

Technical Guidance Document identifying possible issues in processing establishments affected by natural disasters, such as Hurricane Katrina

Natural disasters such as hurricanes can have significant effects on environmental systems and infrastructure that can jeopardize public health. As people and businesses recover from these disasters, there are many public health concerns to address.

Following hurricane Katrina, some meat, poultry, and egg product establishments have been able to resume operations, while others have not and may not be able to do so for months – if at all. In order to ensure the production of safe food, FSIS personnel assigned to processing establishments should consider the following document, which includes **information for discussion with establishment management before** the establishment resumes operations. These are issues that a prudent establishment would consider—**not specific regulatory requirements**. In addition, possible FSIS verification activities before and after operations resume are included below for inspection personnel to consider.

Possible issues affecting establishments within the geographical area affected by natural disasters, such as Hurricane Katrina

Water / Ice

Suggested Discussion Points:

- The establishment has information or documentation that the public water supply is potable.
- The establishment has information that water usage restrictions are not in effect.
- The establishment has information that the integrity of the municipal water distribution system is assured. Integrity may include that there are no breaks in the pipe system, that there will be no anticipated disruption of flow, or that the pipe system has been cleaned.
- The establishment has purged potable water pipes, if necessary, and has reason to believe they are capable of delivering potable water prior to resuming operations.
- The establishment takes steps to prevent rust, silt, or sludge that may have accumulated in the system from creating insanitary conditions or adulterating product.
- The establishment has information or documentation that any private water supply, such as use of a well, is potable.
- The establishment has information that the integrity of the private water supply distribution system is assured. Integrity may include that there are no breaks in the pipe system, seepage contamination cannot enter the system, no anticipated disruption of flow, or that the pipe system has been cleaned.
- The establishment has reason to believe that the private water supply is adequate to maintain sanitary conditions.

Electricity

Suggested Discussion Points:

- The establishment has information that the municipality's electrical supply is operational. Knowing the status of the municipality electrical supply may assist with anticipation of possible power disruptions.
- The establishment has a private electrical generating capacity, can demonstrate the private electrical source is sufficient to meet the establishment's electrical needs, and can demonstrate the ability to maintain a private electrical generating capacity.
- The establishment has back-up signs or lighting for safety purposes, including marked exits and emergency escape plans, in case of power outage.

Workforce

Suggested Discussion Points:

- The establishment has fully qualified (trained) employees available for each workstation identified as essential for the production of wholesome, unadulterated product.
- Trained employees are available to properly execute monitoring and verification of the establishment food safety system.
- Employees are available continuously during operations.
- The establishment has determined the potential impact of the natural disaster on employee hygiene.
- The establishment has determined all of the above workforce issues and has developed a plan to accommodate inadequacies.

Facility

Suggested Discussion Points:

- The establishment has information on the integrity of the facility that establishes it is structurally sound.
- The establishment has determined that the exterior walls and roof are impervious to penetration by moisture and liquids.
- The establishment has determined that exterior structures, such as walls, doors, and windows, prevent entrance to pests and rodents.
- The establishment takes steps to prevent insanitary conditions and/or product adulteration until the structural integrity of the facility can be reestablished.

Support systems

Suggested Discussion Points:

- The establishment has determined if the following are sufficiently available to sustain operations:
 - packaging materials,
 - cleansers and sanitizers,
 - employee welfare supplies,
 - fuel and vehicles,

- contract carriers are available to deliver raw materials to the establishment,
- contract carriers are available to remove finished product from the establishment,
- contract carriers are available to remove condemned and inedible materials from the establishment.
- The establishment has determined if off-site storage facilities used to store finished product are capable of receiving and maintaining product in a sanitary manner.
- The establishment has determined that the effluent/waste disposal systems are fully operational.

Operational

Suggested Discussion Points:

- The establishment has reassessed its food safety systems to ensure that they meet the requirements of any changes (such as suppliers, condition of equipment) in operating conditions that were made necessary by the storm, the period of shut down, and their aftermath.
- The establishment has assessed the need for reducing production speeds because of factors such as fewer employees, changed suppliers, or other operating conditions.
- The establishment has considered whether the available production space is adequate, based on proposed production needs, to prevent the contamination or other adulteration of product.

Issue: If the establishment has no HACCP Plan or SSOP available because they were lost or destroyed in the storm, inspection program personnel may work with establishment management in re-creating these records, but the HACCP Plan and SSOP are necessary to resume operations.

