

# Annual Drinking Water Quality Report

## The Water Works Board of the City of Vincent

January-December 2019

### Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (USEPA) and the Alabama Department of Environmental Management (ADEM) drinking water health standards. Your local water officials vigilantly safeguard its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standards. We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is a spring, which draws water from the Knox Aquifer. The water we supply to our customers requires no specialized treatment. However, Chlorine is added to the water as disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants. We also purchase a portion of our water from New London Water, Sewer, and FPA whose water sources are two wells which pump from the Knox Aquifer.

The **Vincent Water Board** routinely completes a water storage facility inspection plan and utilizes a Bacteriological Monitoring Plan and a Cross Connection Policy is in place to insure good safe drinking water for our customers. We have completed a Source Water Assessment Plan, which is available at our office for review. This report provides information about potential sources of contamination and is set up to help protect our source.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held at 6:00pm on the 4th Monday of the month at the The Water Works Board of the City of Vincent office, located at 35 Florey Street.

**The members of the Board of Directors: Stan Elliott, Chairman Ray McAllister, Co-Chairman  
Larry King, Secretary/Treasurer Evelyn Finn, Board Member Frederick Kidd, Board Member**

### Important Drinking Water Definitions:

**Action Level (AL)** - The concentration of a contaminant that triggers treatment or other requirements that a water system shall follow.

**Maximum Contaminant Level (MCL)** - 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.

**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.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that 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.

**Millirems per year (mrem/yr)** - Measure of radiation absorbed by the body.

**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.

**Non-Detects (ND)** - Laboratory analysis indicates that the constituent is not present.

**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.

**Parts per billion (ppb) or Micrograms per liter (µg/L)** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt) or Nanograms per liter (ng/L)** - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq) or Picograms per liter (pg/L)** - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/L)** - Picocuries per liter is a measure of the radioactivity in water.

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

**Threshold Odor Number (T.O.N.)** - The greatest dilution of a sample with odor-free water that still yields a just-detectable odor.

**Variations & Exemptions** - ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

### Explanation of reasons for variance/exemptions

Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

The **Vincent Water Board** routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the data presented in the following tables show the results of our monitoring period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2019.

