

## Proper Handling of Sandbags Used for Floods

Sandbags and other sand filled containers are used by communities and private property owners to hold back flood waters to protect property. Disposal of sand from uncontaminated sandbags does not require special handling under state solid waste regulations. Clean soil is *exempt* from solid waste regulations.

In **most** instances, sand used for flood protection can be treated as clean soil. However, not all sand remains clean after a flood. Certain disposal precautions should be taken after a flood event *if* there is reason to believe the sandbags have been exposed to hazardous or potentially infectious materials.

### Before the flood

Make sure you purchase your sand from a reputable dealer and that you purchase clean sand. Sand is sometimes contaminated with ash, foundry sands, sand blast grit, etc. This type of sand should not be used in sandbagging operations. If it is, it likely will need to be disposed after use at permitted waste handling facility. Ask the business you are buying your sand from if it is clean.

Use appropriate protective equipment such as gloves, dust masks, and eye protection when filling sandbags to ensure protection from possible abrasion, inhalation or blowing sand.

Sandbags may deteriorate when exposed to continued wetting and drying. If bags are placed too early, they may not be effective when needed. If possible, keep sandbags in a dry place, out of sunlight, prior to use – this helps prevent the sandbags from prematurely rotting or breaking down.

### After the flood

Because sandbags may rot or break down and become unstable over time, they should be removed from use as soon as the threat of flooding is gone. It is especially important to remove sandbags from near roadways and waterways since loose or

#### WHY IT MATTERS MORE INFORMATION

Your home and property can be flooded by natural or human-caused events even if you don't live in a flood plain. Preparing for such an emergency before it happens is the best insurance to cut down on losses and damaging effects.

In most instances, sand used for flood protection can be treated as clean soil. However, during a flood, hazardous materials can escape into floodwaters and damage your property, threaten your family's health and harm the environment. Knowing how to properly handle and dispose of used sandbags can save you time, cost, potential injury and harm to the environment.

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#### Special accommodations:

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leaking sand can create dangerous conditions for drivers and possibly affect streams, wetlands and storm drains.

Use caution when reusing sand that came in contact with flood waters. Sand that may not look or smell any different, may still have come in contact with fecal coliform or other disease organisms. Spreading the sand on the ground and allowing it to be exposed to the sunlight will reduce health risks. Bacteria present will diminish with time and exposure to the elements. But even with reduced risk, we recommend you avoid placing sand in playgrounds, sandboxes, or other areas of direct human contact after removal from bags.

If the sand is clean, there are a number of uses for it. These include, but are not limited to, general fill, substitute aggregate in construction applications, blending into gardening soil or use for snow removal or ice control. Also check with your local government as they may have or know of programs that will accept sand.

Although sandbags can be stored for reuse, mold can become a problem if they are stored in a saturated condition. Dry out sand bags as much as practical before storage. When “dewatering” sandbags, do so over a connection to a sewer where possible. Check with local ordinances to make sure sandbags can be stored for extended periods on-site. If emptied and dried, the sacks can be filled again. Otherwise, they may rot after a period of time because of the damp sand. If not using the sandbag again, dispose of the empty sandbag properly to prevent litter problems. Empty sandbags can be disposed of with normal trash.

### **Dispose of sand and bags properly**

If sandbags have come in contact with industrial wastes, fuel, oil or other chemicals, the sand should be tested for contaminants of concern to verify that use as clean soil is appropriate. Without testing, contaminated sandbags must be disposed at a permitted waste handling facility. Check with your local health or solid waste authorities for acceptance procedures for full sandbags.

If you don't know what specific contaminants have come in contact with the sand and sand bags from flood waters, generic testing should include TPH (total petroleum hydrocarbons) and total metals. If the levels are above those identified in the Model Toxics Control Act (e.g. 2000 ppm for diesel and 250 ppm for lead), the sand should not be used as fill or for road sanding but should be disposed of as solid waste. If sand is not appropriate for use as fill, other options may include disposal at an inert waste landfill or using as an amendment for manufacturing concrete.

When handling sand or sandbags contaminated with flood water, wear gloves and other appropriate personal protection. After handling sandbags, wash hands thoroughly with soap and water and change your clothing.