

Commercial, multi-family, and City of Austin properties that are one-acre in size or larger must complete an irrigation system inspection every two years. An [Austin Water Authorized Irrigation Inspector](#) must perform the evaluation.

CRITICAL PROBLEMS

These will result in a property failing the inspection and being prohibited from operating its irrigation system:

1. **Leak** – a break or other water containment failure in the irrigation main line, lateral line, or station valve. A mainline leak will fail the entire irrigation system. A lateral line or station valve leak will fail the associated station.
2. **Broken Head** – a missing, cracked, or punctured sprinkler head, sprinkler body, swing joint, or drip line often, but not always, resulting in significant loss of water.
3. **Spray Landing in Street or Parking Lot** – a misaligned or inappropriately sized sprinkler head resulting in a spray pattern shooting outside of the landscaped area and falling onto a street or a parking lot.
4. **Runoff / Ponding** – in a street or parking lot, water originating from the irrigation system traveling a distance of 50 feet or more, or creating a puddle with a depth measuring $\frac{1}{4}$ " or more.
5. **High pressure / Misting** – a sprinkler head operating above its recommended pressure limit resulting in excessive atomization of the spray pattern often resulting in the presence of a mist or fog effect.

During an inspection: if misting is present during the visual inspection, the inspector will measure the dynamic outlet pressure of the sprinkler head. Pressure ceilings for different emitter types are below:

- a. **Spray Nozzles** – 40 psi
- b. **MP or Multi-stream Rotators** – 50 psi
- c. **Rotors** – 60 psi

Pressure measurements above these ceilings result in failure of that irrigation station.

NON-CRITICAL PROBLEMS

These are noted solely to inform owners of potential efficiency improvements they could make:

1. **Not Hydrozoned** – irrigation stations are not segregated into zones based upon plant material water requirements or sun exposure.
2. **Clogged Nozzle** – uniformity of spray pattern is impaired or prevented due to build-up of debris.
3. **Obstructed Head** – spray pattern is interrupted by an object such as vegetation or another physical object.
4. **Low Pressure** – water pressure at sprinkler head is not adequate to maintain full throw of spray.
5. **Low Head** – a sprinkler head that has sunk into the ground or does not rise high enough to spray over the vegetation.
6. **Poor Coverage** – sprinkler spray pattern does not supply water evenly over the entire landscape.
7. **Stuck Head** – sprinkler head either does not pop-up, rotate, or fails to go down after operation.

COMMERCIAL FACILITY IRRIGATION ASSESSMENT - GUIDELINES

8. **Tilted Head** – sprinkler head is not vertically aligned at ninety degrees from grade.
9. **Mixed Sprinkler Technologies** – use of multiple sprinkler technologies (*sprays with rotors*) in a single irrigation station.