

U.S. DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE  
**OPERATION AND MAINTENANCE PLAN**

**PUMPING PLANT**

**CODE 533**

Landowner/Operator: \_\_\_\_\_

Job Location: \_\_\_\_\_ Sec: \_\_\_\_\_ T: \_\_\_\_\_ R: \_\_\_\_\_

Prepared By: \_\_\_\_\_ Date: \_\_\_\_\_

**OVERVIEW**

A properly operated and maintained pumping plant is an asset to the farm. The estimated life span of this installation is at least 15 years. The life of this system can be assured and usually increased by developing and carrying out an effective operation and maintenance program.

This practice will require you to perform periodic maintenance and may also require operational items to maintain satisfactory performance. The following are some recommendations to help you develop a good operation and maintenance program.

**OPERATION AND MAINTENANCE RECOMMENDATIONS**

- Maintain all pumps, agitators, piping, valves, solar panels, and other electrical and mechanical equipment in good operating condition within the electrical code and following the manufacturer's recommendations.
- Maintain grounding rods and wiring of all electrical equipment in good working condition.
- Maintain all safety shields on pumps, motors, or other electrical or mechanical equipment.
- Check all pump bases and mountings for durability and ability to hold the pump in place without vibration, repair when necessary.
- Replace, repack or tighten the seals when leakage is in excess of manufacturer's recommendations.
- Inspect metal surfaces for rust and other damage. Especially inspect sections in contact with earthfill and/or other materials. Repair or replace damaged sections and apply a protective covering.
- Maintain area around pump and other equipment. Remove all debris that hinders system operation. Provide and maintain adequate surface water drainage around the pumping plant area to avoid ponding of water.
- Protect the pumping plant from freezing where needed. If parts of the system cannot be drained, a non-toxic, noncorrosive antifreeze solution shall be used.
- Do not allow the operation of any equipment that exceeds the design limits on or within twenty feet of the structure.
- Repair any vandalism, vehicular, or livestock damage.
- Eradicate or otherwise remove all rodents or burrowing animals. Immediately repair any damage caused by their activity.