Suggested Considerations include:

- Inspection program personnel may use available databases to access data and history of the establishment, including PBIS and LEARN. This information may help the plant in validating the HACCP plan.
- Inspection program personnel may contact the District Office for additional information or data accessible at the District level, including laboratory sample results, management folders, AER, STEPS, and Food Safety Assessment reports.
- Inspection program personnel may contact the Technical Service Center (800-233-3935) or the Small and Very Small Plant Outreach of the Strategic Initiatives, Partnership, and Outreach Staff (202-690-6520) for assistance in working with establishments.

Refrigeration

Suggested Discussion Points:

- The establishment has considered that a loss/interruption of refrigeration may result in:
 - the adulteration of product stored in refrigerated spaces,
 - the growth of pathogenic microorganisms and create a biological food safety hazard in product stored in refrigerated spaces,
 - the growth of non-pathogenic microorganisms and adulteration of product stored in refrigerated spaces,

- the growth of non-pathogenic microorganisms and create insanitary conditions in refrigerated spaces.
- The establishment takes steps to address the acceptable use and labeling of previously frozen product that may have thawed and possibly became re-frozen as a result of temporary loss of refrigeration.
- The establishment has determined if the current refrigeration system is adequate to accommodate proposed production needs.

Sanitation / Environmental

Issue: Are facilities in sanitary condition prior to resuming operations?

Suggested Discussion Points:

- The establishment provides assurances that rodents, insects, and/or wildlife that may have entered the facility are no longer present, and that the facility is cleaned and sanitized as appropriate.
- The establishment considers the possibility that facilities are contaminated with biological (particularly *Listeria monocytogenes* or other pathogens), chemical, and physical hazards, as a result of flooding or structural damage and repair, and takes steps to ensure that prior to resuming operations:
 - All product contact surfaces are sanitary;
 - All non-food contact surfaces that could affect product are sanitary (such as walls, floors, ceilings, refrigeration units, etc);
 - Implements or increases routine environmental and food contact surface testing to ensure that all surfaces which could affect product are sanitary prior to resuming operations.
- The establishment maintains adequate separation of structurally unsound and insanitary areas from those areas that are structurally sound and sanitary.
- The establishment has considered product flow between raw product areas and RTE product areas in order to prevent cross contamination of product

Issue: Are dry goods in sanitary condition prior to resuming operations?

Possible Discussion Points:

- Establishments electing to salvage unused packaging materials take steps to ensure the materials are in sanitary condition and do not result in product adulteration.
- Establishments electing to salvage unused product containers take steps to ensure the containers are in sanitary condition and do not result in product adulteration.

Issue: Are non-meat ingredients in sanitary condition prior to resuming operations?

Possible Discussion Point:

- Establishment takes steps to ensure that container integrity of non-meat ingredients has not been compromised and sanitary conditions have been maintained to prevent product adulteration

Products / RTE

Issue: Is food safety taken into consideration in all product-based decisions?

Suggested Discussion Points:

- The establishment takes into account time/temperature abuse of existing product, in determining the safety of the product for human consumption.
- The establishment has assessed the wholesomeness of any product, or the condition of any materials, exposed to flood waters or other disaster-related environmental conditions, and whether these products or materials are safe and wholesome to use.
- The establishment properly disposes of product that is determined unfit for human consumption.
- RTE establishments consider the possibility that facilities are contaminated with biological (particularly *Listeria monocytogenes*), chemical, and physical hazards, as a result of flooding or structural damage and repair, and take steps to ensure that all products are wholesome and unadulterated prior to entering commerce.
- Establishments electing to salvage RTE product packed in waterproof packaging consider the possibility of biological (including pathogens), chemical, and physical hazards, on the exterior of the packaging and take steps to prevent product adulteration.

Possible verification or other activities, for issues related to establishments affected by natural disasters, such as Hurricane Katrina

Suggested Verification Activities:

- Perform additional verification of the establishment's HACCP system, sanitation performance standards (SPS), and sanitation standard operating procedures (Sanitation SOPs).
- As federally-inspected establishment's resume operations, FSIS may elect to conduct a Food Safety Assessment (FSA) and Intensified Verification Testing (IVT) at some or all the establishments.

For technical guidance, contact the Technical Service Center at 1-800-233-3935.

For guidance related to regulatory activities, refer questions through supervisory channels.