



Atlantic County Division of Public Health
201 S. Shore Road, Northfield, NJ 08225
609-645-5971 / fax: 609-645-5923
www.aclink.org

Emergency Action Planning Guidance for Retail Food Establishments*

Flooding

RECOVERY

Recovery involves the necessary steps for re-opening and returning to a normal operation.

A food establishment that was ordered or otherwise required to cease operations may not re-open until authorization has been granted by the regulatory authority.

The Retail Food Establishment operator will:

- Sort the salvageable from the non-salvageable foods, equipment, utensils, linens, and single service items as quickly as possible.
- Properly dispose of the non-salvageable items.
- Contact the local building department and other appropriate agencies to determine if the building structure is safe and approved for occupancy.
- Provide general clean-up while ensuring worker health and safety. Clean and sanitize equipment and utensils.

For information on air quality after a flood, see the U.S. EPA publication "Fact Sheet: Flood Cleanup - Avoiding Indoor Air Quality Problems" at: <http://www.epa.gov/mold/flood/index.html>

Personal Health and Safety Considerations for Employees Involved in Clean-up

- Wear eye protection.
- Wear rubber boots that can be washed and sanitized after the event.
- Wear protective clothing such as coveralls.
- Do not allow employees to walk between the affected area and other areas of the establishment without removing footwear and protective clothing.
- Follow OSHA rules for handling detergents, sanitizers, and other chemicals used in the cleaning process.
- Handwashing – Immediately after working with contaminated materials and before engaging in food preparation activities (working with exposed food, clean equipment and utensils, unwrapped single service / use articles)
 - o Double hand washing: Clean hands and exposed portions of the arms using a cleaning compound in a lavatory that is properly equipped by vigorously rubbing together the surfaces of their lathered hands and arms for at least 20 seconds and thoroughly rinsing with clean water. Repeat.
 - o Dry hands using disposable towels.
 - o Use a disposable towel to turn off the water to prevent re-contaminating the hands.
 - o Follow-up with a food code compliant hand antiseptic.
 - o Have janitorial staff clean the lavatory faucets and other portions of the lavatory after use to prevent transferring any contamination to food handlers.

Clean-up

To prevent mold and mildew growth, conduct corrective actions within 24-48 hours after the floodwaters recede.

- Remove wet materials. Dispose of any materials that cannot be effectively cleaned and sanitized. Remove any standing water.
- Unsalvageable food and all single service items, packaged or unpackaged that came in contact with floodwater, must be destroyed and properly disposed.
- Floors, walls, furnishings, carpets, and equipment damaged beyond salvage must be removed and replaced as necessary. Sheet rock is especially susceptible to mold growth and should be removed and replaced if in contact with floodwaters.
- Affected walls, floors, and equipment surfaces must be cleaned with soap and water, rinsed, and sanitized. Carpets should be either removed or effectively cleaned and sanitized.
- Use a detergent solution to clean floors, equipment, and other affected areas followed by a clean water rinse.
- Disinfect the floor and any other affected areas by using an EPA-registered disinfectant such as a 500 parts per million chlorine solution or other product labeled as a disinfectant. Follow manufacturer's instructions for 'disinfectant' use.
- Air-dry the affected area.
- Clean and sanitize any utensils and salvageable equipment in the affected area.
- Launder any linens or uniforms in contact with floodwater. Launder separately from other linens by using bleach and/or a mechanical dryer.
- Launder or discard mop heads and other cleaning aids that contacted flood water.
- Alternative measure: Hire an outside service having expertise in cleaning and sanitizing food establishments exposed to flood water.

An establishment utilizes a well and/or septic system that was covered by floodwater must contact your local health department for additional instructions.

General Flood Salvage Assessment

Floodwaters may carry silt, raw sewage, oil or chemical waste that can make storm-damaged foods unsafe to eat if packaging is contaminated. Discard any food or food packaging materials that have come into contact with floodwater. Very few food or beverage items can be saved after being exposed to flood water. Food items in soft packaging or with screw-top lids must be destroyed. In some cases, canned goods in metal cans or rigid plastic containers can be saved. Even so, the condition of the can is another limiting factor. The presence of rust, soil, or destroyed labeling precludes salvage. Flood water can make foods unsafe to eat, especially if the packaging is contaminated.

