

**OPERATION AND MAINTENANCE PLAN
IRRIGATION PIPELINE
CODE 430**

Landowner/Operator _____

Job Location _____ GPS _____

Prepared By _____ Date _____

OPERATION AND MAINTENANCE ITEMS

A properly operated and maintained irrigation pipeline system is an asset to your operation. This system was designed and installed as a permanent solution to irrigation delivery system deficiencies. The estimated life span of the installation is at least _____ years and can be assured and usually increased by carrying out the following recommendations. This checklist is provided for your convenience in order to help you develop a good operation and maintenance plan.

OPERATION CHECKLIST

For a pumped system do this before turning on the pump:

- Check that all preseason maintenance is complete.
- Before starting, read and record flow meter totals.
- Inspect all drains to be sure that drain valves are closed.
- Inspect all mainline, lateral, and turnout valves. Open the operational turnout. The first and last risers on each line, as well as any riser that is at a high point in the line, should be cracked open to allow air to be released from the system.
- Open all manual air release valves.
- Inspect all air-vac valves to see that the airway is open (stem pushed down) and the float ball and seat are in place and undamaged.
- Visually inspect all pressure relief valves to be sure they are free to operate and have not been adjusted to a higher or lower pressure setting.
- Before turning on the pump, the valve at the pump should be closed to the point that it is not more than 1/4 open.

Flushing and filling the pipelines:

- When the pump is turned on, not more than 60 feet of pipe per minute should be filled. .
- After the pipeline is filled, slowly open the valve to full open. If the flow must be throttled during operation, consideration should be given to making changes in the system. A throttled valve wastes energy.

Operation during the irrigation season:

- Whenever possible, open the new turnout before closing the old one. Always close valves slowly to prevent water hammer.
- Inspect the pipeline inlet daily or more often if necessary. Remove trash or debris. Observe flow conditions in the canal and make adjustments necessary to keep the pipeline inlet submerged.
- Check pressures regularly. A change means there is probably an operational or maintenance problem.
- Inspect flow meters at least monthly for proper operation.
- Check pump and valves for noisy operation. Noise is an indication that cavitations may be occurring. Cavitations can greatly reduce the life of the pump and valves.
- Check that air-vacuum valves are seated and not discharging water.

Other _____

