

Pesticide Spill Procedures

The following information is from the Colorado Commercial Pesticide Application and Safety Training Guide produced by Colorado Department of Agriculture, Division of Plant Industry and Colorado State University.

Pesticide spills can pose serious threats to human health and cause significant environmental contamination. A thorough knowledge of the appropriate steps to take in the event of a spill will allow you to minimize the potential for adverse effects and may save you a great deal of money in expensive cleanup costs. Always be prepared to handle spills before they occur. It is a good idea to have a spill kit in storage and mixing areas. Contamination can greatly increase when delaying response to a pesticide spill.

Spills may be relatively minor, involving one or a few leaking containers. However, major spill, such as when a sprayer overturns spilling its contents, can and do occasionally occur. Regardless of the magnitude of the spill, the objectives of a proper response are the same.

- Control the spill
- Contain the spill
- Clean up the spill

These three steps are frequently referred to as the "Three C's" of spill management.

Control

When attempting to control the flow of the chemical, do not expose yourself unnecessarily. Always carry protective clothing and equipment when transporting pesticides. Use this equipment when pesticide emergencies occur.

Contain

After the leak has been controlled as well as possible, contain the spilled material in as small an area as possible. With liquid spills, construct a dam to prevent the chemical from spreading. It is particularly important not to allow any chemical to get into any body of water, including storm sewers. DO NOT hose down the area; this will cause further spread of the chemical. Liquid spills can be further contained by spreading absorbent materials such as fine sand, vermiculite, sawdust, or clay over the entire spill. For absorbing small spills and minor leaks, kitty litter is particularly useful. (NOTE: Avoid the use of sawdust or sweeping compounds if the pesticide is a strong oxidizer. Such a combination presents a possible fire hazard.)

Clean Up

After the spill has been contained, if possible, pump or vacuum up as much of the liquid as possible into a tank designed for this purpose or another empty spray tank or one with the same material or compatible pesticide, so that it may be applied to a labeled site. After the material is picked up, spread absorbent material over the contaminated area, if not done so previously. Sweep up the absorbed pesticide and place it into a heavy-duty plastic bag. Continue to add absorbent material until all the liquid has been soaked up.

After these preliminary stages of cleanup have taken place, it may be necessary to further decontaminate and neutralize the area. This is particularly recommended if highly hazardous pesticides were involved in the spill. Often a mixture of full-strength bleach and hydrated lime is effective for pesticide decontamination. Work the solution into the spill area with a coarse broom. Add absorbent material to soak up the cleaning solution. Sweep and dispose of the contaminated material. Repeat the procedure until the area is thoroughly decontaminated.

When large amounts of pesticides are spilled on soils, effective decontamination is often not possible. In these instances, the top two to three inches of soil should be removed and disposed of. Cover the remaining soil with at least two inches of lime, then cover with fresh topsoil.

Where minor spills occur on soil, activated charcoal may be used in clean-up. The charcoal may absorb and tie-up enough chemical to avoid significant long-term injury.

Before a spill ever occurs, call your chemical retailer or manufacturer to get information on cleanup of specific chemicals. They can also provide you with special safety advice and other information.

During Major Spills

During major spills, someone must always remain at the spill site until it has been effectively contained and cleaned up. The contaminated area should be isolated, preferably by roping it off. Keep people at least 30 feet from the spill. Avoid coming into contact with any drift or fumes that may be released. At times it may be necessary to evacuate people downwind from the spill. DO NOT use road flares if you suspect the material to be flammable.

Reporting

Spills on public property and all spills involving pesticides that are considered to be highly hazardous must be immediately reported to local and state emergency planning personnel. Police or fire officials typically are local contacts to whom such spills should be reported. These agencies will advise you of the proper procedures for cleaning and disposing of accidently released pesticides. Failure to report such spills is a violation of the Emergency Planning and Community Right-to-Know Act (EPCRA/SARA III). Such violations can result in fines of up to \$25,000 for each day the violation continues.