Island County Health Department

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DIRECTIONS FOR DISINFECTING CONTAMINATED AND NEW WELLS

A properly constructed and located well is your best insurance of having a bacteria free drinking water supply. Before well disinfection is undertaken, make sure the following features of construction and location are satisfactory:

1. Top of cover of well is completely tight, so as to exclude all insects, water, and dirt.
2. The curb or casing extends above ground surface and the concrete slab.
3. Watertight casing extends to the water bearing strata, below the water table, or to a distance of 10 feet below ground surface.
4. Safe distance from septic tanks and sewers is 50 feet; seepage pits, pit privies, subsurface sewage disposal fields, cesspools, and barnyards – 100 feet.
5. Other sources of contamination are removed.

PROCEDURE FOR WELL DISINFECTION

To disinfect a **DRILLED** well: Determine the depth of the water. You will need the overall well depth and the depth to static (non pumping) water level (this information is on the well drillers report or may be available at the Health Department) then, using the directions below, make a solution of bleach water.

Diameter of well	Amount of Water	Amount of Bleach
4 inches wide	0.65 gallons per foot	.2 oz per foot
6 inches wide	1.5 gallons per foot	.4 oz per foot
8 inches wide	2.6 gallons per foot	.6 oz per foot

Multiply the feet of standing water in the well times the amount of bleach needed per foot. Mix the recommended amount of bleach in a 5 gallon bucket of water.
Example: You have a 6” diameter well (most common), that is 200’ deep. The standing water level is 150’ from the top of the casing. To determine the amount of standing water subtract the standing water from the well depth. 200’ – 150’ = 50 feet of standing water. For a 6” casing you need 0.4 oz per foot of standing water. 50 feet x 0.4 ounces of bleach per foot = 20 ounces of bleach. 20 ounces of bleach equals 2 ½ cups (8 ounces in a cup). Therefore, you will add 2 ½ cups of bleach to a 5 gallon bucket of water.

To disinfect a **DUG** well: Determine the depth of the water and then, using the directions below, make a solution of bleach water.

Diameter of well	**Amount of bleach per foot depth of water**
3 feet wide	1 ½ cups of bleach
4 feet wide	3 cups of bleach
6 feet wide	6 cups of bleach
8 feet wide	12 cups of bleach

Add the amount of bleach indicated to 10 gallons of water.

If you are disinfecting a dug well, you need to wash down the walls of the well casing with the treated well water and seal the top*.

If you are disinfecting a drilled well, you need to remove the well seal, then pour the bleach solution into the well. Connect a garden hose to the faucet closest to the well. Spray the inside of the well casing for 15 minutes, being careful to wash the casing walls*.

*After completing either the procedure, turn each household faucet on and let run until you smell bleach. Turn the water off and let it stand overnight. The next day, connect a garden hose and let the water run into the yard until you no longer smell bleach (this will protect the septic system).

If you have any questions or concerns with this procedure, please feel free to call the Health Department at (360) 679-7350.