Dear Well Owners Network Member,

Spring is finally here! Springtime is the perfect time to maintain your well, septic, and any treatment devices you have. In this newsletter, you will find tips to help you through the maintenance processes. Don't forget to like us on Facebook and follow us on Twitter for extra tips, news, and more! As always, if you have questions on any of these topics, the wellcare® Hotline can help. Contact the wellcare® Hotline at 888-395-1033 or wellcarehotline.org.

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WELL MAINTENANCE IS IMPORTANT!

The safety and purity of your drinking water and the efficient operation of your private well system depends on a well-organized maintenance program. Protect your investment by regularly inspecting your well, testing your water, maintaining any water treatment devices, and your septic system!
Read additional information on well maintenance.
Environmental Testing & Research (ETR) Laboratories continues to offer discounts on water testing kits!

Ordering is easy... view details for ordering online or contact ETR Labs at 800-344-9977.

Important!
When contacting ETR Labs, simply identify yourself as having been referred by Water Systems Council.

When ordering online, use the coupon codes at ETR Labs website to receive your discount.

Landscaping with a Well

When landscaping around your well or siting a new well, make sure the top of the well sits at least one foot above the ground. Slope the ground down and away from your well for proper drainage and check to make sure all are in good repair, leaving no cracks or other entry points for potential pollutants. Have the well system, including the pump, storage tank, pipes and valves, and water flow inspected every 10 years by a qualified well contractor or pump installer. If you have no inspection record and cannot determine the age of the well, have it inspected immediately by a water well professional. Read additional information on inspecting your well.

Well Inspection

Like any large appliance in your home, you should also create a maintenance plan for your water well system. You should inspect your wellhead several times a year. Check the condition of the well covering, casing, and well cap to make sure all are in good repair, leaving no cracks or other entry points for potential pollutants. Have the well system, including the pump, storage tank, pipes and valves, and water flow inspected every 10 years by a qualified well contractor or pump installer. If you have no inspection record and cannot determine the age of the well, have it inspected immediately by a water well professional. Read additional information on inspecting your well.

Sample Water Well System

1. Check Valve
2. Rope Insert Adapter
3. Clamps
4. Heat Shrink Splice Kit
5. Torque Arrester
6. Safety Rope
7. Cable Tie
8. Cable Guard
9. Pinless Adapter
10. Male-Female Insert Adapter
11. Well Cap
12. Well Seal
13. Check Valve
14. Tank Ten
15. Drain Valve
16. Nipple
17. Relief Valve
18. Pressure Gauge
19. Pressure Switch
20. Safety Switch
21. Pump Saver
22. Lightning Arrester
23. Ball Valve
24. Pressure Tank
25. Pump

This illustration is intended to represent some of the components that can be included in a water well system and is not intended as an exhaustive guide. Check local codes for actual requirements and restrictions.

Click to view larger image.
sure that the grade doesn't allow for any standing water over the well area. Do not place "well coverings" over your well head such as, wishing wells, fake rocks/boulders, treated wood, gravel, etc. as this could lead to contamination of the groundwater as well as make it difficult to access the well for repairs.

When planting near the well use only plants with short root systems and don't plant any closer than 4 feet from the wellhead. Plants that do not like water or wet soils are ideal to prevent root systems from interfering with the well casing. Remember, the larger the plant, the more extensive the root system. Trees should be planted at least 20 feet from the well, with water seeking trees like willows, maples, poplars, and elms at least 50 feet away.

Don't use or store pesticides and

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**Water Testing**

To keep your well water clean and pure and your well operating at peak performance, regular water testing is an important maintenance tool. Private well owners are solely responsible for the quality of their drinking water. So it is up to you, the well owner, to decide when and how to test your water.

At a minimum, your water should be tested every year for bacteria, the most common water quality problem. Other tests may be required, depending on where you live and what is located near your water well. Test more than once a year in special situations: someone in the household is pregnant or nursing; there are unexplained illnesses in the family; your neighbors find a dangerous contaminant in their water; or there is a spill of chemicals or fuels into or near your well. Read additional information on well water testing.

Contact your local health department, cooperative extension service office, state environmental agency or the wellcare® hotline at 888-395-1033 for other water testing guidelines and to find a state certified water testing laboratory in your area.

Discount test kits are also available through Environmental Testing & Research Laboratories. View their website for more information.

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**Understanding Your Well Water Test Results**

Many well owners are stumped when they receive their test results from the laboratory. The often confusing measurements, limits, and standards make it tough to determine if your water is safe or if it needs some type of treatment.
Fertilizers within 100 feet of the well and use care when working or mowing around the well with heavy equipment so as not to damage the wellhead.

