Emergency Action Plan components
- Eliminate
- Contain
- Assess
- Notify
- Clean up
- Report

Plan Components

Emergency Action Plans are implemented when manure or other wastes from your operation are leaking, overflowing, or running off the site. 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 be enacted as follows:

1. Eliminate the source.
2. Contain the spill, if possible.
3. Assess the extent of the spill and note any obvious damage.
4. Notify the appropriate agencies.
5. Clean up the spill and make repairs.
6. Prepare and submit a summary report.

Eliminate the source

Depending on the situation, this may not be possible. Suggested responses to several problems are listed below.

1. Lagoon or slurry basin overflow responses are as follows:
   - Add soil to the berm, increasing the dam's elevation.
   - Pump manure and wastewater to fields at an acceptable rate.
   - Stop all additional flow (waterers, flushing system, etc.) to the structure.
   - Call a pumping contractor.
   - Preven any surface water from entering the storage structure.

   Note: These activities should be initiated when your lagoon level exceeds the temporary storage level of your storage structure. (For more information, consult Lesson 24, *Operation and Maintenance of Manure Storage Facilities.)*

2. Runoff from manure application field responses are as follows:
   - Immediately stop application.
   - Create a temporary diversion or berm to contain manure on the field.
   - Incorporate manure, reducing further runoff.
   - Evaluate and eliminate the situation(s) that caused the runoff.
   - Evaluate the application rates for the fields where runoff occurred.

3. Leakage from the manure distribution or irrigation system
   - Pipe and sprinkler responses are as follows:
     - Stop recycle (flushing system) pump.
     - Stop irrigation pump.
     - Close valves, eliminating further discharge.
     - Separate pipes, creating an air gap and stopping flow.
     - Repair all leaks prior to restarting pumps.

   - Flush system, house, and solids separator responses are as follows:
     - Stop recycle (flushing system) pump.
     - Stop irrigation pump.

- Make sure no siphon effect has been created.
- Separate pipes, creating an air gap and stopping flow.
- Repair all leaks prior to restarting pumps.

4. Leakage from base or sidewall of lagoon or earthen storage structure
   Often these are seepage rather than flowing leaks. Possible responses are as follows:
   - Dig a small well or ditch to catch all seepage, put in a submersible pump, and pump back into lagoon.
   - If holes are caused by burrowing animals, trap or remove animals, fill holes, and compact with a clay-type soil.
   - Other holes may be likewise temporarily plugged with clay soil.

   Note: Problems with lagoons and earthen storage structures require the services of an individual experienced in the repair of lagoons.

5. Manure leakage or discharge from tile drains responses are as follows:
   - Contain manure by damming the field drain.
   - Plug the tile outlet, forcing manure infiltration into the field.

Contain the spill when it occurs, if possible

Minimize manure movement off the farm or downstream, thus minimizing its environmental impact.

Contain the spill when it occurs… minimizing its environmental impact.

1. Manure spill or discharge into a stream or ditch
   - Contain manure by creating a dam in a field, ditch, or stream.
   - Pump collected manure onto fields, into storage structures, or into manure tanks.
2. Seepage or flowing manure from a lagoon or storage basin
   - Construct a temporary basin downslope of the seepage area. Ensure that you do not damage the existing embankment while creating the temporary basin.
   - *If accessible*, place soil over the point of seepage, ensuring that you do not drive over or compact the seepage point. This action may speed up rather than slow down the loss of manure.
   - Pump manure and wastewater to a depth below the point of seepage.

Assess the extent of the spill and note any obvious damages

Assess the extent of the spill… .

1. Did the waste reach any surface waters?
2. Approximately how much was released and for what duration?
3. Did any damage occur, such as employee injury, fish kills, or property damage?
4. What is the distance and direction to the nearest neighbor, town, or public well from the release?
5. Did the spill leave the property?
6. Can the spill potentially reach surface waters?
7. Could a future rain event cause the spill to reach surface waters?
8. Are potable water wells in danger (either on or off the property)?
9. Review any actions that were taken to contain or minimize the spill or discharge.

Notify the appropriate agencies

During normal business hours, call your state water quality agency office; after hours, your state may have an emergency number to use for reporting

manure spills. Your phone call should include your name, facility name, telephone number, the details of the incident (see above), the facility's exact location, the spill's location or direction of movement, weather and wind conditions, what corrective measures have been undertaken, and the seriousness of the situation.

1. If spill leaves property or enters surface waters, call local emergency medical services (EMS).
2. Instruct EMS to contact local Health Department.
3. Contact CES, local SWCD office, and local NRCS office for advice/ technical assistance.
4. If none of the above works, call 911 or the Sheriff's Department and explain your problem to them. Ask them to contact the agencies listed above.

Clean up the spill and make repairs

Perform any modifications that your state water quality agency and technical assistance agencies or professional engineers recommended to rectify the damage, repair the system, and reassess the manure management plan to ensure that the problem does not happen again in the future.

The emergency action plan must include provisions for the emergency spreading or transfer of waste from all waste storage structures at a facility. This may include emergency pumping or spreading (to prevent overtopping of a storage structure) during periods when the soil or crop conditions are not conducive to normal spreading or application. Contact your state water quality agency and local soil and water conservation district for guidance on land applying waste in this instance. Assess which fields are best able to handle the waste without further environmental damage. Application rates, methods, and minimum buffer distances must all be addressed. If transferring waste to another location for application, consider the limitations that may be involved with the transfer of waste to that site and application considerations at that location. For more information on selecting land application sites, refer to Lesson 33, *Selecting Land Application Sites*.

Post-spill assessment and reporting

If a spill occurs on your farm, the water quality agency in your state will normally require a written report to be submitted following the accident. Reports are typically due within one week of the spill, but check with your state water quality agency about the length of time you have before the report is required. 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. Check with your state water quality agency to determine if they require any additional information.

1. 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?

2. Response to spill
   - When and where was the spill contained?

Assessments… give you…an opportunity to reflect and learn from the events that led up to the spill and those actions that were taken following the spill.

- 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?

3. 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?
4. Contact the appropriate agencies
   - When were local and state agencies contacted, 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?