



## CATHEDRAL WOOD MUTUAL WATER COMPANY CONSUMER CONFIDENCE REPORT (CCR)

June 2015

### *What should I know about possible contaminants in our water?*

**Arsenic** The EPA's MCL for arsenic in drinking water is 0.010 mg/L (ppm). The EPA balances the current understanding of arsenic's possible health effects against the cost of removing the chemical. They continue to research the health effects of low levels of this element. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer. Arsenic in water may be from the erosion of natural deposits or runoff from orchards.

**Lead and copper** The action levels established by the EPA are 1.3 mg/L for copper and 0.015 mg/L for lead. These contaminants are the result of the corrosion of household plumbing systems or the erosion of natural deposits. Short term exposure to copper may lead to gastrointestinal distress; long term exposure may lead to liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the action level. Infants and young children typically are more vulnerable to lead in drinking water than the general population. They may experience delays in physical or mental development or could show slight deficits in attention span and learning abilities. Adults may suffer kidney problems and/or high blood pressure. It is possible that lead levels in your home may be higher than other homes in the community as the result of materials used in your home's plumbing. If you are concerned about lead levels in your home's water, you may wish to have your water tested, and you can flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the EPA's Safe Drinking Water Hotline.

**Nitrate** Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. They can become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall and agricultural activity. If you are caring for an infant, you should ask advice from your health care provider. These chemicals in water may be due to the erosion of natural deposits or from runoff from fertilizers, leaking septic tanks, or sewage.

**Turbidity** Turbidity refers to suspended particles or sediment in the water. It is important because it can interfere with disinfection and provide a medium for microbial growth. Turbidity has no health effects but may indicate the presence of disease-causing organisms including bacteria, viruses, and parasites that can cause nausea, cramps, diarrhea, and associated headaches. We are required to maintain turbidity levels less than 0.3 NTUs (Nephelometric Turbidity Units) in 95% of our samples in any month. Generally our numbers range 0.08 – 0.2, and we have a shutoff switch at 0.3 so that we can correct whatever necessary to bring the turbidity level down.

**TTHMs (Total trihalomethanes) and HAA5s (Haloacetic acids)** These chemicals are by-products of drinking water chlorination. The EPA MCL for the first is 0.080 mg/L (80 ppb) and for the second is 0.060 mg/L (60 ppb). Some people who drink water containing TTHMs and HAA5s in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

*Greetings.* Please take a few minutes to read through this information. In accordance with the Federal Safe Drinking Water Act, Cathedral Wood is required to provide you with an annual report that details the safety and quality of your tap water. If you have any questions after reading through this material, which provides details about our water supply in 2014, please call any one of the members of the board of directors. Sprinkled elsewhere in this report is contact information for other agencies that might be a source of good information for you.

Cathedral Wood has 20 residential connections, and in 2014 these 20 households consumed about 1.5 million gallons of water, up about 300 thousand gallons from the prior year. Some of this increase was due to major residential leaks within our system as well as an increase in our residential population. Our water is of good quality and meets current drinking water standards Cathedral Wood has no variances or exemptions from primary drinking water standards.

If you have any questions about the content of this report, please call me or any other member of the board of directors.

Best wishes,  
Bonnie Overgaard

### *Important Drinking Water Definitions*

**Action Level (AL)** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a community water system must follow.

**Maximum Contaminant Level (MCL)** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the maximum contaminant level goals as is economically or technically feasible. MCLs are enforceable standards.

**Maximum Contaminant Level Goal (MCLG)** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.

**Maximum Residual Disinfectant Level (MRDL)** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Treatment Technique (TT)** A required process to reduce the level of a contaminant in drinking water.

