

# Disaster Assessment, Response and Recovery Checklist

## General ASSESSMENT

- Identify boundaries of the disaster area and estimate number of food establishments contained in that area
- If structural damage is possible, consult with Fire/Building Officials to determine if building is safe to enter
- Evaluate which Personal Protective Equipment should be used before entry
- Date and time disaster occurred \_\_\_\_\_
- Describe the extent of damage to structures: \_\_\_\_\_
- Utility outages if known \_\_\_\_\_
- Identify cause if interrupted water supply (e.g., chemical leak, leaking underground storage tank, municipal water compromised, private water supply compromised)  
\_\_\_\_\_

## General RECOVERY

***Facility may reopen only when regulatory agency and other representatives affecting the safety of the food and facility have approved.***

- Criteria for recovery efforts made available to establishment operator
  - Salvaging foods affected by the disaster
  - Temporary license/permit if requested
  - Recovery after interrupted water service or Boil Water Order
  - Requesting a re-opening inspection for permanent operation
- Products affected by disaster destroyed or separated for salvaging
- Food being held by the establishment until supplier or distributor credits the facility are clearly marked "Not for Sale"
- Temporary operating license/permit issued under certain conditions
- Permanent operating license/permit issued under full compliance
  - Water
  - Electricity/Gas
  - Waste/Sewage Disposal
  - Pest control
  - Equipment and surfaces cleaned, sanitized and functioning properly
  - Fresh Food Supply
  - Ability to prepare and handle Food

## FIRE RESPONSE

- Type of water and/or type of chemicals used to extinguish fire, combustions materials in fire [wood, plastics, electrical wire, chemicals, unknown] \_\_\_\_\_
- Food and related contents of building placed under seizure/embargo pending evaluation
- Inventory of contents, product condition and items to be salvaged
- Informed owner/custodian of their responsibilities for disposal or salvaging of items

## FIRE RECOVERY

- Structural damage repaired and approved
- All utilities available
- Equipment cleaned, sanitized and operable
- Food evaluated for smoke, fire and water damage
- If closed by the fire department, approval to reopen from Fire/Building Department and food safety agency is required

### **POWER OUTAGE RESPONSE**

- Establishment discontinued all cooking operations.
- Establishment did not place hot food in refrigerators or freezers. [Rapidly raises temperature inside unit]
- Establishment discarded food products that were in the process of being cooked, but which had not yet reached the final cooking temperature.
- Establishment using ice or/ice baths to rapidly cool small batches of hot food.
- Establishment employing effective measures to delay temperature abuse.
  - Freezer units covered with blankets, quilts, or newspaper
  - All unit air vents are open and uncovered
  - Alternate working mechanical refrigeration is available
  - Dry ice is being used
  - Packaged ice is being used
  - Perishable foods have been placed in freezer
  - Backup generators

### **POWER OUTAGE RECOVERY**

- All refrigerators and freezers functioning properly
- All PHF/TCS and frozen foods are maintained at proper temperatures
- All equipment used for cooking or processing are functioning properly
- Dishwashing equipment functioning properly
- Hot water available as required
- Facility operations functioning properly [lighting, garbage disposal]
- Food equipment and utensils clean and operational

### **FLOOD RESPONSE**

- Imminent health hazard with sewage or chemical contaminants in flood water, must close
- Other signs of flooding to be removed [high water line, mud/debris, rust, compromised food, single service, other items] \_\_\_\_\_
- Structural or general repairs needed
- Corrective action for submerged or splashed food containers and single service
- Prevention of mold growth

### **FLOOD Recovery**

- Cleaned and sanitized food contact surfaces
- Cleaned and disinfected non-food contact surfaces
- Refrigeration units maintain temperature for 24 hours (air and product temp)
- Control of discarded food to prevent unauthorized access
- Mold remediation if necessary

