Dear Well Owners Network Member:

Thanks for hangin' with us this summer! If you're on social media, don't forget to follow us on Facebook and Twitter. Psst...you will hear news there first!

We are gearing up for the months ahead and we have all the fall well news you can use with some important studies on manganese and groundwater levels along with tips to share to make sure your well and well water are ready for the change in weather. Plus, we have discount water testing opportunities in this issue! It's back to school time, so let's hit the books!

Manganese in Drinking Water
It is a familiar scene this time of year as children are welcomed back to school. As lead in water concerns still loom, there may be another concern...manganese. According to a Canadian study, manganese may cause neurological effects in children. Read the full document.

**Canada Sets New Guideline**

Manganese is natural in the environment, it's in food, consumer products, air, and drinking water and it is essential to human health. However, we are learning that too much manganese may cause neurological effects in children. Canada has set two new guidelines for manganese - maximum acceptable concentration (MAC) for total manganese in drinking water at 0.12 mg/L (120 µg/L) and an aesthetic objective (AO) for total manganese in drinking water at 0.02 mg/L (20 µg/L). Private well owners in Canada should use these levels as guidelines to treat their well water.

**U.S. Recommended Levels**

The U.S. EPA has a non-regulatory health advisory for manganese of 0.3 mg/L and established a secondary maximum contaminant level of 0.05 mg/L based upon aesthetic effects. These levels are established for public water systems in the U.S. Well owners should use these levels as guidelines or consider using Canada's guidelines to treat their well water.

**Testing & Treatment**

Well owners are encouraged to test their well water for manganese and monitor levels annually if detected. See our water testing information below. Currently, there are no approved water treatment systems for manganese. Water Quality Association, Health Canada, the Standards Council or Canada (SCC), and NSF International are working together to certify water treatment for manganese removal. We will provide updates as more information becomes available. In the meantime, there are water treatment devices that can help reduce manganese in drinking water. If your water test shows manganese at or above the recommended levels, contact a certified water treatment specialist in your area to help select the best water treatment for your home and water system.
This year, Protect Your Groundwater Day (#PYGWD) will be observed on September 3. PYGWD was established to provide information on using groundwater responsibly, taking steps to conserve and protect groundwater, and to encourage regular water well testing and well maintenance.

Facts about groundwater from National Groundwater Association:

- Americans use 79.6 billion gallons of groundwater each day.
- Groundwater is 20 to 30 times larger than all U.S. lakes, streams, and rivers combined.
- 44 percent of the U.S. population depends on groundwater for its drinking water supply.
- More than 13.2 million households have their own well, serving 34 million people.

Find out more about PYGWD.

We continue PYGWD with important information below...keep reading!

Water Testing & Well Maintenance

If you are a private well owner, you are responsible for the quality of your drinking water and maintaining your well system. Regular water testing and well inspection are imperative to keep your water well operating properly and to ensure there are no contaminants so you always have a safe supply of drinking water. At a minimum, your well water should be tested every year for bacteria, the most common water quality problem. Other tests may be required or recommended, depending on where you live and what is located near your water well system.

We recommend using a certified lab for water testing which you can find using our interactive map, but what if you don't have a lab nearby? Here are some options:

Tap Score is a service for easy home water testing and reporting, created by SimpleWater. You don't have to find a lab, they already did that for you! They also provide our wellcare® Well Owners Network members with a dedicated 10% discount! You can order well water test kits on their
website and enter code: WCN2019. Once you receive the kit, take the samples and ship to the lab with the label provided. Shipping is included in the kit prices, so no extra charge. They also have specialized water testing.

watersafe® provides do-it-yourself well water test kits you can purchase on their website or by phone at 888-438-1942. Use this code to receive 20% off your first order EDC19HERMHTB.

For additional water well testing recommendations, if you have any questions on well water testing, or if you have any questions once you receive your well water test results, contact the wellcare® Hotline by calling 888-395-1033, send us an email, chat with us live, or contact your local Health Department or Cooperative Extension Office.

Download our information sheets for more information on Well Water Testing and Well Maintenance.

