Chapter 11 Emergency Action Plans

Thomas M. Bass, Biological & Agricultural Engineering Dept., University of Georgia.

Introduction

There are a variety of dangerous situations and accidents that can occur on a farm. The National Safety Council rates the three most dangerous occupations in the U.S. as mining, farming and construction. Not being prepared for emergencies could result in personal injury, property damage and environmental damage on the farm and in the larger community. Accidents you may want to plan for include: fire and explosions, medical emergencies, severe weather, and last but not least, threats to water resources and the environment. While it is a good idea to plan for a variety of accidents, the focus of this chapter is on environmental emergencies.

The largest causes of regulatory fines levied against animal agriculture are manure spills and discharges. Preventing and properly responding to accidental discharges on a farm is everyone's concern. Communication between the farm owner, supervisors, and employees generates ideas and awareness that leads to accident prevention and quick response if a spill does occur. Good, current response plans, and regular inspections of your manure management and application system are essential links in maintaining a safe, accident-free operation.

A properly written, complete plan will...

- Provide essential information to workers and others in the event of an accident
- Demonstrate responsible preparation.
- Protect you and others against environmental damage.
- Meet state or other regulatory requirements.

What is an Emergency Action Plan

An emergency action plan is a basic, yet thorough, common sense plan that will help you, your family, and your employees make the right decisions during an emergency. Such a plan should include three sections:

Part 1 of EAP – Site Plan

The site plan should include a detailed description of the animal production facility site, and land application areas. Your farm map should be a part of this plan and any additional detailed maps or diagrams of buildings and waste storage structures. Consider including the following details on your emergency plan maps and diagrams:

- Entrances and exits from each building
- First aid kit and fire extinguisher location(s)
- Manure storage facility details (access, valves, pumps, switches, etc.)

- Wells, water lines, and water valves
- Electrical service boxes for each building
- Gas lines and all fuel storage
- Tile lines in and near the farmstead, and especially surface inlets
- The location of all emergency equipment
- All land application areas normally used
- Property boundaries
- Emergency land application areas (should be nearby and usable all year)
- Nearby water resources to protect such as creeks, streams, rivers, wetlands, and lakes
- Tile lines, surface inlets, and outlet locations
- Drainage ways and potential locations of emergency berms or storage

Part 2 of EAP – Emergency contact information

A phone tree or contact sheet should be made with the names and phone numbers of anyone who might be able to help in the event of an emergency. Suggested contacts for an emergency contact sheet include:

- Farm Owner
- Manager
- Assistant Manager
- Emergency Response Agencies and Law Enforcement
- Earth Moving and Pump Equipment
- Technical Assistance Providers (Extension, NRCS, Consultants)
- Neighbors
- Local Health Department
- Environmental Agency
- Department of Agriculture

This sheet should be posted next to every telephone so that even part-time employees or a stranger could make emergency calls if necessary. A copy should also be maintained in your Emergency Action Plan file.

The following information should be provided during an emergency call. Make sure someone is always on-farm who can speak English.

- Facility address
- Physical directions to the facility, (i.e. 3 miles west of "town" on County D3, and ¹/₂ mile North)
- Human injuries (known or suspected)
- Type of emergency or spill
- Direction spill is headed (water impacted)
- How long has spill been going on/when did it occur
- Steps already taken address the situation

Part 3 of EAP - Plan of Action for Manure Spills

Do not wait until manure or wastewater reaches a stream or leaves your property to acknowledge that you have a problem; make every effort to ensure that this situation does not happen. Your Emergency Action Plan should be available to all employees, and they should be trained in its use because accidents, leaks, and breaks can happen at any time. To be most effective, your Emergency Action Plan should follow these steps:

- Eliminate the source
- Contain the spill, if possible
- Assess the extent of the spill and note any obvious damage
- Notify the appropriate agencies
- Clean up the spill and make repairs
- Prepare and submit a summary report

Considering these generic steps, you should write specific responses to emergencies that could cause the most damage and are possible considering the type of storage and application systems you have.

Post-spill assessment and reporting

If a spill occurs on your farm, the Georgia Environmental Protection Division requires that you report the spill within 48 hours and will normally require a written report to be submitted following the accident. Environmental emergencies in Georgia can be reported at 800-241-4113. Assessments or "follow-up" reports give you and the regulatory agency an opportunity to reflect and learn from the events that led up to the spill and those actions that were taken following the spill. The following suggestions provide the information that should be included in a post-spill assessment report. This record will help you should any legal action result, and will help you prevent similar occurrences in the future.

- Assess the extent of the spill and note any obvious damages
 - Did the waste reach any surface waters, wetlands, tile drains, or wells?
 - Approximately how much manure was released and for what duration?
 - Did you note any damage, such as employee injury, fish kills, or property damage?
- Response to spill
 - When and where was the spill contained?
 - What measures were taken to avoid additional contamination and threat to the environment or human health?
 - Did anyone or any local group assist in the cleanup?
 - Was a technical specialist (NRCS, Conservation District, or engineer) consulted? What corrective actions are necessary to repair any damage to your storage structure, manure transfer, or application equipment?
- Cause of the spill
 - Can you determine the cause of the spill or discharge?
 - If appropriate, were signs present of the condition before the accident occurred?

- Contact the appropriate agencies
 - When were local and state agencies contacted (record the day, hour, and minute), notifying them of the spill?
 - Did a representative of the state water quality agency or health department respond to the notification? List names, titles, and agencies.
 - Did state or local representatives give you any "special" instructions?

Creating a Community Response Plan

When an emergency arises, you may need the assistance of neighboring farmers, fire departments, or other county services. Consider who in the community (producers, farmers, or community services) owns equipment that may be locally available for use in the event of a manure spill. Large equipment or custom services that may be necessary to respond to and clean up a manure spill include: earth moving equipment, generators, pumps, tanker wagons, irrigation equipment and dump trucks. Also in a an emergency you may want permission to access neighboring property if there is a chance to stop a spill from reaching surface waters.

Note: Excerpts taken from Livestock and Poultry Environmental Stewardship Curriculum, Lesson 50 "Emergency Action Plans" and ISU Extension pub Pm-1859, "Emergency Action Plans".