**Section 920.100 Finishing and Testing**

a) Upper Terminal. The casing or riser pipe shall be terminated at a height above finished ground surface consistent with proposed plans for a pump house and pump installation but not less than 8 inches above finished ground surface or 24 inches above maximum high water level where flooding occurs. The well shall be capped watertight until pump installation is made.

b) Disinfection. Only after the well has been effectively cleaned of all remaining drilling mud and drill cuttings can the well be disinfected. The well contractor shall be responsible for properly disinfecting the well upon completion. Disinfection shall also be done after the pump installation is completed. Sufficient chlorine shall be introduced to give a dosage of 100 parts per million to the water in the well.

1) Drilled Wells. The disinfection of drilled wells shall be accomplished in accordance with the following:

|  |  |  |  |
| --- | --- | --- | --- |
| DIAM. WELL IN INCHES | GALLONS PER FT. | AMOUNT OF DISINFECTANT REQUIRED FOR EACH 100 GALLONS OF WATER | |
| 3 | .37 | LAUNDRY BLEACH (5.25% CHLORINE) | HYPOCHLORITE GRANULES (70% CHLORINE) |
| 4 | .65 |
| 5 | 1.0 |
| 6 | 1.5 |  |  |
| 8 | 2.6 |  |  |
| 10 | 4.1 | 3 cups | 2 ounces |
| 12 | 6.0 |  | |
|  | | | |
|  | 1 cup = 8 oz. measuring cup | | |
|  | (2 cups = 1pt.; 4 cups = 1 qt.) | | |
|  | 1 oz. = 1 heaping tablespoon granules | | |
|  | (16 oz. = 1 lb.) | | |

A) Determine the amount of water in the well by multiplying the gallons per foot by the number of feet of water in the well.

B) For each 100 gallons of water in the well, use the amount of chlorine liquid or compound given in the above tables. Mix this total amount in about 10 gallons of water. If dry granules or tablets are used, they may be added directly to drilled wells.

C) Pour this solution into the top of the well before the seal is installed.

D) Connect one or more hoses from faucets on the discharge side of the pressure tank to the top of the well casing and start the pump, recirculating the water back into the well for at least 15 minutes. Then open each faucet in the system until a chlorine smell appears. Close all faucets. Seal the top of the well.

E) Let stand for several hours, preferably overnight.

F) After standing, operate the pump, discharging water from all outlets until all chlorine odor disappears. Faucets on fixtures discharging to septic tank systems should be throttled to a low flow to avoid overloading the disposal system.

2) Dug/Bored Wells. The disinfection of dug/bored wells shall be accomplished in accordance with the following:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Diameter of well (in feet) | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
|  |  |  |  |  |  |  |  |
| Amount of 5.25% laundry bleach to use per foot of water (in cups) | 1½ | 3 | 4½ | 6 | 9 | 12 | 18 |
|  |  |  |  |  |  |  |  |
| Amount of 70% Hypochlorite granules to use per foot of water (in ounces) | 1 | 2 | 3 | 4 | 6 | 8 | 12 |

A) The amount of disinfectant required is determined primarily by the amount of water in the well. The table above shows the amount of the chlorine to use for each foot of water in the well, according to its diameter.

B) To determine the exact amount of bleach to use, multiply the amount of disinfectant indicated as determined by the well's diameter times the number of feet of water.

C) This total amount of bleach shall be added to approximately 10 gallons of water, and splashed around the lining, or wall of the well. Be certain that the solution has contacted all parts of the well, using the entire amount of disinfectant. Seal the top of the well.

D) When this is done, pump enough water so the strong chlorine odor is evident. When the odor is detected, stop the pumping and allow the solution to remain in the well overnight.

E) After standing, operate the pump, discharging water from all outlets until all chlorine odor disappears. Faucets on fixtures discharging to septic tank systems shall be throttled to a low flow to avoid overloading the disposal system.

3) Water Samples. Upon completion of a new well or modification of an existing well, the contractor shall give the owner information prepared by the Department explaining the importance of water well sampling, procedures for sampling, and how the water can be tested to assure a safe supply of water.

(Source: Amended at 22 Ill. Reg. 3973, effective April 1, 1998)