Additional information can be found in our wellcare® information sheets, Protecting Your Wellhead and Proper Use and Disposal of Pesticides and Fertilizers.

Most substances in water are measured as a concentration: a specific mass of a specific chemical within a specific unit or volume of water. The confusing part is that different terms can be used to reflect the exact same measurement:

- part per million/ppm = milligram per liter of water = mg/L
- part per billion/ppb = microgram per liter of water = ug/L

So what do these terms really mean? Basically, they refer to very small amounts of a substance within about a quart of water. (A liter amounts to 1.05 quarts.)

The U.S. Environmental Protection Agency (EPA) regulates public water supplies but not private wells. Well owners can use EPA's standards to judge their drinking water quality. Sometimes state standards are stricter than the EPA's, so check with your local or state health department for specific substances of concern.

Maximum Contaminant Levels (MCLs) are the highest level of a contaminant that the EPA allows in drinking water. MCLs are legally enforceable for public water supplies. When they turn up in the water, a utility must treat and remove or reduce the contaminant below the maximum level to protect public health.

EPA also sets standards for a second group of contaminants. These limits serve as guidelines for good water quality, but are not required by law. These National Secondary Drinking Water Regulations (NSDWRs), known as the secondary standards, regulate contaminants that may cause cosmetic effects, such as skin or tooth discoloration, or aesthetic effects, such as taste, odor or color, in drinking water. These contaminants are not considered threats to public health.

Finally, EPA studies another group of contaminants for possible regulation in the future. The Drinking Water Contaminant Candidate List (CCL) is published every five years. These standards are under discussion,
but are not yet an official EPA recommendation or regulation.

The chart below is a road map to your test results. It lists each contaminant, how it is regulated or not, and the maximum levels in all the measurements you are likely to see. You can cross reference your test results with the chart to determine your water quality.

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>MCL</th>
<th>Secondary</th>
<th>Candidate</th>
<th>PPM or mg/l</th>
<th>PPR or ug/l</th>
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<tbody>
<tr>
<td>Arsenic X</td>
<td>0.01</td>
<td>10</td>
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<tr>
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<td>0.003</td>
<td>3</td>
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<td>Bacteria X</td>
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<td>2000</td>
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<tr>
<td>Benzene X</td>
<td>0.005</td>
<td>5</td>
<td></td>
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<tr>
<td>Cadmium X</td>
<td>0.005</td>
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<tr>
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<tr>
<td>Chlorine X</td>
<td>4</td>
<td>4000</td>
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<td>Copper X</td>
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<td>Cryptosporidium X</td>
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<td>Zero</td>
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<tr>
<td>Fluoride X</td>
<td>4</td>
<td>4000</td>
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<tr>
<td>Giardia lamberti X</td>
<td>Zero</td>
<td>Zero</td>
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<tr>
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<td>Lead X</td>
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<td>Trifluor X</td>
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<td>Toluene X</td>
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<td>1000</td>
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<tr>
<td>Total Dissolved Solids X</td>
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<td>5000000</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Uranium X</td>
<td>0.03</td>
<td>30</td>
<td></td>
<td></td>
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</tbody>
</table>

Click to view larger image.

Read additional information on understanding your well water test results.

If you need assistance in reading your test results contact your local health department or the wellcare® Hotline at 888-395-1033.

Water Treatment

First, it is important to note that most well water is a safe, reliable drinking water source for you and your family. Water treatment may not be necessary. Some contaminants may be more of a "cosmetic" issue (odor, discoloration, etc.) and may not present any health risks. Test your water before installing any water treatment device. Read additional information on water treatment.
If you have a water treatment system, follow the inspection and maintenance schedule provided by your water treatment device manufacturer or water treatment professional. If you need assistance in locating a water treatment professional contact the wellcare® Hotline at 888-395-1033.

**Septic Systems**

Approximately 20 percent of U.S. households rely on onsite wastewater systems to dispose of wastewater on their property. Homeowners with both wells and septic systems must take care to maintain these systems in order to insure the purity of their drinking water.

Just like your well, you should inspect the septic tank each year for capacity and leaks. Have your tank pumped out as needed, usually every three to five years, based on the number of people in the household and the size of the tank. Repair the tank or drainfield system as needed to prevent leaks of bacteria and nutrients into groundwater. Read additional information on septic systems.

*Contact your septic service professional for assistance.*

Previous newsletters with additional tips can be found on our website.

**WSC has over 90 different wellcare® information sheets that can help you and your family learn more about managing a water well and protecting your water supply. Visit our [website](#) or contact the wellcare® Hotline at 888-395-1033.**