Action-Items for Emergency Flood Evacuation for a Dairy

Emergency evacuation of a dairy is an urgent, complex process, requiring that multiple tasks to be completed simultaneously by many people. Successful completion of an evacuation is most likely accomplished when a single incident coordinator is monitoring and supporting the efforts of employees assigned to various specific tasks. Communication is key. This checklist was reviewed by the California Department of Food and Agriculture.

Evacuation Checklist

- Identify a Relocation Site
  Ideally a producer will have already discussed moving lactating cows to another family or neighbor’s dairy, allowing for uninterrupted milking. Space availability may require that more than one relocation site be used. Some processors and trade groups may be able to assist producers by compiling lists of willing host dairies and vacant facilities. County fairgrounds, sales-barns and feedlots have been used as a last resort if facilities with milking equipment are not available.

- Identify Transportation Resources
  In the past processors and trade groups have helped organize sufficient trucks, trailers and manpower to move a threatened herd. Barring that, the County Agricultural Commissioner or County Emergency Services Coordinator may be able to access transportation resources during a declared local or state-wide emergency.

- Contact Your Milk Inspection Service
  It is essential that producer inform his dairy inspector of the evacuation. If cows are being moved from one inspected dairy to another, no change will occur in Grade A permit status of either the evacuated herd or the host facility. If however a herd is evacuated to a vacant facility, local or state dairy inspectors will need to perform an emergency inspection to insure that all sanitation and hygiene requirements will be met.

- Prepare the Facility for Inundation
  Relocate heavy equipment such as trucks, tractors, ATVs which would be damaged by submersion. Shut off utilities: turn off electrical
breakers and shut off propane at the tank. Leave building doors and windows open several inches to equalize pressure and help prevent buildings from shifting. Use heavy plastic sheeting and duct tape to seal off the well-head, preventing contamination of the farm’s well. Protect toxic and expensive consumable products (animal drugs, fertilizers, pesticides) and hay and grain, if possible.

• **Protect Farm Records**  
  If the farm's records are not already backed up on a secure “cloud” server, you’ll want to collect relevant financial, breeding, ration, production and medical files.

• **Document All Expenditures**  
  If a local or national emergency is declared it is likely that relief grants or low-interest loans will become available. Receipts for any disaster-related expenders (from feed to fuel to hotel rooms) should be collected in a safe place.

• **Contact Regional Water Board**  
  If flooding results in an off-site discharge of manure the General Order requires producers to notify their Regional Water Quality Control Board within 24 hours.

### Checklist for the Host Dairy

- **Record Number of Cows in Each Shipment**  
  The trailer driver and a dairy employee of the host facility should agree on the number of cows being received in each shipment.

- **Separate Evacuated Cows From Resident Cows**  
  Evacuated cows should be kept in pens separate from resident cows. Ensure that evacuated cows can be individually distinguished from cows on the host dairy; cow identification might be unique (different color ear tags) but marking chalk can be used in a pinch. Visiting cows should be monitored closely and daily for signs of illness.

- **Visiting Cows Should be Milked Separately**  
  CDFA allows for the milk of visiting cows to be co-mingled with that of resident cows. Visiting cows however should be milk last, after the resident cow strings, but before the hospital strings of both herds.

- **Insure Evacuated Hospital Pen Cows are Isolated**  
  To prevent residues it is critical treated cows from the evacuated farm not accidentally end up in a milking string.

- **Agreement Between Evacuated and Host Dairy Managers**
There should be an agreement between the evacuating producer and the host producers on how to handle maintenance costs (feed, labor, medications) and milk remittance. A dairy trade group can assist in setting up an agreement.

**Repopulation Checklist**

- **Contact Your Milk Inspection Service**
  Before returning your cows, arrange for a dairy inspection. Contaminated equipment or otherwise unsanitary conditions could lead to a temporary loss of a permit to market milk. If there was potential well water contamination, the dairy inspector may take water samples to ensure that water used for drinking, cooling and washing meet State standards.

- **Perform an Initial Survey**
  If animals were sheltered-in-place, ensure that all animals are accounted for and are eating. Take photographs and video footage of damage and losses for insurance claims submission.

- **Survey Feed Damage**
  Check all sources of feeds and pasture forages for spoiling and contamination. Standing water may have ruined some pasture forage, forcing isolated animals to consume contaminated forages or even poisonous plants. Pay particular attention to stored feed and forages, looking for molds, which can both sicken animals and make their products, such as meat and milk, unsafe for human consumption.

- **Protect Against Animal Disease**
  Develop a post-flood preventative herd health plan with your herd veterinarian. This could potentially include vaccination against diseases associated with flood-prone areas such as Blackleg, anthrax, or leptospirosis, treatment for worms and liver flukes in pastured cattle and an expanded mastitis monitoring program.

- **Watch for Disaster Relief Grants**
  Following declared disasters, state and federal governments may offer disaster relief grants or low-interest loans. For agriculture and animal operations, this assistance is typically managed either through USDA’s Natural Resources Conservation Service (NRCS) or its Farm Services Agency (FSA). Important deadline windows for applying may be narrow and documentation of losses and expenditures is essential.
Resources for Dairy Producers Regarding Flooding Emergencies

University of California-Davis:

Center for Food Safety and Public Health:
http://www.prep4agthreats.org/Natural-Disasters/floods

Purdue University Cooperative Extension:
https://ag.purdue.edu/extension/eden/Pages/flood-livestock.aspx