

# Decherd Water Works

## Water Quality Report 2020

### Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 13 of these contaminants. We found all of these contaminants at safe levels.

### What is the source of my water?

Your water comes from four wells at our water treatment plant. 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) have prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving 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 slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Decherd Water sources rated as slightly susceptible to potential contamination.

- A. Type of Water: Mississippian Carbonate Aquifer, Groundwater under the direct influence of surface water.
- B. Common Name: 4 wells, 3 at Decherd Water Plant and 1 at S. Front St. North

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to the Environmental Protection Agency (EPA) can be viewed online at <http://www.tn.gov/environment/dws/dwassess.shtml> or you may contact the Water System to obtain copies of specific assessments.

### 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. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. 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's Safe Drinking Water Hotline (800-426-4791).

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

The source of drinking water (both tap and bottled water) including rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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 or 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 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.

For more information about your drinking water, please call Glenn T. Summers Jr. at 967-5301.

(Note Paragraph applies only to Ground Water Systems or Systems that purchase ground water.) Any ground water system must inform its customers of any fecal indicator positive ground water source samples or any significant deficiency that is uncorrected at the time of the CCR. The CCR must include the following elements:

The nature of the particular significant deficiency or the source of the fecal contamination (if known) and the date of the significant deficiency was identified by DWS or the dates of how the fecal indicator-positive ground water source samples

Explain how fecal contamination in the ground water source has been addressed under rule 1200-05-01-04(4) and the date of such action:

For each significant deficiency or fecal contamination in the ground water source that has not been addressed under Rule 1200-05-01-04(4), give the approved plan and schedule for correction, including interim measures, progress to date, and any interim measures completed:

If the system receives a notice of a fecal indicator-positive ground water source sample, the potential health effects language must be included, "Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these waste can cause short-term health effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some elderly, and people with severely compromised immune systems."

### How can I get involved?

Our Water Board meets on the second Monday of each month at 8 p.m. at 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 Commissioners of Decherd Water Board serve four-year terms. Vacancies on the Water Board are filled by the vote of the Citizens of the City of Decherd. Decisions by the Water Board on customer complaints, that have been presented to the board, under the District's customer complaint policy may be reviewed by the Utility Management



### Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone 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 guidelines 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).

### 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, pumping stations, etc. to 361-0546 or 967-5120.

## Water Quality Data<sup>1</sup>

### 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.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. 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.
- **TT** - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria <sup>2</sup>	No	0				0	< 5% positive samples	Naturally present in the environment
Turbidity <sup>1</sup>	No	0.15 Max	0.02 to 0.15	Daily	NTU	n/a	TT	Soil runoff
Nitrate (as Nitrogen)	No	2.77		09-09-20	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper <sup>3</sup>	No	90%tile= 0.107		8/14/20	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.60	0.43 to 0.60	One per Quarter	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead <sup>4 &amp; 5</sup>	No	90%tile= 6.22ppb		8/14/20	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium <sup>6</sup>	No	5.8		06-6-18	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
Atrazine <sup>7</sup>	No	ND	ND	Quarterly	ppb	3	3	Runoff from herbicide used on row crops
TTHM [Total trihalomethanes]	No	6.71 ppb		Quarterly	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	9.64 ppb		Quarterly	ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon (TOC) <sup>2</sup>	No	ND	ND	One per Quarter	ppm	TT	TT	Naturally present in the environment.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
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Chlorine	No	2.65	1.15 to 2.65	5 per Week	ppm	4	4	Water additive used to control microbes.
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Lead and Copper sampling is required every 3<sup>rd</sup> year. Sampling was conducted in 2017. The next sampling for our system will be conducted in 2020.

<sup>1</sup> 100% of our samples were below the turbidity limit.

<sup>2</sup> We met the treatment technique requirements for Total Organic Carbon (TOC).

<sup>3</sup> During the most recent round of copper testing 0 out of 20 households' sampled contained concentrations exceeding the Action Level.

<sup>4</sup> During the most recent round of lead testing 0 out of 20 households' sampled contained concentrations exceeding the Action Level.

<sup>5</sup> 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. The DECHERD WATER DEPARTMENT 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>.

<sup>6</sup> Sodium monitoring was conducted in 2018. The next round of monitoring will be conducted in 2021.

<sup>7</sup> Atrazine was sampled quarterly during 2020. All samples were below detectable limit.