

Pesticide Storage Concerns During a Flood

PREVENTION AND EMERGENCY RESPONSE

Safe pesticide storage is of critical importance in both everyday and disaster situations. Not only can improperly stored pesticides pose significant hazards to humans, but they can do great harm to the environment, including surface water and groundwater contamination. Combined with floodwaters, pesticides can create a widespread health problem by threatening drinking supplies.

For all of these reasons, take preventive measures to minimize storage quantities and potential exposure to floodwaters. Take extra precautions if you live in a floodplain or expect flooding. If flooding of pesticides occurs, be sure you follow safe, legal methods for emergency response, containment and clean-up.

PREVENTION

- ◆ *Choose a safe location.* If at all possible, locate pesticides in an area where flooding is not likely. A good location will be downwind and downhill from sensitive areas, such as homes and play areas, ponds or streams.
- ◆ *Update your pesticide storage design.* Contact your local Extension agent or the Midwest Plan Service for modern pesticide storage plans. Safety is a major criterion in new designs, as well as efficiency for farmers. Features may include a mixing and loading pad, a drainage system to collect contaminated runoff, a worker safety area and a separate area for your personal protective clothing and equipment.
- ◆ *Keep pesticide storage to a minimum.* The fewer pesticides on site, the less you have to worry about. Consider the following:
 - a) Contract to have pesticides applied. This eliminates storage and most liability concerns.
 - b) Clean out existing inventories. If a pesticide is still registered for use, give it to a producer who can legally use it. If it is no longer registered, dispose of it at a county Agricultural Clean Sweep program.
 - c) Purchase only enough pesticide for a single season.
- ◆ *Take extra care with water-permeable containers.* Dry formulations packed in paper bags, fiber drums, cardboard boxes or similar containers should be stored on metal shelves. Do not store liquid pesticides on shelves above dry formulations.
- ◆ *If flooding is imminent, move pesticides (especially those in unsealed or water-permeable containers) to a higher storage location.* Use caution in moving containers — wear protective gear as necessary.
- ◆ *Develop an emergency response plan in case of a leak, spill or fire.* Because of hazardous substances on your farm, you may be required to develop a plan under the Superfund Amendments Reauthorization Act (SARA) Title III. SARA requires farmers who have any of 360 extremely hazardous substances at 500 pounds or the threshold planning quantity to alert the State Emergency Response Board (SERB) with a Planning Notification Fee Statement. An off-site plan identifying the substances and their location on the farm must be developed with final plan copies sent to the local fire department, your Local Emergency Planning Committee (LEPC) and SERB. Contact the Wisconsin Division of Emergency Government for more information.

WATCH FOR PESTICIDE POISONING

Be aware of any illness arising after handling pesticides or pesticide wastes. Acute symptoms of poisoning frequently include headache, nausea, diarrhea, visual disturbances, excessive salivation or sweating, difficulty in breathing, weakness, tremors or convulsions. Acute symptoms usually appear immediately or within a few hours after exposure. See a doctor immediately or contact your local poison control center if symptoms appear.

IF FLOODING HAS OCCURRED

If you suspect flooding of pesticide storage areas, use great caution in investigating the immediate area — floodwaters may be contaminated with pesticides. Wear appropriate protective clothing, particularly safety boots, to avoid exposure.

If a release of pesticides has occurred, you are required by the Wisconsin Spill Law to notify local and state authorities. Local authorities include your Local Emergency Planning Committee. You can meet state reporting requirements by calling the Wisconsin Division of Emergency Government Spill Hotline at (800) 943-0003. This hotline is available 24 hours a day, 7 days a week. The duty officer at the Spill Hotline or your LEPC can help you determine if federal notification is needed.

Emergency hotline personnel will gather information about the pesticide release and make response decisions. Emergency response professionals in your area will be notified to serve as the first responders to the flood site, as necessary. Some possible scenarios:

- ◆ *For minimal flooding or leakage from paper containers, officials may provide you with specific clean-up instructions.* For example, you may be asked to place the water-damaged pesticide into a secondary waste container and to dispose of it at the next Agricultural Clean Sweep event.
- ◆ *If moderate flooding has occurred, containment and clean-up may be feasible.* Area emergency response professionals may be sent to the site. Technical guidance from the DNR and the Wisconsin Department of Agriculture, Trade and Consumer Protection will be provided, as necessary.
- ◆ *If major flooding has already occurred, containment may be impossible and clean-up minimal.* Check your storage inventory to determine if product is missing. If so, inform your LEPC about types of pesticides and approximate amounts removed by floodwaters.

CONTAIN THE AREA

Additional resources:

Your local emergency government office, the Wisconsin Division of Emergency Government, your county agricultural agent

Related publications:

UW-Extension publication "Pest Management Principles for the Private Applicator."

"SARA Fact Sheet for Farmers," available from the Wisconsin Division of Emergency Government.

Take steps to prevent further release of the pesticides if possible and feasible. Put smaller containers that are leaking into larger containers. Wear protective clothing and equipment so you do not needlessly expose yourself to the material in the process of stopping the spill.

At the same time the leak is being controlled, contain the spill material to the area; if possible, construct a dam to prevent the chemical from spreading.