

**Guidelines for
Cleaning Up Your Food Service Business
After a Flood**

Salvaging & Remodeling Information for:

Bars Restaurants Convenience Stores Meat Markets

Remember the golden rule of clean-up work

WASH YOUR HANDS THOROUGHLY,

and do it often.

Cleaning up After a Flood

If your business has been involved in a flood, you'll need to observe a few simple precautions as you begin the clean up process. This handout explains how to get up and running again, without jeopardizing your own health - or the health of your customers.

Clean everything that got wet. Flood waters have picked up chemicals from roads, farms, and storage buildings, along with animal and human wastes from lagoons, treatment plants, and septic tanks.

To prevent mold and mildew growth, try to do this job within 24-48 hours after the flood waters recede.

Wells

If you have your own well serving your food service business, and the well was covered by the flood, it must be chlorinated and tested prior to use. Please contact your local health department for complete instructions on chlorination. It will be important to know the diameter of the well casing and the depth of the well to complete chlorination.

Sewage Systems

If your septic tank system was flooded, please call your local health department for an evaluation of the system before using it. Flooded systems may malfunction without proper attention.

Mold

Organic material, bacteria and other microorganisms are deposited onto hard surfaces and into porous building materials and furnishings by flood waters. Many building materials and furnishings that remain wet for more than 48 hours will develop visible fungal colonies. These colonies are commonly referred to as mold or mildew.

Molds and mildews resulting from flooding can create significant health risks for occupants. Unintentional ingestion of flood water or sediment can cause gastrointestinal diseases. Inhalation

exposure to molds may cause allergy symptoms. These symptoms can often be severe. Some fungi may cause infectious respiratory disease, while others generate toxins that may cause illness.

If a flooded building is to be reoccupied, water and the deposited material must be removed. All indoor fungal growth that occurred as a result of flooding must be removed. Clean surfaces first, then apply biocides such as bleach and water to kill molds.

You can disinfect floors or wood surfaces using a solution of 1/4 cup of bleach in a gallon of water. If mold has already begun to grow, use a stronger solution, for example, 1/2 gallon of bleach in a five gallon pail.

Food and Beverages

All flooded food, including sealed and open packages, boxes, cans, produce and fresh meats must be discarded to avoid food-borne illness or injury. Foods that were not flooded and reached temperatures above 45 degrees Fahrenheit must be discarded. Frozen foods which thawed but did not reach a temperature above 45 degrees Fahrenheit may be refrozen.

Equipment

Thoroughly clean and sanitize all salvageable equipment. Use a detergent and a sanitizing solution made with one tablespoon of bleach in a gallon of water. You can generally save equipment if :

It is made of stainless steel or other nonabsorbent materials.

It contains only non-absorbent, closed cell polyurethane insulation. (This material is used in newer refrigerators and freezers. It may require cleaning - check with the manufacturer.)

Refrigerators, freezers, and other equipment with fiberglass insulation must be evaluated to see if the insulation has been flooded. If so, the insulation must be removed and replaced. Styrofoam or closed cell polyurethane insulation may be able to be cleaned - check with the manufacturer. A thorough inspection of the electrical components (wiring, compressors, switches, etc.) must be performed by a professional to judge whether they need replacing. Use a reliable professional for these jobs. Often the cost in materials and time spent in refurbishing flood damaged electrical equipment may exceed the cost of replacement.

Check your water heater. It should be replaced if flood waters got into the gas burner, electrical parts, or insulation.

Equipment with waterlines

Take the following precautions when salvaging post-mix and beverage machines, coffee or tea urns, ice machines, glass washers, dishwashers, and other equipment with water connections:

Flush waterlines, faucet screens and waterline strainers, and purge fixtures of any standing water.

Clean and sanitize all fixtures, sinks, and equipment, using detergent and a solution of one tablespoon of bleach in a gallon of water.

Discard any equipment

That is damaged and can't be repaired to NSF standards.

If it includes flood-damaged wood/particle board or plastic laminate components (counters, cabinets, bars, etc.)

Walk-In Cooler Restoration Guidelines

In general, the walk-in cooler in a flooded food service facility needs to be reviewed on a case by case basis.

If the inside of the cooler has a quarry tile floor with 6-inch sealed coving, and the water did not flood over the coving, the interior surface can be cleaned, scrubbed, and sanitized with a solution of 1 cup of bleach with 4 gallons of water.

If the inside of the cooler has walls that sit directly on the floor, and the caulking seal is intact, the cooler walls can be cleaned, scrubbed, and sanitized with 1 cup bleach/4 gallons water. The walls of the cooler should be made of wood frame with closed foam insulation for this process to be successful.

If the inside of the walk-in cooler was damaged by holes or cuts, and the flood water rose above those holes or cuts, the entire panel will need to be replaced.

On a free-standing walk-in, the panels can be disassembled, cleaned, and sanitized to remove the silt below the panel. This would apply when the cooler wall did not have a satisfactory seal at the wall and floor juncture.

Flooded walk-in coolers with a permeable wood floor need to have the floor replaced.

Walk-in coolers sitting directly on the floor with an aluminum interior floor should have the floor raised and power washed below the floor to remove the river silt.

Remediation techniques will not guarantee the absence of odors that may develop in the future.

******WARNING******

Always use extreme caution when restarting equipment with electrical

components

Furnishings

Some furnishings and fixtures will need to be discarded if they have been in contact with flood water. Examples are:

All upholstered furniture, including chairs, bar stools, benches, booth seats, and bar arm rests.

Any tables or booths that cannot be effectively cleaned and sanitized.

Books, and paper products. These items cannot be thoroughly cleaned.

Clothes and drapes can be washed with potable water containing a sanitizing agent such as bleach or pine oil cleaners. Cloth items which say "dry clean" may be salvaged by dry cleaning.

Walls and Ceilings

If flood water soaked the sheet rock, insulation, or ceiling tiles, remove these items 30 inches above the waterline.

Paneling may be removed and saved but you will still need to get air circulating in the wall cavities to dry the studs and sills. Wet studs and sills do not need to be replaced if allowed to dry properly. Flooded portions of studs and sills should be treated with biocides such as bleach and water.

For paneling, carefully pry the bottom off each panel away from the wall. Use something to hold the bottom away from the sill so the cavities can be drained, cleaned, checked for molds, and dried out. You can nail them back into shape after they and the studs dry out. Remove and discard flooded insulation.

Undamaged walls, hard surfaced floors, and other surfaces should be cleaned and disinfected with a solution of 1/4 cup of bleach to one gallon of water.

Vinyl wall covering should be removed and thrown out if soaked.

Floors and Floor Coverings

Remove any linoleum or tile that been flooded, so you can clean and dry the wooden subflooring. When placed on a concrete base, only loose linoleum or tile need be removed. Linoleum or vinyl tile can be saved and reused if it can be cleaned and sanitized.

Wall-to-wall carpeting, padding and foam rubber should be thrown away if they were soaked with flood water.

Remove tile or vinyl flooring if it is warped, loose, or has a foam-rubber pad.

Duct Work

Vents and duct work for air conditioning/heating units that were submerged in flood waters need thorough cleaning and sanitizing. If it is impossible to do this, it will be necessary to replace them. Insulation around ducts, or ducts made of compressed fiberglass will need to be replaced.

Safety Guidelines for Building Entry and Occupancy

Can be found at the Department of Insurance and Building Inspectors Association websites: www.ncdoi.com/ and www.ncbia.org

When in doubt, remember the golden rule of clean-up work:

THROW IT OUT! WASH YOUR HANDS THOROUGHLY,
and do it often.