

Operation & Maintenance Plan Sprinkler System (Code 442)

Expected Lifespan

The minimum expected lifespan of this practice is at least 15 year(s).

A properly operated and maintained sprinkler system is an asset to a farm. The sprinkler system is designed and installed to efficiently and uniformly apply water to maintain adequate soil moisture without causing erosion or run-off. The practice will require periodic operation and maintenance to maintain satisfactory performance. The life of a structure can be assured and possibly increased by regularly performing operation and maintenance (O&M) activities.

General Recommendations

Inspections and maintenance are required to achieve the intended function, benefit, and life of the practice. The landowner/operator is responsible to establish and implement an inspection and maintenance program. Items to inspect and maintain include, but are not limited to, the following:

- Operate the system as needed for the intended purpose such as water for plant growth, frost protection, bloom delay, salt management, soil moisture storage, or control of particulate matter.
- Operate the system at the pressure, discharge rate, duration, and frequency as designed. Conduct regular testing of pressures and flow rates to assure proper operation; repair or replace any damaged gauges for flow measuring devices. ***Check operating pressure often; a pressure drop (or rise) may indicate problems.***
- Operate irrigation system in accordance to the irrigation water management plan. Set laterals at design spacing, Sequence moves in accordance with design plans. Set time should not be longer than necessary to replace moisture depletion.
- Periodically examine each sprinkler, spay head and nozzles for wear, and replace with proper parts when defective or excessive wear is found. Clean plugged nozzles or replace nozzles if defective and worn. Use shank end of steel drill bits to check diameters.
- Check to make sure all connections are watertight, and all valves are working properly. Promptly repair all leaks by replacing gaskets, broken pipes, or worn parts. ***Frequently check that backflow prevention devices are in place and operating properly.***
- Maintain all pumps, agitators, piping, valves and other electrical and mechanical equipment in good operating condition following the manufacturer's recommendations.
- Maintain all screens, filters, valves, backflow, timers, and other electrical and mechanical equipment in good operating condition following manufacturer's recommendations. Drain and protect from freezing, as necessary.
- During non-seasonal use, drain and place the removable part of the system in an area where it will not be damaged.
- Clean sand traps after the system is turned off and all water has left the pipe. Don't modify sand traps to operate as a water dispersing device.
- Immediately repair any vandalism, vehicular, or livestock damage. Do not allow livestock near equipment or in an area during operation.
- Inspect for damage from rodents or burrowing animals. Eradicate or otherwise remove all rodents or burrowing animals that have or can potentially damage any part of the delivery or application facilities. Immediate repair any damage. Take appropriate corrective actions to alleviate further damage.

O&M Inspection Time

- It is estimated that the annual time to routinely inspect and make minor repairs to your Sprinkler Irrigation System will be:

- Inspection - 1 hour/week/unit
- Minor repairs - 1 hour/week/unit
- Moving and Setup - 2 hours per setup
- Major repairs to damage caused by major storm events will require extra time and materials.
- Most minor maintenance and repairs can be made by the operator using common farm equipment and basic hand tools. However, major repairs to damaged pipeline, spools, pumps, motor, etc. may require hiring a professional experienced in these repairs and improvements.

Specific Site Requirements