## CONTAMINATED WATER SUPPLY RESPONSE

**\*If there is no approved alternate safe water supply available, the establishment must close.**

Identify alternate safe water supplies

- Elevated water tower, water heater, etc. (short term only)
- Warehouses with bottled water
- Bottling/canning plants, dairies, breweries, etc. (will bottle for disaster)
- Approved tank trucks, pumps and hoses from dairies, other plants or independent water haulers with approved water source and cleaning and sanitizing site recorded
- Free-standing water tanks, pillow or bladder tanks or onion tanks used with approved water source
- Temporary connection to safe drinking water supply with backflow preventer
- Private well water tested and safe
- Manufactured ice or dry ice used

## CONTAMINATED WATER SUPPLY RECOVERY

### **Limited Operations in Food Establishments (with alternate water supply)**

- Label all faucets "Non Potable/Do not use to drink, cook, wash hands"
- Limit menu (use fresh-cut, prepared or frozen fruits and vegetables, use packaged foods, use preparations that require little or no water, etc.)
- Wash hands with potable water (coffee urn or 5-gal. water bottle over sink for drainage)
- Use single-service tableware and utensils
- Use chemical or portable toilets if no water available
- Use bottled or canned beverages
- Restrict use of certain equipment (post-mix soft drinks, garbage grinder, ice machine, mechanical dishwasher, coffee or tea maker, etc.)
- Advanced contingency plans when previously unapproved well water is proposed (filtration system, chlorination, testing, etc.)

### **Resumption of Municipal Water Supply**

- Approved municipal or NCPWS available
- Building lines flushed; filters, strainers checked after water supply re-established
- Water using equipment and appliances emptied, filters and strainers checked, flushed and sanitized after water supply re-established
- Back flow preventers present where necessary
- Create physical disconnect between private and municipal water supply unless approved

## FOOD PRODUCT EVALUATION RESPONSE

- Begun immediately - Note time since disaster affected food \_\_\_\_\_
- Salvageable food separated from condemned food. By Operator \_\_\_\_ By Licensed Salvager \_\_\_\_
- Condemned food in sealed and secured container for disposal
  - Denatured on-site
  - Transported under seal to licensed landfill with witnessed destruction
- Record
  - Amount of salvaged product
  - Amount of condemned or destroyed product
- Refrigerated product > 41°F discarded [If on the sales floor, immediately. If in a department cooler, if > 4hr.]
- Frozen product discarded that has completely thawed and risen above unsafe temperatures
- Canned or packaged product discarded if damaged or has absorbed water
- Advise owner/custodian of need to remove salvageable items as quickly as possible
- Weather conditions such as freezing or hot temperatures have impacted salvage of items

<b>Evaluation of Food Products</b>		
<b>Flood, water damage</b>		
Fresh fruits and vegetables	Destroy	Contaminants may be absorbed by produce
Screw-top, crimped-cap, twist-cap, pop-top containers submerged or splashed	Destroy	Not cleanable under/around caps. Containers returned for deposits or recycling must be drained
Permeable (paper, cardboard, cloth, plastic etc.) containers submerged	Destroy	Inadequate barrier to contaminants and water
Hermetically sealed containers (cans, pouches) submerged or splashed	Salvage	Re-label if necessary by removing label, wash, rinse, sanitize (100 ppm chlorine), dry, re-label with all required information and codes
Alcoholic Beverages (closed with cork, screw-top, twist-top, crimped cap)	Destroy	Check with ATF regarding alcohol tax reimbursement (large vols.)
<b>Electrical outage</b>		
Refrigerated foods (PHF, TCS food >41°F more than 4 hours)	Destroy	If less than 4 hours, can be moved to working unit or iced
<b>Fire</b>		
Hermetically sealed containers (cans, pouches) with no heat damage	Salvage	No bulged ends or ruptured seams, use a clean cloth or tissue to detect residue on container
Foods in closed cooler or freezer	TBD	Subject to smoke damage carried inside by circulation fans, evaluate as if in the open
Exposed foods	Destroy	Subject to contaminants in smoke
Food in paper, plastic, cardboard, cloth containers	Varies	Double layer of packaging materials with light smoke damage can usually be salvaged. To examine distressed foods for smoke damage, remove them to an area where the smoke odor is not present
Food with water, heat, heavy smoke, toxic fumes damage	Destroy	Safety and quality are compromised
<b>Winter Storm (Freezing)</b>		
Fresh fruits and vegetables	Depends	Examine closely for deterioration
Screw-top, crimped-cap, twist-cap, pop-top containers	Depends	Frozen foods may expand to stress or break the container seams
Hermetically sealed canned foods, glass containers,	Depends	Frozen foods may expand to stress or break the container seams
<b>Tornado/Hurricane</b>		
All food products	Depends	<b>Should be evaluated due to low pressure</b> Should be evaluated due to physical damage
<b>Salvage for Non-Food/Non-Feed</b>		
Butter (large volumes)	Denature	Not for human consumption, can be salvaged for soap stock
Meat and poultry products (large volumes)	Denature	Not for human consumption, can be salvaged for technical oil production
Oils and nuts (large volumes)	Denature	Not for human consumption, can be salvaged for technical oil production
Flour (large volumes)	Denature	Not for human consumption, can be used for glue or wall board construction
Grains and fruits (large volumes)	Denature	Not for human consumption, can be used for industrial alcohol
Fish (large volumes)	Denature	Not for human consumption, can be used for fertilizer
Eggs (large volumes)	Denature	Not for human consumption, can be used for tannery use

