Secondary containment areas must be diked and treated with watertight, chemical resistant materials.

If your company uses pesticides and fertilizers and is without an integrated system of safe storage, handling and recycling, you are exposing it to risk.

by Fredric C. Haskett

Industries that use pesticides and fertilizers are being watched by a host of different groups: federal and state environmental protection agencies and departments of agriculture, local governments and environmental groups, media watchdogs, insurance companies and the public at large.

Five states—Indiana, Illinois, Nebraska, Florida and Ohio—have either enacted or are working to enact containment laws. Proposed laws carry jail terms or civil penalties and heavy fines.

The questions you must ask yourself are:

- Can your facility stand up to this scrutiny?
- Can your operation comply with the new regulations?
- Do you know the legal and economic implications of compliance or non-compliance?
- Are you aware of the cost difference between recycling residues and rinsates, and of having them disposed of properly?

The cost of non-compliance

If you answer "no" to any or all of these questions, the results could be catastrophic. You could face retroactive fines, lawsuits, criminal and civil penalties, jail terms, negative publicity, large rate increases or loss of insurance, clean-up and disposal costs. And, you could lose your business. It has been estimated that the cost of residue and rinsate disposal for the average facility would range from $8000 to $15,000 annually. Clean-up costs from spills as low as one gallon of concentrate can range from $50,000 to $100,000.

Primary storage requirements

Examine where and how you store liquid and dry pesticide concentrates. This area should be sectioned off into a primary and secondary containment area.

The primary containment area is used for both storage and mixing operations involving concentrated pesticides. The area must be diked, and the floor and dikes treated or coated with watertight, wear resistant materials that are also resistant to chemical corrosion.

In addition, this area should be further segregated by a partition to control unnecessary or unauthorized access. Equipment such as spill recovery tools, emergency shower/eye wash, fire extinguishers and ventilator fan are also important parts of this area.

Secondary containment area

The secondary containment area is used for storing and parking spray rigs or trucks, for loading or fill operations with dilute pesticide mixes and fertilizers, and for washing and rinsing pesticide residues from application equipment and vehicles.

Dry fertilizers and the storage tank for recyclable dilute pesticide residue and rinsates are located here.

The secondary containment area can be sealed from adjacent areas with partial dikes at doorways and with floor and wall coatings that are resistant to chemical corrosion. As is the primary containment area, this insures that any spills or discharges within the area can be contained and recovered.

These basic concepts will bring safe and efficient storage, mixing, loading and clean-up.

Combining the two containment areas and their systems can reduce fill times while at the same time reduce the opportunities for mishan-
The secondary containment area is used for storage, parking and load-and-fill operations.

dling, accidental spillage, unnecessary exposure and waste.

Recovering and recycling wastewater, rinsates, dilute residues and waste concentrates is one of the most critical aspects of this operation. An effective and comprehensive recycling system can be one of the most important systems for protecting your business from becoming a storage site for hazardous waste.

**Backflow prevention**
The last benefit of a successful system is the protection it offers outside water systems. The primary tool here is a backflow prevention device installed at the main source. All water outlets, with the exception of restrooms, are to be equipped with anti-siphon devices for backup protection.

Additional protection for exterior groundwater areas and sanitary sewer and storm sewer systems is achieved with an integrated combination of containment dikes, self-contained recovery sumps, and a system of coatings on the floor and walls.

**Two choices**
In the final analysis, we can either comply with the regulations or evade them. Regulations are either in force or pending. The implications for evasion will be enormous: fines, criminal and civil penalties, negative publicity, shutdowns, lawsuits and waste.

Why should you use this system? There are several reasons:
1. After four years of operation, we know it works.
2. It is approved by the EPA and Ohio Department of Agriculture.
3. It can be used with new construction or retrofitted into any existing building.
4. It is easy to install, operate and maintain.
5. It is affordable, and uses available materials.

Most importantly, you will avoid the “status” of becoming a hazardous waste storage site, with the accompanying high cost of proper disposal.

**Resource material available**
Fred Haskett has put the steps toward safe pesticide containment into book form. The guide contains information that allows both large and small operations to design and construct an affordable, viable and safe chemical/ fertilizer containment area.

Haskett's containment system:
- Can be used for new construction or retrofits.
- Provides protection from spillage and leakage.
- Significantly reduces or eliminates storage and disposal of chemical wastes or residues.

The Haskett system has been approved by the Ohio EPA and department of agriculture.

Cost for the guide book is $69.95 plus $4.50 shipping and handling. For more information, contact Haskett at Department LM, P.O. Box 336, Dover, OH 44622; (216) 364-5235. Allow two weeks for delivery.

Fred Haskett

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