Where is all the groundwater?

People used to think that if their well ran dry, they could dig or drill a little deeper to resolve the problem. However, we are realizing that digging deeper may not be possible as the US is using groundwater faster than it can be replenished naturally. Read the full story. Then read on to find out what you can do to help conserve groundwater!
Water conservation...yes even this time of year!

Owning a well has many benefits, one of which is no water bill. But with no water bill to remind us how much water we are using, it may surprise you that the average person uses between 80-100 gallons of water per day! The largest use of household water is to flush the toilet, followed by showers and baths. During the summer months water use is increased. The average swimming pool needs 18,000-20,000 gallons to fill, the common garden hose uses 5-20 gallons per minute. With irrigation systems, power washing, car washing, etc., it is no wonder that so many wells run low during this time.

As well owners it is a good idea to conserve, not just in the summer but winter too. The following are some tips to help:

**Indoors**

- Fix leaks right away!
- Only run the dishwasher and washing machine with a full load. Check settings on your machines and make sure to set to the correct load size!
- Keep a pitcher of water in the fridge so you’re not waiting for the tap water to get cold.
- Plug the sink or turn the water off while washing dishes, shampooing, brushing teeth, and shaving.
- Have a dehumidifier? Use the water for house plants.
- Install water-efficient fixtures and appliances. Find a list of products.

**Outside**

If you’re headed for cold months, see our Winterizing article below. Burst pipes can waste water too! If you’re in a warmer climate most of the year read on...

- Use a water delivery service/hauler to fill your pool.
- Water your lawn when air temperatures are lower to avoid evaporation. Temperatures are usually at their lowest during the late evening or early morning. Most lawns benefit from watering two to three times per week for 20-30 minutes.
- Collect rainwater to use for watering plants and use only native plants for your area.
- Use soil that absorbs water to keep plants moist longer.
- Sweep outside areas instead of hosing them down.
• Fill buckets to wash and rinse the car instead of running the hose.

There are more ways to conserve water, find out here.

If your water looks dirty, cloudy, or it has sediment in it and it does not return to normal after allowing the well to sit unused for a while, the well may be running dry. Contact a licensed well contractor for an inspection. To find one in your area use our interactive map.

Follow us on Facebook and Twitter and post your water conservation tips with the hashtag #savewater. A few will be selected at random to receive a FREE do-it-yourself bacteria test kit and your tips will be posted in an upcoming newsletter.

SepticSmart Week 2019

Mark your calendar for SepticSmart Week September 16-20, 2019
This annual event focuses on educating the public, homeowners, and communities on the proper care and maintenance of septic systems.

A septic system is a highly efficient, self-contained, underground wastewater treatment system. Just like your well, it must be properly maintained to keep your well water, family, and the environment safe. Here’s how. We also have two information sheets available to download - Your Septic System for Homeowners and Septic Systems for Environmental Health Specialists. For more tips use hashtag #SepticSmartWeek on Facebook and Twitter.

**Hotline 'HOT' Topic: Splash-less Bleach & Flushing Your Well**

Over the last few months, our wellcare® Hotline has received many calls regarding accidental use of splash-less bleach for disinfecting a well. When disinfecting a well use a new bottle of regular non-scented bleach (sodium hypochlorite concentration). Splash-less bleach is a little thicker than regular household bleach. It is less likely to splash, but the sodium hypochlorite concentration is only 1-5%. It isn't strong enough to sanitize and disinfect, as the label warns and you will be left with a lot of suds in your water! Read our instructions for disinfecting or call your licensed well contractor for assistance.

**On a side note, we do not recommend disinfection as regular maintenance. Disinfection is only used when a new well is drilled, flooding occurs, after a well is serviced, if harmful bacteria are found, if the well has been sitting without use for an extended period of time, or if directed by your licensed well contractor.**

If you have already used the splash-less kind, you will need to flush your well system longer than directed on our instructions. The smell of bleach tends to go away quickly, but you may notice you are left with suds in your water. Use an outside hose to flush outdoors. Be careful to avoid areas that drain into lakes or streams because it can kill fish and other
aquatic life. Likewise, the solution can kill grass and shrubs, as well as disrupt septic systems. A good choice may be a backyard ditch (make sure the ditch is not connected to a lake or stream) or side area that will partially contain the solution while it is absorbed by the soil. Flush for an hour then turn off for two hours. Repeat until suds are gone.

