



NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION
AGRICHEMICAL HANDLING FACILITY
(No.)
CODE 309

GENERAL

Construction operations shall be carried out in such manner and sequence that erosion and air and water pollution will be minimized and held within tolerable limits.

The completed job shall present a workman like appearance and shall conform to the lines, grades, and elevations shown on the drawings or as staked in the field.

All operations shall be carried out in a safe and skillful manner. Safety and health regulations shall be observed and appropriate safety measures used.

Size and Capacity. The size of the concrete pad used for chemical mixing shall accommodate the length, width and height of the largest sprayer or apparatus with adequate space for maneuvering and equipment access. Additional space shall be included as necessary to accommodate worker access, tanks, pumps, hoses and other necessary equipment.

The chemical mixing pad shall be sloped to allow for the drainage of water and agrichemical spills to a collection sump.

Foundation Preparation. All top soil, organic matter, and debris shall be removed from the construction site. The concrete slab and granular subbase shall be situated on firm, uniform foundation material. The subgrade surface shall be compacted prior to placement of the granular subbase.

Structural Design. Minimum structural requirements for agrichemical mixing facilities are specified as follows:

1. A minimum of 4 inches of well compacted granular subbase shall be placed prior to concrete placement.
2. The minimum concrete thickness of slabs shall be 5 inches.
3. A watertight concrete design shall be used to avoid leakage from the sump and chemical mixing pad. The sump shall be covered with an impervious sealant for protection from the chemicals. The sump coating material selected shall remain flexible after curing, aging, cold weather, and exposure to agrichemicals.
4. The slab and sump shall be poured in one pour without expansion joints or openings.

- 5. The minimum reinforcement for slabs shall be #4 bars (ASTM A-615, Grade 60) on 18 in. spacing in each direction.
- 6. Installation and materials for concrete shall conform to Construction Specification for Reinforced Concrete (750).

Equipment. The sump pump, hoses, pipes, valves, connectors, filters, tanks, etc. must be compatible with chemicals being handled.

All piping and controls for handling agrichemicals shall be installed such that leaks can be easily detected and repairs or maintenance can be easily performed.

Sump pump. The sump pump shall be a submersible pump and should create a minimum of turbulence within the sump. A filter / strainer shall be installed between the sump pump and sprayer or rinsate tank(s). All electrical components shall be waterproof. The pump shall be manually activated.

Vegetation. All disturbed areas shall be graded and reseeded. Topsoil shall be added, if needed, to establish vegetation. Vegetation establish to be performed according to conservation practice standard Critical Area Planting (342).

Additional Details
