster debris management sites for municipalities without requiring a license or fees. Department staff can provide guidance to ensure that you select a site and plan operations so your debris management has minimal adverse impact to the environment or public health.

Please note that the Department's guidance is aimed at reducing health and environmental impacts; because there are many other factors to consider, the Department strongly recommends that you also seek guidance from the Maine Emergency Management Agency (MEMA) and the Federal Emergency Management Agency (FEMA). For instance, they may have specific

requirements on tracking of materials received/managed to provide reimbursement of your expenses. Confirming your debris management plan with state and federal agencies prior to a disaster declaration may increase the likelihood of recovering costs incurred from your debris management operations during a federally declared natural disaster.

Siting Considerations

Concerns and issues to keep in mind when selecting a temporary debris management site include:

- A temporary debris management site is to be used only during an emergency. A formal declaration by the Governor or President is a good indicator of an appropriate event for site use, and the Department may approve use on a case-by-case basis.
- Municipally or publicly-owned properties are preferred, to avoid the need for lease agreements and to minimize the potential for disagreement about property restoration after debris is removed.
- Existing solid waste facilities may be ideal if there is adequate space nearby, since they are already designed to minimize potential problems from waste handling; remember to talk with your DEP project manager.
- Sites should be accessible during extreme weather events. For example, properties accessible only by roads prone to flooding or washout during extreme weather should be avoided, and debris management sites should not be located in flood zones.
- Large (more than one acre in size), open sites with a paved or firm gravel or soil surface are preferable; avoid sites with clay soils that will become a morass with heavy rains.
- Sites should be accessible by heavy truck traffic. To the extent practicable, avoid using sites that would require heavy trucks to travel on evacuation routes during a storm event.
- Avoid sensitive areas such as watershed protection areas, public drinking water supplies, and protected resources such as wetlands, streams, rivers, and ponds, fragile ecosystems, or significant wildlife habitat.
- Consider possible impact from noise, dust, and traffic, and try to avoid densely populated residential areas, schools, and hospitals.

Storage and processing considerations

In addition to site selection, consider methods for sorting, storing, and processing debris, as well as where the sorted or processed wastes will be sent. You may want to roughly designate specific

areas within the site for the various types of waste expected to minimize contamination and improve management of the debris.

In the case of woody vegetation, for example, marketable logs may be taken to sawmills, while branches, brush, and stumps may be ground to produce biomass fuel chips, mulch, or erosion control material. Untreated wood separated from demolition debris may be sent to licensed processing facilities for conversion into wood fuel chips, or, if the site is appropriate, provide for 'on-site' grinding of the clean wood debris. Separated metal and appliances may be taken to metal recycling facilities. In many cases, outlets for disaster debris may be similar to the ones that you use for routine waste management, but since quantities may be large you may want to contact additional facilities to discuss delivery of excess material resulting from disasters. Having contingency agreements in place will make it easier to divert excess material to alternative destinations when the need arises.

Benefits of coordination

Contacting the Department to discuss temporary debris management sites provides the opportunity for the Department to help identify options to 'co-locate' a temporary storage site with another community or state agency. In addition, the Department may share information about authorized sites with other state and federal agencies such as MEMA, MDOT, and FEMA. Providing information regarding the location of temporary debris management sites and your plan for handling waste prior to an emergency can facilitate regional planning in the event of a widespread disaster.

Site pre-authorization process

To begin the process of pre-authorizing a site for managing disaster debris, please contact Materials Management Division staff in your local DEP regional office. You will be asked to provide basic information (using the attached form) as a starting point for discussion of your possible temporary debris management site(s) and debris management plan. Department staff can review this information in advance of a discussion by telephone or email, and may be able to offer initial feedback based on information in our GIS database, files, regulatory standards, and advice offered by other state agencies on best practices. After having this initial discussion, if needed we can schedule a visit to the proposed temporary debris management site to help develop details for a workable disaster debris management plan.

Guidelines for Emergency Debris Temporary Management Sites

The Maine Emergency Management Agency and the Department of Environmental Protection are encouraging municipalities to plan ahead for management of debris that may be generated during a disaster. When feasible, the agencies encourage the selection of temporary sites that meet the following criteria.

