

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

OPERATION AND MAINTENANCE PLAN

**IRRIGATION SYSTEM, SURFACE
CODE 443**

Landowner/Operator _____

Job Location _____ Sec. _____ T. _____ R. _____

County _____ SWCD _____ Farm/Tract No. _____

Prepared By _____ Date _____

OVERVIEW

A properly operated and maintained surface irrigation system is an asset to your farm. This irrigation system was designed and installed to apply irrigation water to meet the needs of the crops without causing excessive erosion or runoff. The estimated life span of this installation is at least 15 years. The performance life of this system can be assured and usually increased by developing and carrying out a good operation and maintenance program.

This practice will require you to perform periodic maintenance and may also require operational items to maintain satisfactory performance. Here are some recommendations to help you develop an effective operation and maintenance program.

GENERAL RECOMMENDATIONS

- Only operate the system when needed to furnish water for plant growth or to store moisture within the rooting depth of the plant. Monitor crops regularly noting areas of moisture stress and repair or adjust system operation as needed.
- Operate the system at the pressure, discharge rate, irrigation duration and frequency as designed.
- Ensure that runoff water is promptly removed by a drainage or tailwater recovery system.
- Periodic land leveling or grading of surface irrigated fields is required to maintain uniform field grades for application uniformity.
- Maintain system components such as ditches, pipes, pumps, structures, etc.
- Immediately remove any debris, foreign material, obstructions, or blockage from ditch/pipe inlets or outlets and from structures.
- Periodically remove sediment from traps and/or storage facilities to maintain design capacity and efficiency.
- Promptly repair all leaks in delivery facilities by replacing valves, fittings, gaskets, worn parts, or damaged parts.
- Maintain all screens, filters, valves, timers, and other electrical and mechanical equipment in good operating condition following manufacturer's recommendations. Drain and protect equipment from freezing, as necessary.
- During non-seasonal use, place appurtenances in an area where they will not be damaged but are secure, if necessary.
- Eradicate or otherwise remove all rodents and/or burrowing animals that have or can potentially damage any part of the delivery or application facilities. Immediately repair any damage caused by their activity.

