

Storage Facility Suggestions

- **Keep all pesticides out of the reach of children,** pets, livestock, and irresponsible people. Store pesticides in a locked secure place such as a separate building or storage room. Consider fencing around and in the storage building to provide protection from theft and increase safety.

- **Consider soil and land surface characteristics** when constructing a storage facility to prevent contamination of surface or groundwater by drainage, runoff or leaching. Locate your storage area where water damage (flooding) is unlikely to occur. Keep it downwind and downhill from sensitive areas such as houses, play areas, gardens and ponds. Locate the facility a safe distance away from wells.

- **It is preferable to have a separate building** for pesticide storage. If it is necessary for the pesticide storage to be a part of a building used for other purposes, the storage area should be on the ground floor. Offices should not be located in the building or area.

- **Within the storage area,** separate pesticides by group (herbicides, insecticides, etc.) to prevent accidental misuse or contamination. Store pesticides away from food, feed, potable water supplies, veterinary supplies, seeds and protective equipment. This prevents contamination from fumes, dust or spills.

- **Ventilate the storage area** and keep it relatively free from temperature extremes. Very high or low temperatures can cause pesticide deterioration. Generally, pesticides should be stored at temperatures above 40 degrees F and below 90 degrees F. Never place pesticide containers in front of windows. Humidity should be kept low to prevent lumping or degradation of powder formulations and to reduce corrosion of metal containers.

- **Exhaust fans directed in the outside reduce** the temperature and dust or fume concentrations. Fans should provide three to six air changes per hour. Large storage areas, when occupied, may require up to 20 air exchanges per hour.

- **Use fire-resistant building materials.** A sealed cement floor is the best. Seal the walls and floor with a substance such as epoxy paint to prevent absorption of spilled pesticides.

- **Explosion-proof electrical wiring, switches and outlets** may be required depending on the size, location, materials stored and the type of facility.

- **Sink or showers are needed for clean-up.** Drains that may contain pesticide solutions from clean-up, mixing or maintenance operations must not connect to sewer systems or be openly discharged. Water that contains pesticide solution should be stored temporarily in holding tanks until it can be used as a dilutant for the next spray of similar materials or disposed of properly.

- **Post highly-visible, weather-proof warning signs** on walls, doors or windows to indicate to anyone entering the facility that pesticides are stored there. "No Smoking" signs should be posted.

- **Store liquid formulations and small containers** of dry formulations on metal shelving because it does not absorb spilled pesticides and is easier to clean than other surfaces.

- **Store glass containers under cool conditions** on lower shelves. Too much heat can break the container or cause it to explode.

- **Containers should not extend beyond shelving** where they could be bumped or knocked off. Place larger metal drums and non-metallic containers on pallets.

- **Store pesticides only in their original labeled** containers to minimize the potential for accidents. Pesticide containers should be marked with the date of purchase to ensure that the oldest container is used up first. This practice will help ensure that pesticides are used within their shelf life.

- **Consult pesticide labels** for special storage instructions.

- **Have clean-up materials and equipment** (kitty litter, sawdust or other absorbent material, plastic-lined containers, small shovel, broom, dustpan, etc.) readily available. A fire extinguisher approved for chemical fires, first aid equipment and emergency telephone numbers should all be easily accessible. Install smoke detectors, alarms or sprinklers as needed.

- **Give local fire department a floor plan** showing the location, names and amounts of pesticides stored.

The following information should be kept at the storage area and your home (for use after hours):

1) A list of emergency phone numbers:

- Police
- Fire
- Poison control center
- Pollution Emergency Alerting System
- DNR Waste Management Division
- A spill clean-up company

2) An inventory of pesticides

3) Material Safety Data Sheets (MSDS) for each pesticide on site

4) A map of the building floor plan showing the location of pesticides

5) A site plan indicating building sewers, wells, direction of runoff and other environmental hazards.

For more information write or call
Art Selder, Ag Engineer
West Virginia University - Extension Service
Morgantown, WV 26505
(304) 293-5539