# Table of Primary Contaminants

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

CONTAMINANT	MCL	Vincent	New London	CONTAMINANT	MCL	Vincent	New London	CONTAMINANT	MCL	Vincent	New London
<b>Bacteriological</b>		<b>2019</b>	<b>2019</b>	Selenium(ppb)	50	ND	ND - 1.5	Epichlorohydrin	TT	ND	ND
Total Coliform Bacteria	< 5%	ND	ND	Thallium(ppb)	2	ND	ND - 0.14	Ethylbenzene(ppb)	700	ND	ND
Turbidity	TT	0.11	0.25	<b>Organic Chemicals</b>		<b>2019</b>	<b>2019</b>	Ethylene dibromide(ppt)	50	ND	ND
Fecal Coliform & E. coli	0	ND	ND	Acrylamide	TT	ND	ND	Glyphosate(ppb)	700	ND	ND
<b>Radiological</b>		<b>2016</b>	<b>2016</b>	Alachlor(ppb)	2	ND	ND	Haloacetic Acids(ppb) (2015)	60	1.50	ND - 1.65
Beta/Photon emitters (mrem/yr)	4	ND	2.27	Atrazine(ppb)	3	ND	ND	Heptachlor(ppt)	400	ND	ND
Alpha emitters (pci/l)	15	0.9+/-0.7	ND	Benzene(ppb)	5	ND	ND	Heptachlor epoxide(ppt)	200	ND	ND
Combined radium (pci/l)	5	0.8+/-0.7	1.14	Benzo(a)pyrene(PHAs)(ppt)	200	ND	ND	Hexachlorobenzene(ppb)	1	ND	ND
Uranium(pci/l)	30	ND	ND	Carbofuran(ppb)	40	ND	ND	Hexachlorocyclopentadiene(ppb)	50	ND	ND
<b>Inorganic</b>		<b>2019</b>	<b>2019</b>	Carbon Tetrachloride(ppb)	5	ND	ND	Lindane(ppt)	200	ND	ND
Antimony (ppb)	6	ND	ND	Chlordane(ppb)	2	ND	ND	Methoxychlor(ppb)	40	ND	ND
Arsenic (ppb)	10	ND	ND	Chlorobenzene(ppb)	100	ND	ND	Oxamyl [Vydate](ppb)	200	ND	ND
Asbestos (MFL)	7	ND	ND	2,4-D	70	ND	ND	Pentachlorophenol(ppb)	1	ND	ND
Barium (ppm)	2	0.02	ND - 0.0062	Dalapon(ppb)	200	ND	ND	Picloram(ppb)	500	ND	ND
Beryllium (ppb)	4	ND	ND	Dibromochloropropane(ppt)	200	ND	ND	PCBs(ppt)	500	ND	ND
Bromate(ppb)	10	ND	ND	0-Dichlorobenzene(ppb)	600	ND	ND	Simazine(ppb)	4	ND	ND
Cadmium (ppb)	5	ND	ND	p-Dichlorobenzene(ppb)	75	ND	ND	Styrene(ppb)	100	ND	ND
Chloramines(ppm)	4	ND	ND	1,2-Dichloroethane(ppb)	5	ND	ND	Tetrachloroethylene(ppb)	5	ND	ND
Chlorine(ppm) (2015)	4	1.30	ND - 1.12	1,1-Dichloroethylene(ppb)	7	ND	ND	Toluene(ppm)	1	ND	ND
Chlorine dioxide(ppb)	800	ND	ND	Cis-1,2-Dichloroethylene(ppb)	70	ND	ND	TOC	TT	ND	ND
Chlorite(ppm)	1	ND	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	ND	TTHM(ppb) (2015)	80	2.50	ND - 0.002
Chromium (ppb)	100	ND	ND - 0.87	Dichloromethane(ppb)	5	ND	ND	Toxaphene(ppb)	3	ND	ND
Copper (ppm)	AL=1.3	0.10	ND - 0.004	1,2-Dichloropropane(ppb)	5	ND	ND	2,4,5-TP (Silvex)(ppb)	50	ND	ND
Cyanide (ppb)	200	ND	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	ND	1,2,4-Trichlorobenzene(ppb)	70	ND	ND
Fluoride (ppm)	4	0.02	ND - 0.02	Di(2-ethylhexyl)phthalates(ppb)	6	ND	ND - 0.08	1,1,1-Trichloroethane(ppb)	200	ND	ND
Lead (ppb)	AL=15	ND	ND - 1.8	Dinoseb(ppb)	7	ND	ND	1,1,2-Trichloroethane(ppb)	5	ND	ND
Mercury (ppb)	2	ND	ND	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	ND	Trichloroethylene(ppb)	5	ND	ND
Nitrate (ppm)	10	0.31	ND - 0.38	Diquat(ppb)	20	ND	ND - 0.38	Vinyl Chloride(ppb)	2	ND	ND
Nitrite (ppm)	1	ND	ND	Endothall(ppb)	100	ND	ND	Xylenes(ppm)	10	ND	ND
Total Nitrate & Nitrite	10	0.31	ND - 0.38	Endrin(ppb)	2	ND	ND				

# Table of Secondary and Unregulated Contaminants

**Secondary Drinking Water Standards** are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. **Unregulated contaminants** are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