STATE OF YOUR STATE  
DEPARTMENT OF HEALTH AND HOSPITALS

Minimum Standards for Operation of a Retail Food Establishment  
While Under a Boil Advisory

General Guidelines

- The owner or operator must request an inspection from *Your State* Department of Health and Hospitals Office of Public Health at 555-851-4444 (State appropriate number), two days before reopening for business. When cleared for re-opening, an official placard will be issued to be posted in a conspicuous location.
- Applicable provisions of the *Your State* Sanitary Code must be followed as usual. *Your State* Sanitary Code can be located at: [http://\\_\\_\\_\\_\\_](http://_____) (State appropriate link)
- Food service menu is limited by the amount of potable water available.

The following requirements must be met before approval to re-open will be granted:

*Potable Water*

Potable Water – for these purposes is defined as follows:

- *Water that is obtained from a watering point approved by the State Health Officer or*
- *Water that has been subjected to treatment approved by the State Health Officer or*
- *Bottled water obtained from an approved source or*
- *Water that has been subjected to a rolling boil for a minimum of two minutes*

In as much as the water from the East Bank water treatment facility is not potable an alternate source of potable water must be brought in (tanker truck, bottled water, etc.) for food preparation, cooking, washing/rinsing/sanitizing of utensils and food contact surfaces, as well as for hand washing.

- The source of the potable water must be identified
- An approved tanker will be issued a dated *DHH Lab 8* form for each tanker of water. A new form is issued for each refill of water. If there is no *DHH Lab 8* form available the tanker is not approved.
- Single service utensils (paper/plastic plates, forks, spoons, knives) must be used.
- A gravity-fed, potable water supply, soap and paper towels must be provided for hand washing in the food preparation area and toilet rooms.
- A small food establishment with 3 employees uses about 500 gallons of water a day. A major clean-up effort could use twice as much water.
- If non-potable water is used to flush toilets, the *your state* Department of Health and Hospitals Office of Public Health “Unsafe to Use Water” sign must be posted by faucets that provide non-potable water.

\_\_\_ Approved for Reopening  
\_\_\_ Pending Re-inspection  
Re-inspection Date \_\_\_\_\_

**Agency Name**  
**Disaster Survey Form**

Retail Food Event: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone: \_\_\_\_\_

- I. Did establishment lose electrical power:  Yes  No  
 Time electrical off: Day \_\_\_ Hour \_\_\_ am/pm Time electrical on: Day \_\_\_ Hour \_\_\_ am/pm
- II. Number of Refrigerators: \_\_\_\_\_ Number of Freezers: \_\_\_\_\_  
 Thermometers provided?  Yes  No Thermometers provided?  Yes  No  
 Temperature of units: \_\_\_\_\_ Temperature of units: \_\_\_\_\_

Temperature Control for Cooking/Hot Holding/ Cooling/Refrigeration					
Food Item	Temp	Food Item	Temp	Food Item	Temp

