

# JACKSON COUNTY HEALTH DEPARTMENT

801 W. 2<sup>nd</sup> Street, Seymour, IN 47274  
(812) 522-6474 (Ofc) (812) 522-2916 (Fax)  
[www.jacksoncounty.in.gov](http://www.jacksoncounty.in.gov)

## Direction for Chlorinating Your well

Please read the entire fact sheet before starting any well disinfection. If you are not comfortable with this procedure, or for complex water systems or severe contamination problems, a licensed well contractor or pump installer can disinfect your well and water system for you.

### Well disinfection should be performed:

- ❑ When water testing indicates the presence of coliform bacteria.
- ❑ When the well has been near flood waters.
- ❑ After installation or repair of plumbing pipes and fixtures, e.g., softeners, faucets, and filters.
- ❑ During startup of seasonal wells where plumbing, wells, or pumps have been disconnected, or the water system has otherwise been drained or opened.

## Safety Precautions

### ELECTRICAL SAFETY

EXTREME CAUTION is advised when disinfecting a well, as you often will be working with electricity and water. Electricity can kill you. **If you are not acquainted with working with electricity, seek professional advice.**

### CHEMICAL SAFETY

Severe eye damage may result from contact with bleach or chlorine solution. Always follow the manufacturer's use and safety directions. Wear protective goggles or a face shield and rubber gloves when working with the bleach or chlorine solution. Do not mix chlorine with other chemicals.

### RESPIRATORY SAFETY

Underground well pits pose an extreme hazard, as they can contain a build-up of toxic gases or simply lack enough oxygen to sustain life. If your well is located in an underground well pit, **DO NOT ENTER IT.** Leave disinfection of wells in pits to professional, well contractors, or pump installers.

## Procedure for Disinfection of the Well and Water System

The following procedure is for a well that has a submersible pump with either a removable well cap or a well seal with a threaded plug in it. If the well has a sanitary seal, this procedure can only be attempted if a removable threaded plug in the sanitary seal allows access into the well. If your well has a type of pump other than a submersible pump, is located in a well pit, is a flowing well, or has a sanitary seal without a threaded plug, you should contact a professional for advice.

### STEP 1 - Isolate critical water system components

- ▶ **Bypass water softeners and other water system components, such as the dishwasher and the washing machine, that may be damaged by chlorine prior to initiating this well disinfection procedure.**

### STEP 2 - Electrical safety

- ▶ **Turn off electrical power to the pump by turning off the circuit breaker or unscrewing the fuse. Power should not be turned back on until STEP 5 or after the chlorine solution has been placed in the well. Turn off and drain the water heater.**

### STEP 3 - Mixing a chlorine solution

Sodium hypochlorite is the disinfectant found in laundry bleach and is the recommended product for well disinfection. Since bleach loses its disinfecting capacity over time it is important that a fresh container be used.

***Do not use laundry bleach that contains any fragrance or other additive.***

### ▶ Place a large clean bucket near the well. Mix water and bleach as indicated below

- ❑ 2-4 inch diameter casing, mix the recommended amount of bleach with 1 gallon of water, mix thoroughly.
- ❑ 6-10 diameter casing mix the recommended amount of bleach with 5 gallons of water, mix thoroughly.
- ❑ 24 inch diameter or greater casing mix the recommended amount of bleach in 2 five gallon buckets of water mix thoroughly.

(continued on back)

Depth of Water	Diameter of Well Casing						
	2 inches	4 inches	6 inches	8 inches	10 inches	24 inches	36 inches
10 feet	3/4 tbsp	3-1/4 tbsp	1/2 cup	3/4 cup	1-1/4 cups	7 cups	1 gal
20 feet	1-1/2 tbsp	6-1/2 tbsp	1 cup	1-1/2 cups	2-1/2 cups	14 cups	2 gal
30 feet	2-1/4 tbsp	9-3/4 tbsp	1-1/2 cups	2-1/4 cups	3-3/4 cups	1-1/4 gal	3 gal
40 feet	3 tbsp	13 tbsp	2 cups	3 cups	5 cups	1-3/4 gal	4 gal
50 feet	3-3/4 tbsp	1 cup	2-1/2 cups	3-3/4 cups	6-1/4 cups	2-1/4 gal	5 gal
100 feet	7-1/2 tbsp	2 cups	5 cups	7-1/2 cups	12-1/2 cups	4-1/2 gal	10 gal

#### STEP 4 - Adding chlorine to the well

► Pour the mixture into the well letting it run down the side as much as possible and avoid spilling on any wire connections. A funnel should be used for pouring the chlorine solution into small openings.

#### STEP 5 - Recirculating chlorinated water

► Recirculating the chlorinated water mixes the water column thoroughly and distributes the chlorine. It helps to wash down the inside sidewalls of the well casing, pump wires, and drop pipe.

- Turn on the power to the pump.
- Connect a clean garden hose to a nearby yard hydrant or an outside faucet.
- Run the water out of the hose in an area away from the well for approx. 10 minutes until the water runs clear.

You may notice the water coming from the hose turns red, yellow, or brown. Do not run discolored water through the household plumbing, and **do not run it into a septic system**. Since a strong chlorine solution may harm vegetation, dispose of the chlorinated water away from sensitive plants and do not discharge water into a lake or stream.

► When the water coming from the garden hose is relatively clear, turn the water off, place the garden hose into the top of the well casing and run water into the well washing down the sides. After the chlorine smell is first detected from the garden hose, recirculate the water back into the well for about 30 min. Use a chlorine test paper check that presence of chlorine.

► Turn off the power to the pump. Remove the garden hose from the well casing and replace the well cap or plug

#### STEP 6 - Bringing chlorinated water to each faucet

► Turn on the power to the pump. Run chlorinated water through the entire plumbing system by running water to each fixture\* one at a time until you smell bleach (or use chlorine test papers) and then close the fixture. Do this for each fixture, including:

- Cold and hot water faucets.
- Toilets and shower/bath fixtures.
- Any outside faucets.

**\*Faucet aerators may need to be removed if clogging occurs from loosened scale.**

Leave the chlorinated water in the system a minimum of six hours and preferably overnight.

**WARNING:** Chlorine can cause eye damage and skin irritation. Do not consume the water or use the water to shower/bathe.

#### STEP 7 - Removing the chlorinated water

► **Run a garden hose from an outside faucet to flush the chlorine out of the system.** It can take 30 minutes to 24 hours or more to flush all of the chlorine from the well. Do not run the chlorinated water into your septic System, run water away from sensitive plants and do not discharge water into a lake or stream.

#### STEP 9 – Reconnecting water softeners and other water treatment devices

► Refill the water heater if applicable and re-start the water heater.  
 ► Once the chlorine is gone from the well, open up each fixture one at a time until the chlorine smell is no longer present.

**STEP 10 – Have your well water re-tested by the Jackson Co. Health Department in 5-10 days.**