

# Water Quality Report 2019

## Valley Head Water Works Board

In 1974 the Safe Drinking Water Act, (SDWA) was signed into law requiring all water systems that serve the public to meet national standards for water quality. These standards set limits for certain contaminants and require all public water systems to monitor for these contaminants. The Water Works Board of the Town of Valley Head, routinely tests for these constituents in your drinking water according to federal and state laws. The tables in this report show the monitoring results beginning January 1, 2018 to December 31 2019. If you have any questions concerning water quality please contact Dennis Lewis, System Manager, at our water works office located at 101 School Street in Valley Head. Our office hours are from 8:00AM to 4:00PM on Monday thru Friday. You may also attend the monthly board meeting held on the second Monday of each month. The meeting begins at 4:00P.M., and is held at the water works office located at 101 School Street in Valley Head, Alabama.

### Source of Water

Operating under permit by the Alabama Department of Environmental Management, the Water Works Board of the Town of Valley Head operates a ground water treatment plant at Dixie Brown Springs located at 40233 U.S. Hwy 11 North Valley Head, Alabama 35989. Chlorine is added to the water as a disinfectant and the required residual is maintained to protect your drinking water from contaminants.

### Definitions

In the following table you will find many terms and abbreviations that may not be familiar to you. To help you better understand these terms we've provided the following definitions.

1. *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.
2. *Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
3. *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.
4. *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
5. *Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
6. *Maximum Contaminant Level* - The "Maximum Allowed" (MCL) is 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.
7. MCL's are set at very stringent levels. 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.
8. *Maximum Contaminant Level Goal* - The "Goal" (MCLG) is 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
9. *ND* = Not Detected

## Table of Primary Contaminants

At high levels primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
<b>Bacteriological</b>			Endothall	100	ND
Total Coliform Bacteria	< 5%	0	Endrin	2	ND
Turbidity	5	.303	Epichlorohydrin	TT	ND
<b>Radiological</b>			Glyphosate	700	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400	ND
Alpha emitters (pci/l)	15	ND	Heptachlor epoxide	200	ND
Combined radium (pci/l)	5	ND	Hexachlorobenzene	1	ND
<b>Inorganic</b>			Hexachloropentadiene	1	ND
Antimony (ppb)	6	ND	Lindane	200	ND
Arsenic (ppb)	50	ND	Methoxychlor	40	ND
Asbestos (MFL)	7	ND	Oxamyl [Vydate]	200	ND
Barium (ppm)	2	ND	PCBs	500	ND
Beryllium (ppb)	4	ND	Pentachlorophenol	1	ND
Cadmium (ppb)	5	ND	Picloram	500	ND
Chromium (ppb)	100	ND	Simazine	4	ND
Copper (ppm)	AL=.13	ND	Toxaphene	3	ND
Cyanide (ppb)	200	ND	Benzene	5	ND
Fluoride (ppm)	4	ND	Carbon Tetrachloride	5	ND
Lead (ppb)	AL=15	ND	Chlorobenzene	100	ND
Mercury (ppb)	2	ND	Dibromochloropropane	200	ND
Nitrate (ppm)	10	.25	o-Dichlorobenzene	600	ND
Nitrite (ppm)	1	ND	p-Dichlorobenzene	75	ND
Selenium	50	ND	1,2-Dichloroethane	5	ND
Thallium	2	ND	1,1-Dichloroethylene	7	ND
<b>Organic Chemicals</b>			Cis-1,2-Dichloroethylene	70	ND
2,4-D	70	ND	trans-1,2-Dichloroethylene	100	ND
2,4,5-TP (Silvex)	50	ND	Dichloromethane	5	ND
Acrylamide	TT	ND	1,2-Dichloropropane	5	ND
Alachlor	2	ND	Ethylbenzene	700	ND
Atrazine	3	ND	Ethylene dibromide	50	ND
Benzo(a)pyrene [PHAs]	200	ND	Styrene	100	ND
Carbofuran	40	ND	Tetrachloroethylene	5	ND
Chlordane	2	ND	1,2,4-Trichlorobenzene	70	ND
Dalapon	200	ND	1,1,1-Trichloroethane	200	ND
Di-(2-ethylhexyl) adipate	400	ND	1,1,2-Trichloroethane	5	ND

Di(2-ethylhexyl) phthalates	6	ND	Trichloroethylene	5	ND
Dinoseb	7	ND	THM	100	ND
Diquat	20	ND	Toluene	1	ND
Dioxin[2,3,7,8-TCDD]	30	ND	Vinyl Chloride	2	ND
			Xylenes	10	ND

## Table of Detected Contaminants

CONTAMINANT	MCLG	MCL	Range			Amount Detected		Likely Source of Contamination
<b>Bacteriological</b>		<b>(Sampling Date or Period)</b>						
Turbidity	0	5				.303	NTU	Soil runoff
<b>Inorganic Chemicals</b>		<b>(Sampling Date or Period)</b>						
Nitrate	10	10				.25	PPM	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Organic Chemicals</b>		<b>(Sampling Date or Period)</b>						

The chart above shows the only detectable contaminants during the monitoring period was nitrate and turbidity. Both were well below the maximum contaminant level.

The Water Works Board also monitors every three years for lead and copper. The last samples collected in 2017 did not exceed the lead copper action level.

As you can see by the tables, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials." All 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 the 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 at 1-800-426-4791.

## Wellhead Protection Plan

The Water Works Board of the Town of Valley Head in conjunction with the Alabama Geological Survey has completed an extensive WELLHEAD PROTECTION PLAN to identify the recharge area of Dixie Brown Spring. As many of you may have noticed, signs have been posted along U S Hwy 11 and U S Hwy 117 identifying the Wellhead Protection Area. Also, potential contaminant sites have been mapped and susceptibility analysis has been performed to determine if these sites pose any significant risk. If you have any questions concerning the Wellhead Protection Area or would like to review the plan, contact Dennis Lewis, System Manager at 635-6527.

## Educational Information

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 drinking water from their health care providers. EPA (Environmental Protection Agency)/CDC (Center of Disease Control) 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).

Beginning June 1, 2001, we began monitoring for disinfection byproducts (total trihalomethanes and haloacetic acids).

Some people who drink water contaminated with trihalomethanes (TTHM's) **in excess of the MCL** over many years may experience problems with liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

We at the Water Works Board of the Town of Valley Head work around the clock to provide quality water at every tap. We ask that all our customers help us to protect our water source.

Thanks for letting us serve you,

Dennis Lewis  
System Manager