- III. Evidence of flooding?  Yes  No Height of flood line: \_\_\_\_\_ inches
- IV. Physical damage to building (describe): \_\_\_\_\_  
 Was any food destroyed prior to our visit?  Yes  No Owner's estimate of poundage? \_\_\_\_\_  
 How was food disposed of? \_\_\_\_\_
- V. Additional food left to be destroyed (list)? \_\_\_\_\_

Please be advised that it is unlawful for any person to remove or dispose of the detained or seized articles by sale or otherwise without permission of the Department or the court in such case. Compile a list of the food left to be destroyed. Make arrangements with our office to have a Sanitarian witness the destruction. No Official Destruction Notice will be issued unless destruction is verified by a Sanitarian.

\_\_\_\_\_  
Owner/Representative Title FSIO/Sanitarian Reg #

Date: \_\_\_\_\_ Time: \_\_\_\_\_ FSIO/Sanitarian's phone number: \_\_\_\_\_

NAME OF BUSINESS: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET

CITY

STATE

ZIP CODE

OWNER'S NAME: \_\_\_\_\_

	MEETS REQUIREMENTS	YES	NO
<b>WATER SUPPLY- Give Source</b>			
<b>TOILET FACILITIES</b>			
1. For Employees, Male and Female			
2. Room Ventilated			
3. Self-Closing Doors			
4. Lavatory Facilities			
5. Good Repair and Clean			
<b>WASTE DISPOSAL</b>			
1. Approved Garbage Containers, Adequate, Clean, Good Repair			
2. Adequate Drains (Traps)			
3. Proper Drains and Traps			
4. No Back-Siphonage Hazard or Cross Connection			
5. All Liquid Waste Connection to Sanitary Sewer or Approved Type Individual System			
<b>REFRIGERATION</b>			
1. Thermometers In All Refrigeration Units			
2. Drip Into Pan or Indirect To Sewer			
3. Ice Bins Covered, Indirect To Sewer			
4. Ice Source			
<b>UTENSILS -- CLEANING AND SANITIZING (Use Applicable Section)</b>			
1. Sink 3 Compartment, Single Service			
2. Clean Dish Storage			
3. Chemical Test Kit			
<b>DISHWASHER</b>			
1. Chemical or High Temp			
<b>MISCELLANEOUS</b>			
1. Approved sources, no adulterated food used, all damaged food removed			
1. Hand washing Facilities With Hot and Cold Water, Soap, and Sanitary Towels In Ready to Eat Food and Drink Preparation Area			
2. Outside Doors; Self Closing and/or Fans			
3. Windows Screened. Ventilation Fans Louvered or Screened			
4. Hood (If Present) With Exhaust Fan. Adequate Size			
5. Floors, Walls, Ceilings In Kitchen, Storerooms, Toilets are Smooth and Finished In a Light Color			
6. Self-Closing Service Windows and/or Fans			
7. No Direct Opening to Living Quarters. (If Applicable)			
8. Premises Clean, Free from Insects and Rodents			
9. Shielded Lighting In Preparation & Storage Area			
10. Mop-Sink For Cleaning Floors, Etc.			

Signature and Title: \_\_\_\_\_ Permit #: \_\_\_\_\_

FSIO/Sanitarian: \_\_\_\_\_ Date: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

## 2013 Food Code Spec Sheet

SANITIZATION: CONCENTRATION, pH, TEMPERATURE, HARDNESS AND CONTACT TIME			
Minimum Concentrations ppm or mg/L	pH ≤ 10.0 & minimum Temperature	pH ≤ 8.0 Minimum Temperature	Contact Time
Chlorine 25	120°F (49°C)	120° F (49°C)	≥10 seconds
Chlorine 50	100°F (38°C)	75° F (24°C)	≥7 seconds
Chlorine 100	55°F (13°C)	55° F (13°C)	≥10 seconds
Iodine ≥12.5 to 25	pH ≤ 5.0 or per label; ≤ 75° F (24°C)		≥ 30 seconds
Quaternary Ammonium, per label	Water hardness ≤ 500 ppm or mg/L or per label; ≥ 75°F (24°C)		
Hot Water Sanitize, 3 compartment sink w/ integral heating device	≥ 171°F (77°C) immersed in rack or basket for 30 seconds		

**NOTE:** All chemical sanitizers shall be listed in 40 CFR 180.940 Sanitizing Solutions and used in accordance with the EPA approved Manufacturer's label use instructions or, **for sanitizers generated on-site**, be subject of an effective food contact notification for this purpose and comply with 40 CFR 156 Labeling Requirements for Pesticides and Devices.

