# HAND PUMPS ON WELLHEADS

## A Fact Sheet For Drillers and Pump Installers

### REGULATIONS

**Section NR 812.32(7),** Wisconsin Administrative Code has specific requirements for the use of hand pumps on a wellhead.

- NR 812.32(7)(a) Hand pumps must be designed to prevent any contaminants from getting into the well through openings in the hand pump assembly. There are specific requirements for prevention of erosion and ponding around the base of the well due to water purged from the hand pump.
- NR 812.32(7)(b) The hand pump must be properly attached to the wellhead.

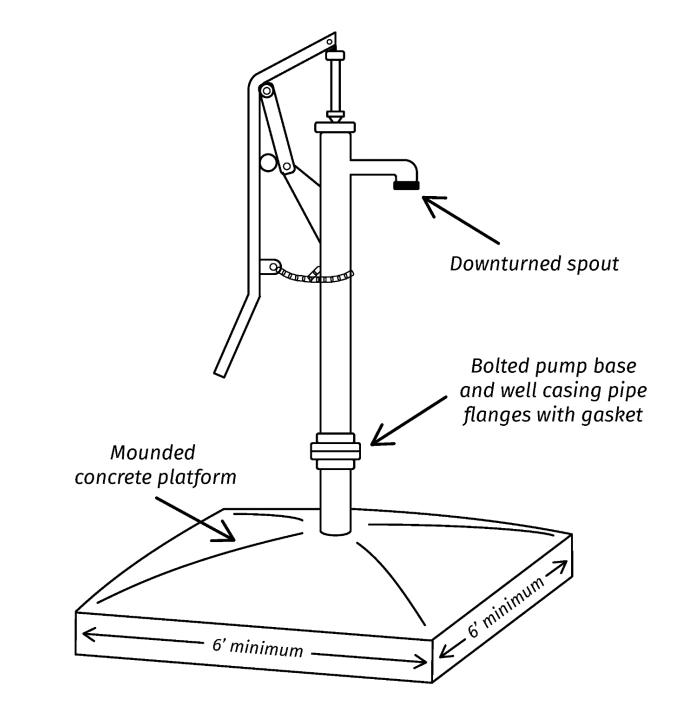
Hand pumps can be used to pump water from a well during a power outage. Since most private wells use electric power to pump water out of their well, some well owners will also install a manually operated pump on their wellhead to be able to get water from the well during those times when electricity is not available.

#### **IMPORTANT FACTS ABOUT HAND PUMPS ON WELLHEADS**

- HAND PUMP APPROVAL The make and model of a hand pump is not required to be approved by the Department of Natural Resources (DNR) or other regulatory agencies. Instead, basic design requirements are described in NR 812.32(7) and are summarized below.
- **VERMIN-FREE CONNECTION** Hand pumps must be installed so that insects or other vermin cannot enter the well at the wellhead. The pump connection to the wellhead must be threaded or use a bolted flange that has a gasket between the wellhead flange and the pump base flange. No other openings to the inside of the well are allowed.
- **CONCRETE PLATFORM -** A minimum 6-foot diameter, crack-free concrete platform must be installed so that excess water pumped from the well will flow away from the wellhead.
- **ADDITIONAL EROSION PROTECTION** If the excess flow from the hand pump forms a channel upon leaving the edge of the concrete platform, a drain and pipe or other water-tight channel must be installed to move the water at least 8 feet from the wellhead.

If you have any additional questions about hand pumps or pump jacks on wells, please contact your regional Private Drinking Water Supply Specialist.

#### **DIAGRAM NOT DRAWN TO SCALE**



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