

**NATURAL RESOURCES CONSERVATION SERVICE  
MISSOURI CONSTRUCTION SPECIFICATION**

**WATERING FACILITY**

**(tank or trough)**

**CODE 614**

**GENERAL**

Construction operations shall be carried out in a manner and sequence that erosion and air and water pollution are minimized and held within legal limits.

The completed job shall present a workmanlike appearance and shall conform to the line, 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. Contractor shall be assured that all state laws concerning buried utilities have been met.

All trees, stumps, roots, brush, weeds, and other objectionable materials shall be removed from designated work area.

**MATERIALS**

Tanks shall be as shown on drawings. All tanks shall be durable enough to withstand forces exerted by water, soil, and livestock. Permanent tanks shall have a minimum design life of 10 years. Crushed rock or gravel shall be hard durable rock. Concrete for the pad or tank shall conform to Construction Specification 750, Reinforced Concrete. Geotextile shall conform to Construction Specification 753, Geotextile.

**PLACEMENT**

Tanks should be placed on suitable subgrade material. Location and direction tanks face shall be shown on drawings. If freezing is a concern watering facility should face south where possible.

**PADS**

The area adjacent to the tank (or trough) shall be protected from livestock traffic. Pads shall be constructed as shown on the drawings.

**VEGETATION**

Topsoil shall be added, if needed, to establish vegetation on all disturbed areas. Refer to JS-AGRON-25 for seeding and mulching recommendations or equivalent.

**Additional Details:** \_\_\_\_\_

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resource Conservation Service or download the standard from the electronic Field Office Technical Guide for Missouri.

**NRCS MOFOTG  
January 2008**

**NATURAL RESOURCES CONSERVATION SERVICE  
MISSOURI OPERATION AND MAINTENANCE**

**WATERING FACILITY**

(tank or trough)

CODE 614

**OPERATION AND MAINTENANCE**

The operation and maintenance plan for the system is the responsibility of the landowner. The tank or trough shall be checked frequently. Some of the items that need to be addressed are:

1. Check periodically to see if any type of debris has fallen into the trough which may restrict the inflow or outflow system.
2. Check tank for leaks or cracks and repair immediately if any cracks or wall separations are found.
3. Check the automatic water level device to insure that it is operating properly.
4. Inspect the outlet pipe to be sure it has a free outlet and is not causing any serious erosion problems.
5. If the trough has not been designed to prevent damage from freezing, it should be prepared for winter weather.
6. Algae and iron sludges sometimes are problems in watering facilities. Known methods of controlling algae include:
  - a. Chemicals such as copper sulfate and chlorine have been used. Federal, state, and local rules and regulations are to be followed when using chemicals.
  - b. The stocking of several common goldfish in water tanks and troughs has been successful in controlling algae in many cases. Add 2-4 goldfish per 100 gallons of tank capacity.
7. Check for vandalism and normal wear and deterioration. Repair any damage that would prevent the system from working properly.
8. Remove large accumulations of manure at or near the tank or trough.
9. Inspect the condition of the pad or surfaced area around the tank or trough for deteriorating condition and repair or replace materials, as needed.
10. Inspect and maintain wildlife watering facility berm or emergency spillway as needed.

**Additional Details:** \_\_\_\_\_

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