



NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL GUIDANCE DOCUMENT

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Natural Disaster Debris Management

The following guidance is provided to facilitate and coordinate the management of debris following a natural disaster. Disaster debris resulting from terroristic or other man-made events may have considerations that go beyond the scope of this guidance document. Proper and planned management of natural disaster debris will be beneficial in preventing a threat to human health and the environment, and will also expedite recovery efforts in an impacted area. Types of natural disasters may vary for specific geographical locations; therefore, debris management practices and plans will not all be the same. In the Midwest, and more specifically in Nebraska, some of the more prevalent weather-related disasters may be the result of tornadoes, strong winds, floods, and snow and ice storms.

The Nebraska Department of Environmental Quality (NDEQ) is the state agency that regulates the management and disposal of solid waste. Natural disaster debris must be managed in accordance with Title 132 – Integrated Solid Waste Management Regulations. The debris may ultimately be placed in a municipal solid waste disposal area or a construction and demolition waste disposal area. The Department provides a list of all permitted solid waste management facilities, their location and contacts on its website at www.deq.state.ne.us

Clean-up following a natural disaster event may involve sorting and characterizing the debris and disposing or managing it in several different approved manners as follows:

- **Branches, Trees and Brush Waste** can be separated from other debris and then sent to a permitted community burn pile, disposed in an un-permitted area, shredded and used for mulch or composted, disposed in a municipal solid waste (MSW) disposal area or a construction and demolition (C&D) waste disposal area.
- **Demolition Debris** is the structural debris from houses and buildings and other man-made structures. This material can be taken to the nearest permitted construction and demolition (C&D) disposal area or a permitted municipal solid waste (MSW) disposal area.
- **Specific Demolition Debris** from a natural disaster area also may be sorted and some of the material recycled or used as “fill” as specified in Title -132, Chapter 2, Section 002. Fill material consists of sand, gravel, stone, soil, brick, concrete rubble, asphalt rubble, or similar material.
- **Exception to the Regulation** – Title 132, Chapter 2, Section 002.01J allows “upon permission of the director, the deposit of building demolition material resulting from the clean-up from a natural disaster” in a location other than a permitted solid waste disposal area. Also, Title 132, Chapter 2, Section 002.01E allows “the deposition of on-farm building demolition waste generated by an individual and disposed on location if such location is agricultural in nature”.
- **Household and Commercial Waste** such as trash and furniture should be sent to a permitted MSW disposal area.

- **Landfill Banned Waste** – This type of waste includes used oil, lead acid batteries, household appliances (Title 132, Chapter 1, Section 024) and waste tires. These materials must be recycled or managed in an approved manner not to include disposal in a landfill. (State Statute 13-2039)
- **Asbestos** containing material, friable and non-friable, may be disposed in a permitted municipal solid waste disposal area. Friable asbestos material may be described as being dry and powdery and capable of being airborne. Non-friable asbestos materials may be disposed in a permitted construction and demolition disposal area. Special measures should be taken when handling friable asbestos materials. Individuals certified in handling friable asbestos should manage this type of waste. Asbestos-containing products may include roofing, siding, insulation, vinyl floor tile or linoleum. Asbestos also may be found in products used for pipe and heating duct insulation. For specific information on proper handling of asbestos contact the Nebraska Department of Health and Human Services at (402) 471-0386.
- **Hazardous Wastes** – If the disaster debris contains regulated hazardous wastes, these materials should be containerized, labeled and sent to a designated disposal facility. Household hazardous waste (HHW) may be collected from the debris, containerized and, with proper planning, disposed along with other regulated hazardous wastes. Also, household hazardous waste can be disposed at a municipal solid waste landfill. Specific circumstances may dictate the choice of disposal method. Contact NDEQ at (402) 471- 2186 or after hours at (402) 471-4545 to discuss proper handling and disposal procedures.

The NDEQ has developed guidance documents that may address specific types of disaster debris and information on how they should be managed. These guidance documents can be found on the Department's website: www.deq.state.ne.us. The titles of these selected guidance documents are:

- **Guidance for Clean-up Following Tornadoes and Severe Storms**
- **Treated Wood Utility Poles (Recycling and Disposal)**
- **Disposal of Animal Carcasses**
- **Household Hazardous Waste Regulations**
- **General Asbestos Information**
- **Construction and Demolition Waste in Nebraska**

Preparation prior to a natural-disaster is very important in the management and disposal or handling of natural disaster debris. A natural-disaster debris management plan will aid in an efficiently organized response to a natural disaster. An in-place plan will also aid communities in negotiating for financial and technical assistance from the Federal Emergency Management Agency (FEMA) and other government agencies. A debris management plan may still have shortcomings; however it can be a basis for a community's preparation and response to a natural disaster.

A natural-disaster debris management plan should consider the following components:

- Identify possible types of debris and amounts of the debris
- Develop a list of applicable federal, state, and local agencies
- Develop a list of debris-management facilities in the area
- Pre-select temporary debris sorting and storage sites
- Identify equipment, supply needs and resources
- Develop a communication program to include a debris-management team, the general public and government agencies

In summary, communities need to develop a debris-management plan to address the types of natural disasters that are likely to occur for their geographical location. An understanding of the type and possible sizes of natural disasters will dictate the type and amount of debris that may be generated. A list of existing waste-management facilities, local temporary storage/staging areas and various disposal options should be a major part of the plan. Also, an inventory of pre-negotiated contracts or a list of pre-qualified contractors for managing debris will help the process of the clean-up to move in an efficient manner. It will also be important to make sure that administrative supplies and equipment are available to help ensure the

activation of the debris-management plan. Once the disaster debris management plan has been established it will be important to communicate with the public so they have a general understanding of the procedure and when the plan would be activated.

Resources and References:

Nebraska Department of Environmental Quality (NDEQ) website: www.deq.state.ne.us
Laws and Regulations, Publications Forms – Grants – Waste Management

United States Environmental Protection Agency – Office of Solid Waste – EPA -530-K-08-001
(Publication), website: www.epa.gov/osw

EPA’s Disaster Debris Website:
<http://www.epa.gov/epawaste/consERVE/rrr/imr/cdm/debris.htm>

Federal Emergency Management Agency (FEMA) “Public Assistance: Debris Management Guide”
(publication 325) updated July 2007. This guide can be found on FEMA’s website at:
<http://www.fema.gov/pdf/government/grant/pa/demagde.pdf>

FEMA’s Emergency Management Institute (EMI) has several courses on debris management and etc. A complete listing of EMI’s training courses can be found at: <http://training.fema.gov>

For more information, contact
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