1. Putrescible waste (MSW, including food wastes, and animal remains)

- A. A minimum 500 feet to nearest residence (on- or off-site);
- B. Storage in covered leak-proof containers only;
- C. Seven (7) day limit on storage time;
- D. No burial on-site;
- E. High priority for disposal.

2. Non putrescible waste

- A. A minimum 100 feet to nearest on-site residence and minimum 250 to off-site residence;
- B. Storage in containers or on paved surface (asphalt or concrete) is preferred;
- C. 30 day limit on storage time;
- D. On site CDD burial OK if no nuisance and if limited to one acre – for site of generation only, not municipal sites.

3. General site and operational design considerations

- A. At least 250 feet from off-site commercial or public structures, and potable water supply wells.
- B. A minimum 100 feet to water body or wetland.
- C. Not within any V or A zones as shown on a town's Flood Insurance Rate Map (FIRM).
- D. A minimum 100 feet to waste boundary of closed landfill.
- E. Property is relatively level (less than 5% slopes).
- F. Sites with gas, waste, sewage, or electrical or other transmission lines under the site need careful consideration.

- G. Sites bisected by overhead power transmission lines need careful consideration due to large dump body trucks / trailers used to haul debris.
- H. No impacts to cemeteries (public, private, pet), or culturally sensitive areas.
- I. Stormwater run on and run off must be controlled to avoid adverse impacts to water bodies or supplies.
- J. Ability to implement controls as needed for odor and dust
- K. Plan for traffic control of site for safety
- L. No liquids or hazardous materials – consider separate storage at fire department, public works, or some other suitable municipal building.
- M. Grinding/chipping of woody materials is preferred. On site burning of wood only with permission of local Fire Department or Forest Service:
 - 1) 50 foot mineral fire break
 - 2) 100 foot setback from edge of mineral fire break to structures
 - 3) Burn pile size limited to 625 square feet or smaller per local Fire Dept.
 - 4) Continuous supervision until fully extinguished
 - 5) Ash must be removed for proper disposal when finished
- N. Plan for separation of bulky wastes into appropriate areas for off-site deliveries; for example, furniture in one area, appliances in another.

Temporary Debris Management Site Notification Form

Please mail to your local DEP regional office or email to:
eric.p.hamlin@maine.gov

Name of Municipality: _____

Contact information:

Name and Title: _____

Address: _____

Telephone Number: _____

Fax Number: _____

Email Address: _____

Address or physical location of proposed site (please include county):

GPS coordinates (if known): _____

Please attach an image such as an aerial photo, photocopy of a map, etc. with the site location marked.

Please briefly describe the management plan for each waste debris type as applicable:

- Woody debris (trees, brush, stumps):

- Mixed demolition debris:
- Separated demolition debris:
 - Untreated wood
 - Pressure treated (chemically treated) wood
 - Roofing materials
 - Metal – appliances, roofing
 - “Bulky waste” (furniture, carpets, etc.)
- Putrescible waste (trash, food, animal carcasses)
- Universal waste
- Hazardous waste
- Special waste

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DEP regional offices

Augusta, Main Office and Central Maine Regional Office (CMRO)
(Mail) 17 State House Station, Augusta, Maine 04333-0017
(Physical) 28 Tyson Drive, Augusta, Maine 04333-0017
(207)287-7688 • (800)452-1942 • FAX (207)287-7826

Bangor, Eastern Maine Regional Office (EMRO)
106 Hogan Road, Suite 6, Bangor, Maine 04401
(207)941-4570 • (888)769-1137 • FAX (207)941-4584

Portland, Southern Maine Regional Office (SMRO)
312 Canco Road, Portland, Maine 04103
(207)822-6300 • (888)769-1036 • FAX (207)822-6303

Presque Isle, Northern Maine Regional Office (NMRO)
1235 Central Drive, Presque Isle, Maine 04769
(207)764-0477 • (888)769-1053 • FAX (207)760-3143