## **CHAPTER 12**

## **Poultry Farm Emergency Action Plans**

## John E. Albrecht and Joy Shealy

Animal waste spills have the potential to harm human and environmental health. Therefore, it is in the public's best interest to prevent spills. Prevention is generally less costly than clean-up. Although external factors, such as heavy rainfall, can play a part, spills and leaks are often due to human error or equipment failure. Alterations in farm construction and operating practices can reduce the potential environmental contamination. Care must be taken during the transportation, storage and spreading of poultry waste. Vehicle accidents can easily result in the deposition of litter or manure in compromising situations.

A site specific emergency response plan provides a step-by-step process for producers to address a manure emergency such as may be caused by a tornado, hurricane or flood. Being site specific, the plan assures that producers and their employees are aware of proper initial containment strategies, that the proper authorities are notified, and that necessary equipment to implement the plan is available.

For emergencies involving catastrophic animal mortalities or accidental leakage of manure nutrients, the action plan normally will include

- recognition and assessment of the problem,
- notification of proper authorities,
- enlistment of help from other producers and others to correct the problem,
- restoration of the affected area to its original condition.

To ensure prompt response to a request for assistance, producers should make reciprocal arrangements with neighboring farms, and discuss their plans with other businesses whose expertise or equipment may be needed.

In deciding who might serve on a response team, consider the potential emergencies that might occur on your farm and the number of personnel who will be available at any given time to take corrective action. If the risk is small, the farm manager or owner will likely serve as the response team leader. In other cases, where manure discharge has a greater potential for disaster, either in terms of magnitude or environmental impact, the response team leader may be a service manager for a contract company or other off farm, technically trained individuals. Off-farm people should not be considered as first response leaders in most situations.

Each farm should identify all locations where system failure may occur, and identify the magnitude of failure potential. Examples may include stacked litter where seepage could enter surface water or existing ditches, the potential of the farm site to hurricane damage, and the proximity to a flood plain. Seepage may also occur from buildings or properly stacked and covered manure due to blocked or ruptured pipes, heavy rainfall events, failed pumps, and a host of unforseen problems. Spills may also occur with trucks and manure spreaders.

All live animal farms have routine death loss where farm management has planned for disposal of carcasses. It is possible for a number of types of events to cause massive deaths in a very short period of time. These events may include fire, storm effects or disease. This type of loss usually exceeds the farm's dead animal disposal plan. Plans should include who to call and where to seek help if catastrophic events occur.

<u>Farms must have a master plan that describes what to do with each type of spillage event.</u> Persons finding the spill or failure should immediately contact the response team leader. All employees should be instructed in how to turn off water lines or pumps that may be causing the spillage.

Study the drainage patterns from your farm and envision where a manure discharge will flow while it is on your property and after it leaves your property. Determine the point at which the discharge might enter surface waters. For some farms, manure may travel long distances before entering a ditch or stream. In other cases, the stream may be nearby, demanding a much faster response.

## **Emergency Plan Contents**

### A. Developing The Individual Site Plan

A well coordinated, timely response will show the professionalism and concern of the facility's personnel, and will help avoid many of the negative impacts of the emergency. Minimizing adverse impacts of an emergency is important because the stakes are high. Poor responses to emergencies can lead to personal injuries, economic losses, negative public reaction, and increased scrutiny by regulatory officials. Manage the system with storm warnings as part of the plan.

- 1. Catastrophic death is most likely to be caused by natural acts. Past events have been due to ice, hurricanes and floods. Loss of electricity frequently leads to death by excessive body heat.
- 2. Smoke and fire may cause tragic losses on a single farm site, but will usually not affect great areas.
- 3. Disease outbreaks may cause much higher than normal mortality.

### B. Prevention

- 1. Prevent or minimize potential damage caused by threatening natural occurrences such as hurricanes or strong storms associated with approaching fronts actions include:
  - a. Do not spread waste on fields just prior to an approaching storm.
  - b. Do not spread waste on fields that flood during high rainfall events.
- 2. Plan for the containment of seepage water below the stacked manure, in the direction of runoff. Maintain the manure handling system and:
  - a.. Inspect equipment regularly and maintain a log.
  - b. Provide warning devices and keep good records.
  - c. Understand the operation of all application equipment.

## C. Preparedness

Have a detailed plan/schematic of the waste management system that a designated representative can use and follow. <u>This plan should include:</u>

- 1. <u>The location of shutoffs for water and electric systems.</u>
- 2. The names and telephone numbers of emergency response agencies.
- 3. The names and telephone numbers of the farm's emergency response team.
- 4. The facility layout and spill control measures drawn out on a diagram.
- 5. <u>Pre-approved burial site for catastrophic death disposal.</u> If no plan has been approved, then you may be required to have a SC DHEC inspector on the site before you can proceed with disposal.
- 6. <u>Contact list of neighboring property owners that may be affected</u>.
- 7. <u>A list of spoil materials and their location that may be used for forming berms around seepage.</u>
- 8. <u>List of equipment on site for emergency use, including location</u>.
- 9. <u>List of heavy equipment owners who have agreed to assist in an emergency.</u>

# Be familiar with the Emergency Action Plan specifically designed for your farm and attached to the approved Waste Management Plan.

(CAMM Poultry Chapter 12, last review - January, 2003 wbs)

## **Poultry Farm Operators Emergency Action Plan**

Post this plan in obvious location

## A. Farm Contacts

Individual	Responsibility	Day Phone	Night Phone

## **B.** Agency Contacts

Contact Agency	Person	Day Phone	Emergency Number
DHEC	<b>Regional Office</b>		1-888-481-0125
NRCS	County Office		
Sheriffs Office			
State Veterinarian	Dr. Julie Helm Dr. Venaye Reece	1-803-788-2260 (Disease) 1-803-788-2260 (Disaster)	

### **C. Property Owner Contacts**

Name	Location of Property	Day Phone	Night Phone

## **D.** Factors to identify when calling agencies

- 1. Nature of emergency
- 2. Location of spill including address and site description
- 3. Did the spill reach surface water, and if so, how much
- 4. Approximate volume of spill
- 5. Immediate perceived impact
- 6. Are potable water wells in danger
- 7. Control action implemented

## **Emergency Action Plan**

Post this plan in an obvious location

Suggested responses to some possible problems:

- A. Massive die-off that is disease related.
  - 1. Notify State Veterinary Office.
  - 2. Limit exposure to other birds.
  - 3. Prevent visitation by unnecessary people.

4. Dead birds should be moved into a DHEC approved transport vehicle or a DHEC approved storage area or bin.

- B. Massive die-off that is disaster related.
  - 1. Notify State Veterinary Office

2. Routine methods of dead bird disposal are usually not sufficient in handling large amounts of dead birds. The most common methods of disposal for catastrophic death are as follows:

- a. Contract disposal to a renderer.
- b. Disposal in a landfill.
- C. Runoff from waste application field
  - 1. Immediately stop waste application.
  - 2. Create a diversion to contain waste.
  - 3. Incorporate waste to reduce runoff.
  - 4. Evaluate and eliminate the reason(s) that caused the runoff.
  - 5. Evaluate the application rates for the fields where runoff occurred.
- D. Seepage from stacked manure storage area.
  - **1.** Dig a small ditch, catch all seepage, put in a submersible pump, and pump back to lagoon, storage pond or tank.
  - 2. If holes are caused by burrowing animals, trap or remove animals, fill holes with a clay type soil and compact.
  - **3.** Have a professional evaluate the condition of the side walls and bottom as soon as possible.