### *Do I need to take special precautions?*

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

**Cathedral Wood board of directors:** Dave Bertelsen, 408-219-5592; Lee Cantey, 831-430-0408; Bob Daniel, pres., 831-439-2097; Bonnie Overgaard, sec./treas., 831-438-5373; Gary Peters, vice pres., 831-438-1036; Penny Terry, 831-438-1881

**Where does our water come from?**

Cathedral Wood gets its water from three sources, two (surface water) streams and one (ground water) well. One stream is referred to as the “North Spring;” it is located on a property on Sugar Valley Road. The second is called the “South Spring;” it is on a property at the end of Sugarloaf Road. The well is located on Carl Drive.

Cathedral Wood first filters the water, via a pipeline flocculator and a sand filter, and then disinfects the water using chlorine. With good water from the sources and by meeting turbidity and disinfectant contact time requirements, we provide water of good quality to the residents of the system.



Remember  
the  
drought!  
Don't  
waste  
water!

**Are there contaminants in the drinking water? Why?**

Drinking water, including bottled water, reasonably may be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (EPA) Safe Drinking Water Hotline (800-426-4791). The EPA also has prepared a citizen’s guide to drinking water called *Water on Tap: A Consumer’s Guide to the Nation’s Drinking Water*.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

**Microbial** contaminants, such as viruses and bacteria that may come from improperly operated sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. **Inorganic** contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. **Organic** contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems. **Radioactive** contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

Individuals can get more information from the FDA.

**Routine Bacteriological and Chemical Monitoring**

Cathedral Wood draws a **bacteriological** sample of our water (fully-treated or *finished* water) every month for testing for the presence or absence of e. coli and total coliform bacteria, rotating the sample site according to a plan filed with SC County EHS several years ago. We have a long history of sample results being negative for e.coli and total coliform. **All test samples have been negative since one positive in May 2012. If at any time sample results are positive, you will be notified immediately. And if there is a problem with the water, we will of course investigate to determine the source of the contamination and to correct the situation.**

We currently test annually for **TTHMs and HAA5s**, which are by-products of the disinfection process; they are the result of the interaction of chlorine with organic particles in the water. The results in early 2012 were higher than the prior year (not unexpectedly since we began keeping the residual chlorine levels higher than in prior years) but still within the MCLs. In 2014, TTHMs were 69 ppb and HAA5s were 46 ppb, lower than the MCLs of 80 and 60 ppb.

In 2014 a California MCL of 10 ppb for **Hexavalent Chromium**, also known as **Chromium 6**, became effective. We tested all three of our sources immediately, and no Chromium 6 was detected.



Cathedral Wood also tests for **other regulated chemicals** according to the following schedule:

**Synthetic Organics**... We ran this test battery in May 2012. Synthetic Organics principally are pesticides and herbicides. We did not expect to find any contaminants, and in fact none were detected. These tests will be due again in 2021.

**Inorganics**, including arsenic and nitrates and nitrites... All three water sources are tested annually. See table below for 2014 Results.

**Volatile Organics**... Last done on well in 2008, due again in 2015. South spring done in 2009 and again in 2013; due again in 2016. North spring done in May 2012, due again in 2015. No volatile organic contaminants were detected in the north spring water in 2012 or in the south spring water in 2013.

**Radiological (Gross Alpha)**... Done in 2007; due next in 2016.

**Perchlorate**... Tests done annually. None detected in any source in 2014.

**Lead/Copper**... Done in 2010; next due in 2016.

Please call Bonnie Overgaard (831-438-5373) if you would like copies of the detailed test results.

**Inorganic Contaminants**

Contaminant	Level Detected	MCL	Notes
Arsenic	No. Spring, 2.2 µg/L (ppb)	10	See page 1 for details on sources and effects.
Fluoride	No. Spring, 0.17mg/L (ppm) So. Spring, 0.18 mg/L Well, 0.16 mg/L	2	We don't add fluoride. Source most likely the erosion of natural deposits. Potential health effects of exposure above the MCL may be bone disease including pain and tenderness, and mottled teeth for children.
Nitrate + Nitrite	No. Spring, 0.22 mg/L	10	See page 1 for details on sources and effects.

Note: See Turbidity section on page 1 and TTHM/HAA5 sections on both pages, 1 and 2, for details on these contaminants.