



**Operation and Maintenance Plan
Watering Facility, Code 614**



Landowner/Operator:	<input type="text"/>	Date:	<input type="text"/>
NRCS Service Center:	<input type="text"/>	Conservation District:	<input type="text"/>
Location of Practice:	Lat: <input type="text"/>	Long:	<input type="text"/>
UTM Coordinates:	<input type="text"/>		
	SEC: <input type="text"/>	TS: <input type="text"/>	R: <input type="text"/>
		Field ID:	<input type="text"/>

GENERAL

A properly operated and maintained livestock watering facility is an asset to your operation. This system was designed and installed as a permanent solution to provide livestock watering. The estimated life span of the installation is at least 20 years and can be assured and possibly increased by performing operation and maintenance activities.

The system was designed for a maximum of _____ (number) of _____ (livestock). If the numbers are increased, additional water supplies may be needed during peak use periods.

This practice will require you to perform the O&M activities as listed below.

O&M REQUIREMENTS

- Close all hydrants and valves slowly to prevent water hammer.
- Make sure all pressure tanks, pressure relief valves and pressure reducer valves are operating within design pressure limits and are properly adjusted. Properly operating pressure gauges at appropriate locations are a valuable aid in monitoring the system.
- Inspect the system for sudden changes in quantity of water received from the source.
- Check periodically to see if debris is restricting inflow or outflow to a watering facility.
- Check tank overflow outlets. If the outlet is being damaged by livestock, erosion is occurring or a bog is creating a problem, protect the outlet with rocks, fencing, or other protective material.
- Periodically check watering facility for leaks and cracks and repair immediately as necessary.
- Periodically check all aboveground facilities for physical damage and repair as necessary. Protect all above ground facilities and appurtenances from freezing.
- At the beginning of the year, inspect the entire length of the pipeline for any signs of leaks or pipe damage.
- Once a year, inspect the entire length of pipeline for signs of erosion and pipeline trench settlement. This is particularly important for the first two or three years after installation. Repair eroded areas and construct water bars (diversions) or other protective measures to keep



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water from flowing down trenches or into the area around tanks. Add backfill where pipeline trenches have settled.

- Check automatic water level devices to insure that they are operating properly. Adjust or repair as necessary.
- Check air valves and vents periodically to make sure they are operating properly and are not leaking.
- Check the area adjacent to troughs or tanks for erosion and wear-and-tear by stock. Use gravel, concrete, compacted earth or other durable material to build the area back up. Install heavy use area protection around the facility.
- Periodically clean watering facilities. If algae and iron sludge in tanks or troughs is a problem consider using chemicals such as chlorine, copper sulfate, or adding small fish to the tank to keep it clean.
- Periodically check the watering facility and appurtenances after major storm event and repair any damage as necessary.
- Periodically check the watering facility for vandalism and repair immediately.

CONTACT YOUR LOCAL NRCS OFFICE FOR ANY ADDITIONAL TECHNICAL ASSISTANCE YOU MIGHT NEED FOR IMPLEMENTATION OF THIS O&M PLAN FOR YOUR CONSERVATION PRACTICE.

This O&M Plan was discussed and a copy provided to the landowner/operator.

Date: _____

Signed by the Responsible Landowner/Operator

Date: _____

Signed by the Responsible NRCS Employee/Conservation Partner