Discard the following foods if floodwater has covered, splashed, dripped on or seeped into the package:

- Alcoholic Beverages: Refer to your local regulatory authority for salvage or destruction.
- Exposed Foods: bulk foods, fresh produce, meat, poultry, fish and eggs
- Any foods packaged in paper, plastic, cloth, or fiber;
- Cardboard boxes, even if the contents seem dry, including cereals, pasta products, rice, salt;
- Foods with cardboard seals, such as mayonnaise and salad dressing, or foil or cellophane packages;
- Food in glass jars, including unopened jars with waxed paper, foil, cellophane or cloth covers;
- Foods, liquids or beverages in crown-capped bottles or containers with pull-tab tops, corks or screw caps;
- All opened containers and packages; foods in bags or canisters;
- Cans that are dented, leaking, bulging or rusted; and
- Cans that have been tossed about and are far from their normal storage spot (possibility of pinholes or seam fractures).
- Cans may not be sold without all required labeling information. Therefore, cans with damaged labels should be discarded.

Salvaged Goods – Reconditioning

In some cases where the quantities of food involved are large (e.g. a large supermarket or a food warehouse), it may be feasible to attempt salvage of food items for either human or animal consumption. The salvageable items must be documented and securely moved to an approved firm that has reconditioning capability. Such activity must be coordinated with the New Jersey Department of Health and Senior Services Food and Drug Safety Program and the Local Health Department.

Disposal of Food

- Remove to a designated condemned food storage area away from food preparation and equipment storage and secured in covered refuse containers or other isolated areas to prevent either service to the public or accidental contamination of the facility and other food.
- If the food must be retained until the distributor can credit the facility, it must be clearly labeled as “not for sale” and kept in a refrigerated location separate from other food and held for credit.
- Discarded refrigerated food may be recorded by food supplier/distributor.
- The facility should document the type and amount of food, costs and the reason for disposal for insurance and regulatory purposes.
- Small volumes of food to be discarded can be denatured with a cleaning product (such as bleach) and placed in a covered refuse bin outside the facility.
- Large volumes of food should be stored in covered refuse containers in a secure location and disposed of by a refuse disposal company as soon as possible.
- All food waste is to be disposed of in accordance with state and local waste disposal regulations in a licensed landfill.
- Local landfills should be contacted prior to delivery of food from a private individual or carrier to insure acceptance of the waste.

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.
 - Discard any equipment that is damaged and can't be restored to safe sanitary standards. This may include 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 floor did not flood over the coving, the interior surface can be cleaned, scrubbed, and disinfected with an EPA-registered disinfectant. Follow label use instructions for disinfecting floors. In the absence of EPA-registered product, a solution of 1 tablespoon of chlorine bleach (5.25% concentration) in 1 gallon of water may be used. Quaternary Ammonium at a concentration of 200 ppm, or other EPA-registered product should be used on equipment and structural surfaces that are salvageable.
- 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 disinfected with an EPA-registered disinfectant following label instructions or using 1 cup bleach (5.25% concentration) in 4 gallons of 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 freestanding 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!**

Walls and Ceilings

- If floodwater 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 sanitized with a solution of 1 tablespoon of chlorine bleach (5.25% concentration) in 1 gallon of water. Quaternary Ammonium at a concentration of 200 ppm, or other EPA-registered product should be used on surfaces that are salvageable.
- 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 sub flooring. 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 ductwork for air conditioning/heating units that were submerged in floodwaters 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

For questions regarding building entry and occupancy, contact your local construction code office and/or your insurance agent.

* **Source:** "[Emergency Action Planning Guidelines for Retail Food Establishments](#)". New Jersey Department of Health and Senior Services. December 2009. Full text at:

http://www.state.nj.us/health/foodanddrugsafety/documents/emergency_actionplans.pdf