

BRINE EQUIPMENT OPERATION AND SHUTDOWN TIPS

Brine Makers

- Clean out after every 20 – 30 thousand gallons (Varitech style)
 - Too much waste in salt hopper will make it difficult to obtain proper salinity in brine
 - Clean with vac truck when available
 - Units with the tanks stacked giving limited access to the holding tank may be offset (top tank moved one direction and the lower tank moved the other) to gain better access to the lower tank. Tank skids may need to be extended to provide adequate support to the tanks
 - Consider installing quick connectors on plumbing if its removal will ease cleaning
 - Consider installing Varitech's 6" clean out bung for easier cleaning (Varitech style) when truck is not available (approx. \$1000)
 - Put waste on the salt/sand pile for use in spreaders
- WINTER SHUTDOWN (Between Storms)
 - Circulate brine through the fresh water inlet
 - Keep enough brine in holding tank to submerge the pump (Varitech style)
 - Maintain enough liquid to cover salt pile in the salt hopper
 - Consider cleaning out salt hopper especially if vac truck is available
 - If the pump is not submersible, the pump shall either remain primed with brine or be drained and filled with automotive antifreeze
- END OF SEASON (spring) SHUTDOWN
 - Clean both salt hopper tank and brine holding tank
 - Maintain enough fresh water in brine tank to keep pump submerged (Varitech style)
 - Remove flexible hoses and store out of sunlight
 - Drain brine from pumps, flush with water or a salt neutralizer, and fill with RV or automotive antifreeze
 - Clean and coat external electric motors with a penetrating oil

BRINE EQUIPMENT OPERATION AND SHUTDOWN TIPS

Brine Storage Tanks

- WINTER OPERATION
 - Circulate brine in tank approximately 10 minutes before each weather event requiring brine
 - Keep pumps primed with brine – do not drain pumps
 - Shut off all valves at the tank after dispensing or circulating – Never leave tanks valves open on UNATTENDED tanks
 - Hoses should be kept out of the path of vehicles and loaders

- END OF SEASON (spring) SHUTDOWN
 - If tanks are not anchored down, a minimum of one third full should be maintained through the summer to keep tank from blowing over
 - It is not necessary to empty the storage tank by the end of the season. Contaminants may settle out over time but can be easily stirred back into the brine.
 - Pumps should be flushed and filled with RV or automotive antifreeze
 - Motors should be cleaned and coated with a penetrating oil
 - It is not necessary to circulate brine to maintain the salinity
 - Fluid level should not be allowed to get low enough to dry the sludge collected in the bottom of the tank
 - All hoses should be drained and stowed out of the sun
 - Pumps should be rotated manually or exercised at least once per month

BRINE EQUIPMENT OPERATION AND SHUTDOWN TIPS

Brine Spray Tanks (1500 gallon)

- WINTER SHUTDOWN (Between Storms)
 - Tank must be drained for removal with enough brine left on the pump to keep it primed and full (do not let the pump go dry)
 - Close valves to isolate the pump if possible so that the brine in the pump does not evaporate
 - Drain the check valves (if equipped)
 - Ensure electrical connector is coated with dielectric grease and the protective cap is installed

- END OF SEASON (spring) SHUTDOWN
 - Tank and pump should be drained and flushed with water or a salt neutralizer
 - Drain the check valves (if equipped)
 - Pump should be filled with RV or automotive antifreeze
 - Valves should be closed to isolate the pump
 - Electrical connector should be coated with dielectric grease and the protective cap installed

Brine Saddle Tanks (for prewet)

- WINTER SHUTDOWN (Between Storms)
 - Tank must be drained for removal with enough brine left on the pump to keep it primed and full (do not let the pump go dry)
 - Close valves to isolate the pump (if equipped)
 - Ensure electrical connector is coated with dielectric grease and the protective cap is installed

- END OF SEASON (spring) SHUTDOWN
 - Tank and pump should be drained and flushed with water or a salt neutralizer
 - Pump should be filled with RV or automotive antifreeze
 - Valves should be closed to isolate the pump (if equipped)
 - Electrical connector should be coated with dielectric grease and the protective cap installed