WAREWASHING: MECHANICAL AND MANUAL		Minimum Wash Temperature	Minimum Sanitizing Temperature
<b>SPRAY TYPE WAREWASHERS:</b> Single Tank, Hot Water Sanitize	Stationary rack, single temperature	165°F (74°C)	165°F (74°C)
	Stationary rack, dual temperature	150°F (66°C)	180°F (82°C)
	Conveyor, dual temperature	160°F (71°C)	
<b>Multi-tank, Hot Water Sanitize</b>	Conveyor, multi temperature	150°F (66°C)	Sanitization levels as stated in the above table or per labeled manufacturer's instructions on the container
<b>Chemical Sanitize</b>	Any warewashing machine	120°F (49°C)	
<b>3 Compartment Sink</b>	Cleaning agent labeling may permit lower washing temperatures	110°F (43°C)	

### MINIMUM COOKING TEMPERATURES AND HOLDING TIME AT SPECIFIED TEMPERATURES

165°F (74°C) for 15 seconds 7 log reduction in microorganisms (or 7D kill)	poultry; wild game animals (live caught or field dressed) <u>STUFFED</u> fish, meat, pork, pasta, poultry or ratites; and <u>STUFFED</u> containing fish, meat, poultry or ratites.
165°F (74°C) with a 2 minute post cooking hold 7D kill	Microwave Cooking for raw animal foods: covered, rotated or stirred throughout or midway through the cooking process, and held for 2 minutes covered.
155°F (68°C) for 15 seconds or 158°F (70°C) for <1 second 150°F (66°C) for 1 minute 145°F (63°C) for 3 minutes 5D kill	ratites; injected meats; <u>COMMINUTED</u> raw animal foods such as fish, ground beef & other meats, commercially raised game animals, exotic animal or rabbits; and <u>RAW SHELL EGGS</u> not prepared for immediate service (combined or hot hold), {also see Highly Susceptible Populations (HSP)}.
145°F (63°C) for 15 seconds 3D kill	raw shell eggs prepared for immediate service; commercially raised game animals, exotic animals or rabbits; and other raw animal foods not otherwise specified in this table.
Surface temperature ≥ 145°F (63°C) + cooked color change on all external surfaces	<u>WHOLE-MUSCLE, INTACT BEEF STEAK</u> that is properly labeled as such may be served undercooked as RTE if not serving a HSP

### WHOLE ROASTS OF BEEF, CORNED BEEF, PORK OR CURED PORK

			Oven Type	Roast Weight <10 lbs. (4.5 kg)	Roast Weight ≥10 lbs. (4.5 kg)
145°F (62.8°C) 4 minutes*	158°F (70.0°C) 0 sec.*		<b>Still Dry</b>	≥ 350°F (177°C)	≥ 250°F (121°C)
144°F (62.2°C) 5 minutes*	157°F (69.4°C) 14 sec.*				
142°F (61.1°C) 8 minutes*	155°F (68.3°C) 22 sec.*		<b>Convection</b>	≥ 325°F (163°C)	≥ 250°F (163°C)
140°F (60.0°C) 12 minutes*	153°F (67.2°C) 34 sec.*				
138°F (58.9°C) 18 minutes*	151°F (66.1°C) 54 sec.*		<b>High Humidity<sup>1</sup></b>	≤ 250°F (121°C)	≤ 250°F (121°C)
136°F (57.8°C) 28 minutes*	149°F (65.0°C) 85 sec.*				
135°F (57.2°C) 36 minutes*	147°F (63.9°C) 134 sec.*		<sup>1</sup> Relative humidity > 90% for ≥ 1 hour as measured in the cooking chamber or oven vent, or in a moisture- impermeable bag that provides 100% humidity.		
133°F (56.1°C) 56 minutes*					
131°F (55.0°C) 89 minutes*					
130°F (54.4°C) 112 minutes*					
6.5 D kill					
*Note: holding time may include post-cooking heat rise					



## PLANT FOOD COOKING FOR HOT HOLDING

135°F (57°C)	Fruits and vegetables that will be hot held shall be cooked to the hot holding temperature of 135°F (57°C)
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**NON-CONTINUOUS COOKING:** Food receiving a non-continuous process requires minimum cooking times and temperatures after cooling or freezing.

