# Town of Trimble Water Quality Report for 2011

### Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 85 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 10 of these contaminants. We found all of these contaminants at safe levels.

# What is the source of my water?

Your water, which is ground water, comes from a confined tertiary sand aquifer. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water to this water system. The SWAP Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Town of Trimble sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.state.tn.us/environment/dws/dwassess.shtml or you may contact the Water System to obtain copies of specific assessments.

A wellhead protection plan is available for your review by contacting David Norsworthy at the Town of Trimble between 8:00 A.M. to 4:00 P.M. weekdays.

### Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably 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 Safe Drinking Water Hotline (800-426-4791).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

For more information about your drinking water, please call David Norsworthy at 731-297-3955

### How can I get involved?

Our Water Board meets on the first Monday of each month at Trimble City Hall. Please feel free to participate in these meetings.

## Is our water system meeting other rules that govern our operations?

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

### Other Information

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:

- · Microbial contaminants, such as viruses and bacteria, which may come from 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- · Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

### 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 persons with cancer undergoing chemotherapy, persons 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC quidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Town of Trimble is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead

## Water System Security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to 297-3955



# Water Quality Data

### What does this chart mean?

- MCLG Maximum Contaminant Level Goal, or 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.
- MCL Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs
  as feasible using the best available treatment technology. To understand the possible health effects described for many regulated constituents,
  a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described
  health effect.
- MRDL: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- MRDLG: Maximum residual disinfectant level goal. 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.
- <u>AL</u> Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- Below Detection Level (BDL) laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- Non-Detects (ND) laboratory analysis indicates that the contaminant is not present.
- Parts per million (ppm) or Milligrams per liter (mg/l) explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/L) picocuries per liter is a measure of the radioactivity in water.
- Millirems per year (mrem/yr) measure of radiation absorbed by the body.
- Million Fibers per Liter (MFL) million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- <u>Nephelometric Turbidity Unit (NTU)</u> nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- TT Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
		-						
Asbestos	NO	BDL	- A	7/27/05	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Copper	NO	.057		2009	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead <sup>4</sup>	NO	1.4		2009	Ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride	NO	.97	.561.2	2011	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination

Nitrate (as Nitrogen) 5	NO	2.7		2011	ppm	10	10	Runoff from fertilizer use;
								leaching from septic tanks,
								sewage; erosion of natural
								deposits
Sodium	NO	18		2010 .	ppm	N/A	N/A	Erosion of natural deposits;
	110							used in water treatment
TTHM <sup>6</sup>	NO	11.1		2009	ppb	n/a	80	By-product of drinking
[Total trihalomethanes]	110	****						water chlorination
Haloacetic Acids		1.4		2009	ppb	N/A	60	By-product of drinking
(HAA5)		1			• • •			water disinfection.
Chlorine	No	2.2	.82.2	2011	ppm	4	4	
	1,0							
Total Coliform	NO	0		2011		0	<2 positive	Water additive used to
Bacteria			200				samples	control microbes.
								Naturally present in the
			174 list Paul Augusta	3				environment

# Health Effects

**Iron:** Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or "rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.14 ppm. The aesthetic limit for iron is 0.3 ppm.

During the most recent round of Lead and Copper testing, 0 out of 10 households sampled contained concentrations exceeding the action level

# **How Contamination Occurs**

Water normally flows in one direction, from the public water system through the customer's cold or hot water plumbing to a sink tap or other plumbing fixture. The plumbing fixture is the end of the potable water system and the start of the waste disposal system.

Under certain conditions water can flow in the reverse direction. This is known as **backflow**. Backflow occurs when a backsiphonage or backpressure condition is created in a water line.

Backsiphonage may occur due to a loss of pressure in the water distribution system during a high withdrawal of water for fire protection, a water main or plumbing system break, or a shutdown of a water main or plumbing system for repair. A reduction of pressure below atmospheric pressure creates a vacuum in the piping. If a hose bib was open and the hose was submerged in a wading pool during these conditions, the non-potable water in the pool would be siphoned into the house's plumbing and back into the public water system.

**Backpressure** may be created when a source of pressure, such as a pump, creates a pressure greater than that supplied from the distribution system. If a pump supplied from a non-potable source, such as a landscape pond, were accidentally connected to the plumbing system, the non-potable water could be pumped into the potable water supply.

# How to Prevent Contamination of Your Drinking Water

Protect your drinking water by taking the following precautions:

### Don't:

Submerge hoses in buckets, pools, tubs, sinks, ponds, etc.

Use spray attachments without a backflow prevention device.

Connect waste pipes from water softeners or other treatment systems to the sewer, submerged drain pipe, etc.

Use a hose to unplug blocked toilets, sewers, etc.

#### Do:

✓ Keep the ends of hoses clear of all possible contaminants.

If not already equipped with an integral (built-in) vacuum breaker, buy and install hose bib type vacuum breakers (see reverse side of this pamphlet) on all threaded faucets around your home.
These devices are inexpensive and are available at hardware stores and home improvement centers.

✓ Install an approved backflow prevention assembly on all underground lawn irrigation systems. Remember, a plumbing permit is required for the connection of an underground lawn irrigation system to your plumbing system.

# **Hose Connection Vacuum Breaker**

Hose connection vacuum breakers are specifically made for portable hoses attached to hose thread faucets. Their purpose is to prevent the flow of contaminated water back into the drinking water. These devices screw directly to the faucet outlet. They can be used on a wide variety of installations, such as service sinks, hose faucets near a wading pool, laundry tub faucets, etc.

Some units are designed for manual draining for freezing conditions.

Some are furnished with breakaway set screws as a tamper proof feature.

These device are not intended for operation under continuous pressure.

# Protection of the Water Purveyor's Distribution System

In general, the installation of plumbing in compliance with the plumbing code will provide adequate protection for your plumbing system from contamination.

Hose Connection

Vacuum Breaker

However, the water purveyor may require (as a condition of service) the installation of a backflow prevention assembly on the water service to provide additional protection for the public water system. A backflow prevention assembly will normally be required where a single-family residence has special plumbing that increases the hazard above the normal level found in residential homes, or where a hazard survey cannot be completed.

To help determine if a backflow prevention assembly is required, the water purveyor may send residential customers a Cross Connection Control Survey Questionnaire. The water purveyor will evaluate the returned questionnaires to assess the risk of contamination to the public water system. Based on the results of the evaluation, the installation of backflow prevention assemblies may be required on services to some customers.