

Best Environmental Management Practices

Farm Animal Production

Emergency Action Planning for Livestock Operations

Don Jones and Alan Sutton, Purdue University and Charles Gould, Michigan State University

This publication provides an outline to develop an emergency plan for manure releases. Livestock producers should plan for potential manure releases, high animal death loss, and silage leachate. This plan should be readily available to and understood by all farm employees. The main points of the plan along with the relevant phone numbers should be posted by all telephones at the site. A copy should also be available in remote locations or vehicles if the land application sites are not adjacent to the facility office.

What to Do if There is a Spill

Recognize and make an initial assessment of the spill then take quick and effective actions to minimize damage. Some operations will need assistance from other nearby producers and others. It is essential that prior arrangement be made so that every person involved will know what to do when an emergency arises.

The 4 Cs of Spill Response

- Control the Source:
 - Stop manure application or pumps
 - Close valves
 - Separate pipes, creating an air gap and stopping flow due to siphoning
 - Transfer manure liquid to another basin, lagoon or tank
 - Plug holes, or shut off the water in case of a waterline break

- Contain the spill
 - Build containment dam in field, ditch or stream. Check for tile flows
 - Limit the area impacted
 - Construct a temporary holding basin down slope from the release
 - Use absorbent material such as sawdust to absorb the release
 - If accessible, place soil over the point of seepage
- Comply with Reporting Requirements
 - Did the release reach any surface waters, streams, well casings, or other sensitive areas?
 - You must immediately report manure spills on public roads (county sheriff) and those that threaten surface waters (state environmental management agency)
 - For other spills, prepare a summary report for your files to document your actions
- Clean up - Assess and Restore the Affected Area
 - Collect spilled manure and spread or return to storage
 - Restore damaged area
 - Prepare a summary report

Farm name: _____

Date: _____

1) List Emergency Telephone Numbers

Facility Owner: _____

Alternate Contact: _____

Environmental management agencies: _____

Drain Commissioner: _____

Fire Department: _____

Road Commissioner: _____

State Police: _____

County Health Dept.: _____

Co. Sheriff: _____

Other _____

Agriculture Pollution Emergency Hotline
Michigan 1-800-405-0101
Indiana 1-888-233-7745 or (317) 233-7745
(Office of Environmental Response)

2) Develop a Map

Items to include:

- Anticipated flow path in the event of a spill
- Well heads
- Streams, wetlands, and lakes
- Tile flow
- Schools, churches, daycare centers, etc...
- Road ditches
- Drainage ditches
- Other Sensitive areas

3) Earth-moving equipment available for manure spills. Include owned and other nearby equipment and contact information. Ideally, you should have a prearranged agreement with neighboring producers. Include excavating equipment as well as additional pumping equipment and storage.

4) Emergency Action Plans for potential

Additional Equipment and Storage	Location and Owner	Telephone
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

manure spills on your farm

Breach of Manure Storage

Your plan: _____

General action steps: Stop flow into storage, build containment dams, notify state regulatory agency add soil to berm, pump manure from storage to field, remove manure from discharge area. Utilize prearranged additional storage with neighbor.

Manure Spill on Road

Your plan: _____

General action steps: Human injuries, if present, take precedence. Stop any additional spill, build containment dams, and remove manure, contact Road Commissioner and Drain Commissioner, wash manure from road under advisement. Prepare summary report. Contact the county sheriff if manure is spilled in a roadway.

Manure Irrigation Emergency

Your plan: _____

General action steps: Stop pumps, close valves, separate pipes, build containment dams, notify appropriate regulatory agencies, remove manure from discharge area. Prepare summary report.

Manure Spill in Field

Your plan: _____

General action steps: Stop manure application, build containment dams, remove manure from discharge area, notify appropriate agency. Prepare summary report.

Manure Field Runoff

Your plan: _____

General action steps: Stop application, plow a diversion trench, and remove manure if needed, notify appropriate agency. Prepare summary report.

High Animal Mortality

Your plan: _____

General action steps: Mortalities may be buried, burned or rendered. In MI, contact the Department of Agriculture or Department of Environmental Quality (DEQ) for exemption to state Act 239, P.A. 1982, as amended. In IN, Contact the State Veterinarian's Office.

Confined Spaces Entrance Procedure

Your plan: _____

Silage Leachate Containment Plan

Your plan: _____

General action steps: Utilize sawdust, lime or other material to contain and or neutralize leachate. Collect leachate in designed containment; utilize grass filter strip to treat pad runoff.

Other Tools and Resources

Emergency planning:

- Livestock and Poultry Environmental Stewardship
- Distributed by MidWest Plan Service
1-800-562-3618, www.MWPSHG.org

For silage leachate management:

- Frequently Asked Questions Document
www.maeap.org

Animal Mortality Management:

- Livestock and Poultry Environmental Stewardship
- Distributed by MidWest Plan Service
1-800-562-3618, www.MWPSHG.org
- State Law
- Brochure
- Animal Industry Division Phone Number



Contact Information:

Michigan:

- Contact Department of Environmental Quality if manure intercepts a water of the state.
Michigan emergency hotline: 1-800-405-0101
- Michigan Emergency Tube
- Contact your local Groundwater Technician for assistance

Indiana:

- Contact Department of Environmental Management, Office of Environmental Response within 2 hours of any spill.
1-888-233-7745 or (317) 233-7745

About this Publication

This publication was funded by USDA Special Needs, Purdue University, and Michigan State University. It was adapted in part from the Livestock and Poultry Environmental Stewardship project, funded by the U.S. EPA, coordinated by the University of Nebraska-Lincoln, and published by the MidWest Plan Service, 122 Davidson Hall, Iowa State University, Ames, Iowa 50011-3080. See <www.lpes.org> or call (800-562-3618) to obtain access to this and other lessons.

Publications in this series:

- Land Application Records and Sampling
- Emergency Action Planning for Livestock Operations
- Mortality Management
- Inspecting Your Confined Feeding Operation
- Feeding Strategies to Lower N&P in Manure
- Building Good Neighbor Relationships
- Disposal of Farm Medical Wastes
- Manure Nutrient Recycling
- Environmentally Sensitive Field Characteristics
- Manure Applicator Calibration
- Odor Control Options for Confined Feeding
- Comprehensive Nutrient Management Planning



It is the policy of the Purdue University Cooperative Extension Service, David C. Petritz, Director, that all persons shall have equal opportunity and access to the programs and facilities without regard to race, color, sex, religion, national origin, age, marital status, parental status, sexual orientation, or disability.

Purdue University is an Affirmative Action employer.
This material may be available in alternative formats.

1-888-EXT-INFO

<http://www.ces.purdue.edu/extmedia>



MSU is an affirmative-action, equal-opportunity institution. Michigan State University Extension programs and materials open to all without regard to race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, marital status, or family status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Margaret A. Bethel, Extension Director, Michigan State University, E. Lansing, MI 48824. This information is for educational purposes only.



Best Environmental Management Practices

Farm Animal Production

Emergency Action Planning for Livestock Operations

Don Jones and Alan Sutton, Purdue University and Charles Gould, Michigan State University