A retest of your water should be conducted to confirm the water is safe before resuming use. See water testing information in the article above.

---

**Winterizing and Protecting Pipes**

You may recall this article from our winter newsletter, but we believe this information is important for our new members to see as well. Every year the wellcare® Hotline fields calls from homeowners with a frozen well or plumbing system. If your well or pipes freeze, contact your licensed well contractor or plumber as soon as possible.

If you are in an area that tends to reach freezing temperatures, you should make every effort to prevent your pipes and well casing from freezing. When pipes freeze, the flow of water is completely blocked. Since water expands as it turns into ice, the pipes are very likely to burst. It could also ruin your well pump. This can be an expensive problem to fix and a disastrous occurrence in frigid winter months. Both hot and cold water pipelines can freeze, so be sure to protect both.

**Your Pump and Well**

Most well pumps are down inside the well at depths that do not freeze, so you will be protecting the well casing that is exposed (above ground) and your pipes. You can insulate your well casing and pipes with foam rubber sleeves or fiberglass insulation, wrapping the insulating material around the casing and pipes. For extra protection in the areas of your home that are not heated, such as a crawl space or basement area, pipes may first be wrapped with special heating strips and then an outer layer of insulation wrapped on top. For assistance, contact a licensed well contractor or plumber in your area.

If you have an above ground pump, it needs to be kept in an area where the temperature stays above 40 degrees in order to prevent the water in
the pump and water lines from freezing. If the pump is located in an area where temperatures drop below 32 degrees, the pump should be housed in an insulated enclosure. The pump motor does generate some heat which can help prevent the pump from freezing inside an enclosure. If your pump is exposed outside and your area experiences some days of freezing temperatures, contact your licensed well contractor to help with enclosing your pump to prevent it from freezing.

Help keep your well from freezing with a pitless adapter. A pitless adapter attaches to your well casing to provide a sanitary and frost proof seal between the casing and the water line running to your home. This device protects the water from freezing and permits convenient access to the well and well components without having to dig around the well. The adapter is connected to the well casing below the frost line, which is the depth at which the ground does not freeze. Water from the well is diverted horizontally at the adapter to prevent it from freezing. Contact your licensed well contractor to discuss installing a pitless adapter.

Your Pipes

If your home has an outside faucet or spigot, there may be a shutoff valve somewhere inside of your home. Turn off the water supply to this faucet for the duration of the winter. First, close the shutoff valve then open the outside faucet to drain the remaining water from the pipe. This will protect the pipes that lead to the outdoors from freezing. If you do not have a shutoff valve, consider having one installed. Try to spot any trouble with your pipes before it’s too late, keeping an eye out for signs that may signify your pipes are beginning to freeze. For instance, has your water pressure dropped? Note: If you notice this problem prior to cold months, this is not a sign of pipes freezing. Contact your licensed well contractor for assistance. If there is a cold spell and you fear your pipes are going to freeze despite the efforts you have made, there is still one more trick. Leave one of your faucets that is farthest from your home’s water supply open and running slightly. If the water is running, it will be less likely to freeze.

For more information on protecting your well, contact your licensed well
contractor, plumber, the wellcare® Hotline at 888-395-1033, and read our Winterizing information sheet.

More Resources

The following sheets are available in Spanish:

- Buying a Home with a Well
- Disinfecting a Well
- Renting a Home with a Well

Get the latest information on Facebook and Twitter.

Still Have Questions?

We can help! Call the wellcare® Hotline at 888-395-1033, complete an online form, send us an email, or chat with us live! Hablamos español también!

Stay Connected:

Water Systems Council, 1101 30th Street, N.W., Suite 500, Washington, DC 20007