NEBRASKA

DEPT. OF ENVIRONMENTAL QUALITY

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Sand and Flood Sediment Cleanup

The Nebraska Department of Environmental Quality (NDEQ) has specific statutory responsibilities relating to the disposal of wastewaters and solid waste. The NDEQ has prepared this guidance document to assist individuals and communities with proper practices for recovery from flood damage. The NDEQ is seeking to clarify requirements related to flood recovery efforts and sediment and debris accumulations resulting from floods while ensuring protection of human health and the environment.

This guidance relates to recovery efforts in counties where a flood declaration has already been declared. Failure to follow these steps could jeopardize assistance that may be provided by federal or state programs related to flooding assistance. This Guidance Document provides procedures and reminders when considering clean-up and disposal of flood deposited sand, sediment, and debris:

1. **Take reasonable measures to minimize pollutant discharges to surface waters** – During recovery and clean-up efforts, reasonable measures should be employed to minimize the discharge of sand, sediments, and debris from clean-up operations to surface waters and the surrounding environment.

2. **Allow sediment and debris to dry and be exposed to sunlight** – Sand, sediments, and debris resulting from flood waters are likely to contain microbial contaminants from sewage, animal wastes and other sources. The majority of these populations will be inactivated within several days if exposed to UV radiation from the sun. When possible, allow accumulated sediment and debris to naturally dewater and receive sunlight after flood waters recede. These materials will not be rendered completely harmless, though microbial populations should be reduced.

3. **Identify potentially toxic or hazardous materials –** Flood waters may transport more than microbial contaminants. Barrels, drums and other containers may be washed into the flood waters and deposited miles from the original location. These containers may contain potentially hazardous materials such as pesticides, petroleum products, and other agricultural or industrial chemicals. Determine whether these suspect materials are within or adjacent to the area of concern. Toxic or hazardous material residues may also be deposited by floodwaters from burst containers and other sources. If toxic or hazardous substances are encountered or suspected, contact NDEQ at (402) 471-2186, toll free at 1-877-253-2603, or after hours at (402) 479-4921 to discuss proper handling and disposal procedures.

4. **Remove gross contamination and properly dispose –** Accumulated debris, trash or other waste should be separated from sand and sediments and disposed of properly. These materials are regulated as a solid waste and will need to be reused, recycled or disposed of in a landfill.

(Additional guidance on proper disposal of solid waste is available from the NDEQ website.) Gross sand and sediment accumulations should be removed and stockpiled for fill or disposal. Stockpile sand and sediment away from wellheads and other sensitive areas to allow de-watering. Placement of accumulated sand and sediments into streams or rivers may require authorization from the US Army Corps of Engineers (USACE). The USACE should be consulted prior to conducting any such activity. USACE can be contacted at (402) 896-0896.

5. **Manage washwaters** – After removal of gross contaminants, residues may remain on exterior surfaces. Where such residues would normally be exposed to precipitation (exterior pavement, building exteriors, etc) these residues may be removed with the aid of water. When detergents and surfactants are *not* used, this washwater may be allowed to discharge in the normal flow path. Prior to such operations, gross contaminants should be removed and reasonable measures should be implemented to minimize pollutant discharges. Reasonable measures would include practices such as: providing an impoundment area to allow sediments to settle prior to them leaving the area, directing washwaters to vegetated areas for pollutant removal, installing inlet protection devices or installing a series of curb socks in the curb line to slow water and remove sediment. Based on site conditions, other measures may be reasonable. When washwaters are generated from interior locations, or where detergents are used, these washwaters should be directed to a sanitary sewer for treatment at a municipal waste water treatment plant.

6. **Monitor impacts to receiving waters** – During clean-up operations, especially during washing operations, downstream locations should be observed to determine if the discharge is affecting aquatic life. If any aquatic life is observed to be stressed or is showing obvious signs of impacts from the discharge, cease the activity immediately and contact the NDEQ.

7. **Adhere to aesthetics standards for surface waters** – Nebraska State Title 117 – Nebraska Surface Water Quality Standards, Chapter 4, §005 states: *This use applies to all surface waters of the state. To be aesthetically acceptable, waters shall be free from human-induced pollution which causes: 1) noxious odors; 2) floating, suspended, colloidal, or settleable materials that produce objectionable films, colors, turbidity, or deposits; and 3) the occurrence of undesirable or nuisance aquatic life (e.g., algal blooms). Surface waters shall also be free of junk, refuse, and discarded dead animals.* If any operation related to clean-up efforts is resulting in any of the situations listed above, cease the activity immediately and contact the NDEQ. In short, do not push or dump anything into the river, even naturally occurring sand and sediment.

Further guidance and forms can be accessed by contacting any of the respective agencies or by contacting the Nebraska Emergency Management Agency at (402) 471-7421.

RESOURCES:

- NDEQ Home Page http://deq.ne.gov/
- Nebraska Emergency Management Agency (NEMA) web site at http://www.nema.ne.gov/

Contacts:

- NDEQ Waste Management Section (402) 471-4210
- NDEQ Toll Free Number (877) 253-2603
- NDEQ Hazardous Waste Compliance Assistant (402) 471-8308
- Email questions to: NDEQ.moreinfo@nebraska.gov

- United States Army Corps of Engineers (402) 896-0896

NDEQ Publications:

- NDEQ Guidance Document – Natural Disaster Debris Management
  Guidance is available on the NDEQ Home Page under "Publications & Forms"

- Title 128 – Nebraska Hazardous Waste Regulations
- Title 132 – Integrated Solid Waste Management Regulations
  Titles are available on the NDEQ Home Page under "Laws/Regs & EQC", "Rules & Regulations"

Produced by: Nebraska Department of Environmental Quality, P.O. Box 98922, Lincoln, NE 68509-8922; phone (402) 471-2186. To view this, and other information related to our agency, visit our web site at ***http://deq.ne.gov.***