

Battle Mountain Plumbing Winterization Guide

Critical Freeze Protection for Wells, Water Mains, Crawlspace & Manufactured Homes

Battle Mountain Local Frost Depth Warning: Soil frost penetration in the Reese River Valley and Humboldt Basin routinely reaches 24 to 30 inches during extended sub-zero inversions (0°F to -15°F). High Great Basin winds dramatically accelerate windchill-induced heat loss on perimeter crawlspaces and exposed risers.

1. Exterior Supply & Irrigation Shutdown (Complete by Oct 20)

EXTERIOR

Hose Removal & Sillcock Drainage

Disconnect all garden hoses and splitters. Trapped water in frost-free bibs prevents anti-siphon drainage, causing internal wall pipe bursts.



Insulated Faucet Dome Installation

Fit heavy-duty 5/8" thick expanded polystyrene (EPS) covers or insulated neoprene socks over every outside spigot.



Air Compressor Sprinkler Blowout

Shut off main irrigation gate valve; blow out all lateral zones at 50 PSI max until pure mist escapes. Drain backflow assembly test cocks.



Livestock Tank & Hydrant Prep

Test submersible trough heating elements; inspect frost-free yard hydrants to ensure drain ports are buried below 36" gravel beds.

2. Crawlspace, Skirting & Foundation Defenses

SUB-FLOOR

Crawlspace Vent Sealing

Close all perimeter foundation flood and air vents. Insert 2" extruded polystyrene (XPS) foam blocks behind grates to stop freezing drafts.



Manufactured Home Skirting Inspection

Secure vinyl/metal skirting along bottom tracks; seal all wind penetrations, missing panels, and access doors tightly to maintain trapped heat.



Pipe Insulation Retrofit

Encase all exposed PEX, copper, and CPVC runs in closed-cell polyethylene foam insulation tubes (minimum 3/4" wall thickness); tape all seams.



Thermostatic Heat Tape Verification

Inspect self-regulating heating cables on main supply risers. Confirm built-in thermostats activate below 38°F; never overlap cables.

3. Rural Wellheads, Pressure Tanks & Pitless Adapters

PRIVATE WELLS

Well House / Pump House Heat Source

Set a thermostatically controlled ceramic utility heater (with tip-over switch) to 45°F inside the well pumphouse; monitor with a min/max gauge.



Pressure Switch & Gauge Line Wrap

Insulate the 1/4" sensing line feeding the pressure switch. If this thin capillary tube freezes, the well pump will run continuously and burn out.



Pressure Tank Bladder Check

Verify pre-charge air pressure in expansion tank. Insulate tank bottom manifold and emergency blow-off drain valves against slab cold.



Pitless Adapter & Casing Seal

Verify well sanitary cap is bolted tight with bug screen intact; ensure pitless discharge sits at least 36" underground to avoid frost line.

Winterizing Unoccupied Property? If leaving town or managing rental units in Battle Mountain during December–February, do NOT merely shut off the furnace. Either keep heat at 55°F+ or perform a comprehensive system blow-out: drain the water heater, clear toilet traps, and charge DWV P-traps with non-toxic RV propylene glycol.

Freeze Response, Thawing & Emergency Actions

Immediate Steps for Frozen Pipes, Burst Prevention, and Local Municipal Resources

4. Extreme Cold Operational Rules (<15°F or Below 0°F)

ACTIVE DEFENSE

- ☐ **Calibrated Faucet Drip**
During prolonged sub-zero weather, open cold water faucets on exterior wall fixtures to a steady, pencil-lead stream. Moving water resists freezing.
- ☐ **Cabinet Under-Sink Circulation**
Open under-sink kitchen and bathroom cabinet doors so warm room air can freely circulate around uninsulated supply runs and traps.
- ☐ **Water Heater Flush & T&P Test**
Sediment build-up in high-mineral Lander County water reduces heat transfer. Flush sediment and test temperature-pressure relief valve.
- ☐ **Main Shut-Off Tagging**
Ensure your interior quarter-turn ball valve or street curb box is clearly marked and accessible. Verify wrench operation before freeze season.

5. Safe Thawing Protocol for Frozen Water Lines

SAFETY FIRST

- 1

Locate & Relieve
Shut off main water inlet. Open affected faucets to relieve hydraulic pressure as ice expansion melts inside the pipe.
- 2

Gradual Thaw
Apply heat starting at the faucet and work toward the freeze blockage using a hair dryer, heat tape, or warm towels.
- 3

Burst Inspection
Gradually crack the main valve open while inspecting pipe joints, fittings, and elbows for pinhole fractures or swelling.

Thawing Method	Application & Instructions	Safety Rating
Electric Hair Dryer / Heat Gun (Low)	Slowly sweep hot air along pipe length. Keep moving to prevent localized thermal shock or PEX degradation.	Recommended
Heating Cable / Portable Space Heater	Position electric ceramic heater toward open crawlspace bay or wall opening; keep 3 ft away from combustibles.	Safe Method
Open Flame / Propane Torch	STRICTLY PROHIBITED. High risk of igniting wall studs, vaporizing trapped water into steam explosions, or melting PEX.	Do Not Use

6. Battle Mountain Emergency Plumbing & Water Contacts

DIRECTORY

- BM Water & Sewer Dept.**
(775) 635-2190
50 State Route 305 • Curb shut-off
- Lander County Public Works**
(775) 635-2885
Main office & infrastructure response
- Lander County Dispatch**
(775) 635-5161
After-hours emergency utility paging
- BM Plumbing (Licensed Pro)**
(775) 389-7651
Local emergency pipe repair
- Southwest Gas Emergency**
1-800-772-4555
Gas water heater leak or outage
- NV Energy Emergency**
1-800-962-4168
Well pump & heat tape power outage