



SWD Weatherization Methods

The following weatherization methods augment the RRC's *Weatherization Practices Guidance Document* issued in September 2022. The intent of this document is to provide guidance for saltwater disposal facilities weatherization, specifically common methods applicable to areas throughout the state of Texas.

Wind Barrier

Wind barrier (Breaks) may be temporary or permanent structures/walls installed around pump(s) to:

- Reduce wind chill impact on pump(s)/connecting pipes.

Wind barriers may enclose the entire area or a specific area around equipment. An operator may install a wind wall on the prevailing wind direction side for any equipment requiring weatherization. Wind barriers may be:

- Permanent
- Temporary

Installation

May be constructed of plywood, tarps or similar material erected around the equipment to minimize the impact of wind. When erected barriers should be able to withstand the velocity of the wind without impacting overall equipment performance.



Permanent Wind barrier

Preventive Measures for Permanent Wind Barrier

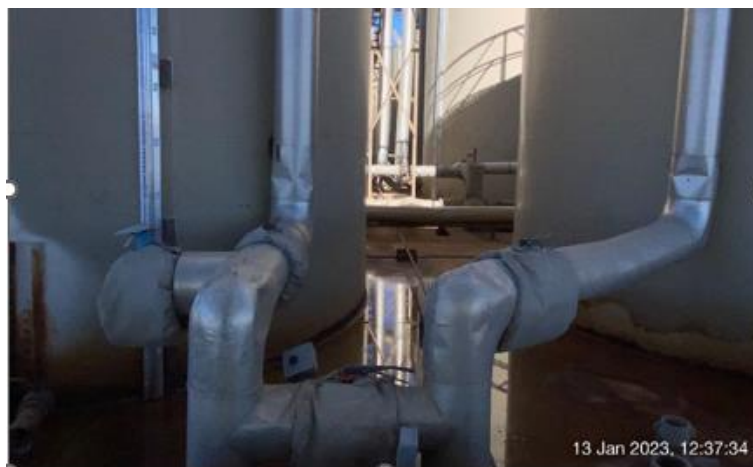
- Structures should be constructed of sturdy materials that can withstand wind up to 65mph.
- Structures must be inspected for damages that may adversely impact performance particularly over extended periods of winter weather or consecutive winter storms.

Preventive Measure for Temporary Wind Barrier

- Structures should be made of common building materials (metal, wood, etc.).
- Barriers made of tarps must be tested to determine its ability to withstand strong winds and perform its function in expected environmental conditions.
- Openings should be in the leeward sides (opposite side from wind direction).

Connecting Pipes and Wellhead Equipment

Connecting pipes exposed to extreme cold are likely to incur freeze offs. Ice can form at temperatures below 32° F at the freeze off points. This can lead to flow blockage and damage to system equipment. Operators may trace and insulate pipes to prevent freezing.



Tracing and Insulation – pipes in tank battery



Tracing and Insulation – Wellhead



Tracing and Insulation pipes in unloading bay.

When electric tracing is used, energized meters or temperature gauges may be installed as shown below.



Preventive Measure for Connecting Pipes

- Heat tracing and insulation should be installed and inspected around pipes and wellhead equipment to prevent freeze offs.
- Unloading lines must be inspected for blockage or damages.
- Heat tracing equipment should periodically be calibrated for accuracy.
- Corrosion inhibitors should be used to prevent corrosion of pipes and equipment.