

Safety Note #119

HIGH-PRESSURE IRRIGATION SYSTEM SAFETY



Photographs Courtesy of South Coast REC

High-pressure irrigation systems are used to deliver water on-demand to agricultural research projects at pressures of 60 to 65 psi. A high-pressure irrigation system provides better handling and control of irrigation, water conservation through more efficient water delivery methods, and improved energy efficiency through control of peak load electrical use. Hazards associated with high-pressure irrigation systems include potential eye injuries, contusions, lacerations, strains, and electrocutions. CCR Title 8, Section 3203 (7) requires employees be trained on the equipment they use in the workplace.

Pre-Use Activities

Prior to using the high-pressure irrigation system, including the filter wagon, connectors, valves, and flexible or aluminum pipe, perform the following tasks:

- Always inspect the irrigation connectors for wear and damage.
- Inspect high-pressure irrigation valves and valve openers for worn or broken parts.
- Determine whether the valve opener is seated properly on the high-pressure irrigation valve and the latches are fully engaged.
- Assure that all flexible and aluminum irrigation pipe connections are securely attached.
- Assure pipe and connector gaskets are in place and in good condition. Replace any damaged or worn gaskets

Operating Precautions

- Open and/or close high-pressure irrigation valves slowly while maintaining contact with the handle to direct the valve away from your body in case the valve should fail.
- Eye protection is recommended when opening or closing high-pressure irrigation valves.
- Never stand directly over a high-pressure irrigation valve when opening or closing it.
- Do not install or use a damaged high-pressure irrigation valve or valve opener.
- Carefully adjust the regulator on the filter wagon.
- Be aware of the locations of overhead power lines when moving aluminum irrigation pipe. Keep all aluminum irrigation pipe at least 15 feet from any power line.
- Use safe lifting practices when moving flexible or aluminum irrigation pipe. Detach connectors from pipe and move pipe and connectors separately.
- For high-pressure irrigation systems that use filter canisters, only replace filter canisters when the system has been turned off and de-pressurized.
- When towing the filter wagon, assure the wagon hitch is properly secured to the vehicle.

