Technical Guidance Document identifying possible issues in slaughter 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-producing 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 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 the 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 electrical grid 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 considered the potential impact of the natural disaster on employee hygiene.
- The establishment has considered 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 liquids.
- The establishment has determined that exterior 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 considered if the following are sufficiently available to sustain operations:
 - o packaging materials,
 - o cleansers and sanitizers,

- o employee welfare supplies,
- o fuel and vehicles,
- o contract carriers to deliver raw materials to the establishment,
- o 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 considered if off-site storage facilities used to store finished product are capable of receiving and maintaining product in a sanitary manner.
- The establishment has considered that the effluent/waste disposal systems are fully operational.

Operational

Suggested Discussion Points:

- The establishment should consider the negative impact to live animals, especially poultry, and address this in their establishments.
- The establishment considers the need for decreased line speeds.

Refrigeration

Suggested Discussion Points:

- The establishment considers 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 identify thawed and re-frozen product as a result of temporary loss of refrigeration.

Sanitation

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.
- The establishment considers the possibility that facilities are contaminated with *Listeria monocytogenes* or other pathogens, as a result of flooding or structural damage and repair, and takes steps to insure that all product contact surfaces are not affected prior to resuming operations.

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

Products

Issue: Is food safety taken into consideration in all product-based decisions? **Suggested Discussion Points**:

- RTE establishments consider the possibility that facilities are contaminated with *Listeria monocytogenes* 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 product packed in waterproof packaging consider the possibility of *Listeria monocytogenes* on the exterior of the packaging and take steps to sanitize the package exterior.

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

Suggested Verification Activities:

- Perform increased food safety verification ("zero tolerance") procedures.
- Increase verification of the establishment's generic *E. coli* testing
- Perform additional verification of the establishment's control of sanitary dressing procedures, sanitation performance standards, and sanitation SOPs.