**REHEATING FOR IMMEDIATE SERVICE:** Cooked and refrigerated RTE foods for a consumer's order may be served at any temperature, (i.e. roast beef sandwich au jus).

**REHEATING FOR HOT HOLDING:** To be completed  $\leq 2$  hours. Leftovers shall be reheated to at least 165°F (74°C) for 15 seconds {microwave is 165°F (74°C) rotated or stirred, covered, held for 2 minutes}. Remaining unsliced portion of beef or pork roasts cooked as stated in Table 1 above may be reheated with the same initial cooking parameters listed in table 1. Commercially processed, packaged, ready-to-eat (RTE) food shall be reheated to at least 135°F (57°C).

**COLD & HOT HOLDING:** Cold foods  $\leq 41^\circ\text{F}$  (5°C). Hot foods  $\geq 135^\circ\text{F}$  (57°C), except beef & pork roasts cooked or reheated as stated above, may be held at 130°F (54°C).

### **COOLING TCS (PHF) FOOD:**

**Hot foods:** 135°F to 70°F (57°C to 21°C) within 2 hours, and 135°F to 41°F (57°C to 5°C) within 6 hours or less.

**Ambient room temperature:** cooled to 41°F (5°C) within 4 hours, i.e. Reconstituted foods, canned tuna

**COLD RECEIVING:** Laws allowing shipping temperatures  $\geq 41^\circ\text{F}$  (5°C) for certain products shall be cooled to 41°F (5°C) within 4 hours, *except* that time parameters do not apply to raw shell eggs, which must be immediately placed in refrigeration at 45°F (7°C) or less.

**TIME AS A PUBLIC HEALTH CONTROL:** Written procedures on site & available to the inspector. The working supply (before cooking) or RTE (for service or display) TCS (PHF) FOODS is marked or identified with the maximum 4 hour, or 6 hour time period when removed from temperature controls. After 4 hours, or 6 hours OR if the product is unmarked or mismarked per time, the food shall be discarded. Procedure may not be used with raw eggs in a HSP facility.

**FROZEN FOOD:** Temperature necessary to keep product frozen "solid" and varies with product type. SLACKING: moderating the temperature.

**HANDWASHING FACILITIES:** Shall be equipped to provide hot water at 100°F by use of a mixing valve.

### **TEMPERATURE MEASURING DEVICES – TMDS**

1. Metal stem or thermocouple thermometers shall be provided, readily accessible and designed to be easily readable.
2. Food TMDs may not have sensors or stems constructed of glass, *except stems encased in a shatterproof coating such as candy thermometers may be used.*
3. Mechanically refrigerated or hot food storage units: equipped with at least one integral or permanently affixed, easily viewed TMD with sensors or a simulated product temperature shall be located in the warmest part of the refrigeration unit and in the coolest part
4. Warewashing machine TMDs to indicate water temperature in each wash and rinse tank: and entering the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank, and availability of irreversible registering temperature indicator required.

### **THAWING OF FROZEN FOODS**

1. Under refrigeration  $\leq 41^\circ\text{F}$  (5°C);
2. Cook or microwave as part of an uninterrupted cooking process;
3. Submerge under running water  $\leq 70^\circ\text{F}$  (21°C) with sufficient velocity and flow to float off loose particles in an overflow, and no portion of RTE food rises above 41°F, OR any raw animal food that will be properly cooked and does not rise above 41°F for more than 4 hours (includes time exposed to running water, preparation and cooling to  $\leq 41^\circ\text{F}$ ).
4. Remove frozen ROP fish from package prior to thawing or immediately after thawing.