

Wash Water Containment Construction Strategies

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By now all licensed turf applicators in Illinois should have received their official notice indicating what needs to be done in order to comply with the recent amendment to the Illinois Lawn Care Act. With that notification a permit and copy of the Lawn Care Act was included. Page 5 of the Act booklet describes Part 256 — Lawncare Wash Water and Rinsate Collection. As was indicated in a earlier article (April 1993, pp. 20-2), general class permits A,B, and C are acceptable guidelines to use for compliance. The permit, which must be approved by the Department of Agriculture, is a relatively simple process to complete. Please read through the instructions carefully. Any questions regarding the permit should be directed to Gerald Kirback at 217/785-0780.

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Golf course superintendents would probably want to consider a general class C permit with a structure that is permanent. It would also be wise to include the storage needs for the pesticides that are used on the golf course in this design. A structure designed to contain the pad, sump and storage area all under one roof is advisable. The roof eliminates any need to be concerned with the rainfall accumulations and consequent disposal requirements. Moving the strage out of current work areas and away from office facilities is a good idea. If for nothing more than removing the odors associated with a pesticide storage area. The new building and storage area would have improved ventilation and be designed for a better organization for the pesticide products. Improved accuracy in inventory control could be another advantage in building an accompanying storage room. Separate storage facilities are ideal, but are quite expensive.

In addition to the pad and storage area, several other items should be considered when planning the facility. They are: site selection; functional system design; worker safety area; fire safety needs; electrical and ventilation requirements; sizing concerns; rinsate handling, storage and management; type of sump and transfer system; water supply and backflow prevention requirements; and disposal of rinsates and containers.

Several firms are working with designs for structures suitable for golf courses. Cost for an enclosed building designed with a pad, sump, and storage will vary. A ballpark figure would be in the \$7,000 to \$10,000 range for a 24 by 24-foot structure. A suggestion would be to build the storage room in a 6-foot section across the entire length or width of the building. Obviously many factors would go into the actual cost of such a building.

Several have asked about figuring the volume of a pad. The slope and sump volume can be used to satisfy the volume requirements. For example, a Class C pad protected from the rainfall must hold a minimum of 120 gallons or 120% of the largest applicator device volume. In a roofed building the volume requirements would be much less and easier to determine. Depending on the sump design the following formulas can be used to figure the pad volume.

(continued on page 24)

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WASH WATER (continued)

Approximate liquid holding capacity in gallons:

Pad with central sump = $\frac{1}{3} \times 7.5 \times L \times W \times D^*$

Pad with trough sump = $\frac{1}{2} \times 7.5 \times L \times W \times D^*$

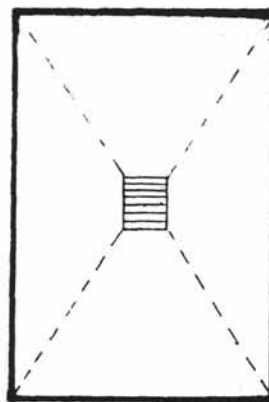
Where, L = Pad length in feet

W = Pad width in feet

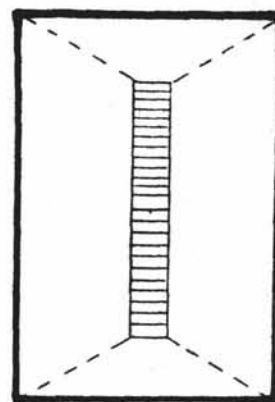
D = Depth at sump in feet

7.5 = gallons per cubic foot

*See illustrations



Central Sump



Trough Sump

Information relating to the planning, design, and construction of the above structures can be attained from a book published by the Midwest Plan Service and available from the Agricultural Engineering Department at the University of Illinois. Ask for MWPS-37 *Designing Facilities for Pesticide and Fertilizer Containment*. Contact the author for more information on who to contact regarding existing plans or to get a copy of this manual. The address and phone number is 1304 W. Pennsylvania Ave., Urbana, IL 61801 and 217/333-9418. The book sells for \$15.00.

The next article in this series will discuss the management and operations of washwater and rinsate collection devices.

* The author would like to take some pictures this summer and fall of any construction (during and finished) being done to comply with the new lawncare amendments. Please notify him at the above phone number to make arrangements.

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