

SAFETY ALERT

June 18, 2025

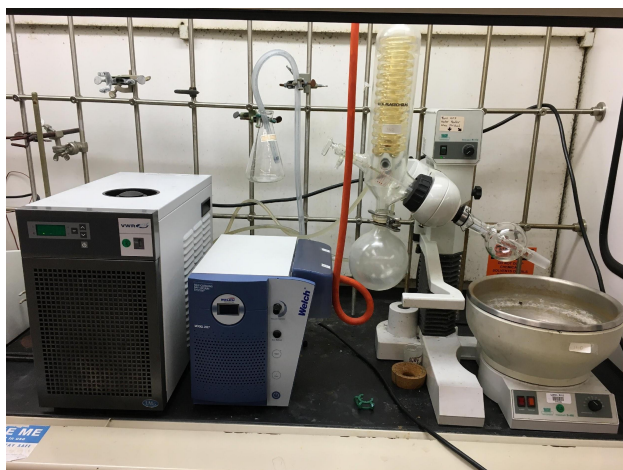
Secure Water Hose Connections

Hazards: Building Floods, Damage to Equipment, Electrical Shock

Some lab areas have equipment that is connected to the building water systems. This water is under pressure and flows continuously. In the past, there have been serious water leaks when a water hose connection has come loose or the hoses have failed. Water leaks can cause damage through the building, may disrupt laboratory access, and can result in significant clean-up costs. In order to prevent water leaks from occurring, ensure your lab area workers are aware of the following when connecting equipment to water systems:

1. **If at all possible, use a closed-loop system such as a chiller rather than the house chilled water system. There is a limited volume of water in chillers which eliminates the risk of flooding.**
2. Use tubing of proper internal diameter. Tubing that is too small will not connect adequately with barbed fittings. Tubing that is too large can be loose and may not adequately secure around the fitting.
3. Use tubing of adequate thickness and strength. Thin tubing may rupture or split under high pressures. Aged, cracked, discolored or brittle tubing will also fail.
4. Use the proper type of clamps for securing the water hose to the equipment. Ensure the clamps are properly tightened so that the hose cannot come loose.
5. The maximum water system pressure is approximately **150 pounds per square inch**. This should be considered when selecting tubing and attachment hardware.
6. The Low Conductivity Water (LCW) system is a closed loop. There is a feed (supply) valve and return valve. When circulating water through equipment, **DO NOT close** the return valve. System pressure will build up and possibly cause tubing to rupture or attachment fittings to fail.
7. Always check connections for leaks and make sure equipment is operating properly on a daily basis. This is particularly important when equipment is operated while unattended.
8. Disconnect water connections or turn off water flow to equipment that are no longer in use.
9. If the equipment drains water into a sink, ensure the sink drain is clear and there is no debris that can cause it to plug.
10. Report all significant water leaks (>5 gallons) immediately by calling **X6999**. Facilities will respond to assess the situation and provide clean-up assistance.

You can request water hook-up assistance from the LBL Engineering Division by submitting the following form: [Water Assistance Request Form](#).



Use a Chiller If At All Possible



Ensure Tubing Diameter Fits and Has an Adequate Clamp



Glassware in Sinks Can Block Drains