

## Winterizing your Water Well System



Winter is around the corner and it is important to winterize your water well system to prevent frozen pumps, water treatment and piping.

### \*Why Pumps Freeze

A frozen water pump causes more than the inconvenience of losing water for a while; it can also mean burst pipes, cracked water pumps and flooding once the frozen pipes warm up again.

The root cause of this problem is when air surrounding a water pipe drops below freezing, any heat in the water will transfer to the air and cause the water to freeze. The smaller pipes always freeze first because of the larger relative surface area. Therefore, the ¼ inch lines to the pressure switches, which turn the pump on and off, will be the first to freeze. A frozen pressure switch will not start the pump. A small heat source, like a heat lamp or heater directed at the pressure switch will remedy this. Just remember that heat sources should be used prudently as overheated materials can ignite and start a fire. **Always follow manufacturer's instructions.**

### \*Structural Protection

Pumps that are above ground usually have a small well house built over them to protect the pump from the elements. It is important to have some heat in the pump house such as a thermostat controlled baseboard heater. A well-built pump house, whether built of wood, blocks or metal should have insulation in the walls, the door and the ceiling. Not having a heated pump house is asking for problems. Make sure all openings and doors are closed properly, keeping the heat in and the wind, which wicks the heat away, out. If your pressure tank is located in your

garage make sure it is heated and insulated from the cold and **keep the garage door closed.**

**\*Insulation for a Well House Pump and Pipes**

Insulation of any type will help to slow the transfer of heat in the water to the surrounding air but spending a little extra for thick fibreglass or foam rubber sleeves specifically designed for this purpose is worth the cost. Covering your pipes with foam insulating sleeves will prevent freezing for a number of hours even in a power failure.

A frozen well pump or pipes can cause many preventable problems for homeowners. Winterize your well water pump long before the weather turns cold and care for it as you would the family car, for years of worry free service.