CONTAMINANT	MCL	Vincent	New London	CONTAMINANT	MCL	Vincent	New London	CONTAMINANT	MCL	Vincent	New London
<b>Secondary 2019</b>											
Aluminum	0.2	108.00	ND	Foaming Agents	0.5	ND	ND	Silver	7	ND	ND - 0.35
Chloride	250	2.60	1.59 - 2.18	Iron	0.3	ND	ND	Sulfate	70	1.2	0.46 - 0.51
Color (PCU)	15	5.00	ND	Magnesium	75	11.00	ND	Total Dissolved Solids	100	49	121 - 141
Copper	1	0.003	ND	Odor (T.O.N.)	5	ND	ND	Zinc	5	ND	ND - 3.78
<b>Special 2019</b>											
Calcium	N/A	27.40	ND - 23	pH (SU)	N/A	7.80	6.92 - 7.66	Temperature (*C)	N/A	ND	19.1 - 25
Carbon Dioxide	N/A	8.4	0.88 - 1.7	Sodium	N/A	0.86	0.75 - 0.95	Total Alkalinity	N/A	111	106 - 110
Manganese	0.05	0.03	ND	Specific Conductance (umhos)	<500	239.00	191 - 195	Total Hardness (as CaCO3)	N/A	114	105 - 109
<b>Unregulated 2019</b>											
1,1 - Dichloropropene	N/A	ND	ND	Bromobenzene	N/A	ND	ND	Hexachlorobutadiene	N/A	ND	ND
1,1,2,2-Tetrachloroethane	N/A	ND	ND	Bromochloromethane	N/A	ND	ND	Isoprylbenzene	N/A	ND	ND
1,1-Dichloroethane	N/A	ND	ND	Bromodichloromethane	N/A	ND	ND	M-Dichlorobenzene	N/A	ND	ND
1,2,3 - Trichlorobenzene	N/A	ND	ND	Bromoform	N/A	ND	ND	Methomyl	N/A	ND	ND
1,2,3 - Trichloropropane	N/A	ND	ND	Bromomethane	N/A	ND	ND	Metolachlor	N/A	ND	ND
1,2,4 - Trimethylbenzene	N/A	ND	ND	Butachlor	N/A	ND	ND	Metribuzin	N/A	ND	ND
1,2,4-Trichlorobenzene	N/A	ND	ND	Carbaryl	N/A	ND	ND	MTBE	N/A	ND	ND
1,3 - Dichloropropane	N/A	ND	ND	Chloroethane	N/A	ND	ND	N - Butylbenzene	N/A	ND	ND
1,3 - Dichloropropene	N/A	ND	ND	Chlorodibromomethane	N/A	ND	ND	Naphthalene	N/A	ND	ND
1,3,5 - Trimethylbenzene	N/A	ND	ND	Chloroform	N/A	2.50	ND	N-Propylbenzene	N/A	ND	ND
2,2 - Dichloropropane	N/A	ND	ND	Chloromethane	N/A	ND	ND	O-Chlorotoluene	N/A	ND	ND
3-Hydroxycarbofuran	N/A	ND	ND	Dibromochloromethane	N/A	ND	ND	P-Chlorotoluene	N/A	ND	ND
Aldicarb	N/A	ND	ND	Dibromomethane	N/A	ND	ND	P-Isopropyltoluene	N/A	ND	ND
Aldicarb Sulfone	N/A	ND	ND	Dichlorodifluoromethane	N/A	ND	ND	Propachlor	N/A	ND	ND
Aldicarb Sulfoxide	N/A	ND	ND	Dieldrin	N/A	ND	ND	Sec - Butylbenzene	N/A	ND	ND
Aldrin	N/A	ND	ND	Fluorotrichloromethan	N/A	ND	ND	Tert - Butylbenzene	N/A	ND	ND

Table of Detected Drinking Water Contaminants									
CONTAMINANT	MCLG	MCL	Range			Vincent	New London	Amount Detected	Likely Source of Contamination
<b>Bacteriological Contaminants</b>									
Turbidity	0	TT				0.11	0.25	NTU	Soil runoff
<b>Radiological Contaminants</b>									
Beta particle and photon	0	4				ND	2.27	mrem/yr	Decay of natural and man-made deposits
Alpha emitters	0	15				0.9+/-0.7	ND	pCi/L	Erosion of natural deposits
Combined Radium 226 & 228	0	5				0.8+/-0.7	1.14	pCi/L	Erosion of natural deposits
<b>Inorganic Contaminants</b>									
Beryllium	4	4	ND	-	ND	ND	ND	ppb	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Chlorine	MRDLG 4	MRDL 4	ND	-	1.30	1.30	ND - 1.12	ppm	Water additive used to control microbes
Chromium	100	100	ND	-	ND	ND	ND - 0.87	ppb	Discharge from steel and pulp mills erosion of natural deposits
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level 0			0.10	ND - 0.004	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	4	4	ND	-	0.02	0.02	ND - 0.02	ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	0	10 Sites AL=15	No. of Sites above action level 0			ND	ND - 1.8	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N)	10	10	ND	-	0.31	0.31	ND - 0.38	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate & Nitrite	10	10	ND	-	0.31	0.31	ND - 0.38	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	ND	-	ND	ND	ND - 1.5	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium	0.5	2	ND	-	ND	ND	ND - 0.14	ppb	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Organic Contaminants</b>									
Di(2-ethylhexyl)phthalates	0	6	ND	-	ND	ND	ND - 0.08	ppb	Discharge from rubber and chemical factories
Diquat	20	20	ND	-	ND	ND	ND - 0.38	ppb	Runoff/leaching from herbicide use
Haloacetic Acids (HAA5)	0	60	ND	-	1.50	1.50	ND - 1.65	ppb	By-product of drinking water chlorination
Total trihalomethanes (TTHM)	0	80	2.20	-	2.50	2.50	ND - 0.002	ppb	By-product of drinking water chlorination
<b>Secondary Contaminants</b>									
Chloride	N/A	250	ND	-	2.60	2.60	1.59 - 2.18	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Iron	N/A	0.3	ND	-	ND	ND	ND	ppm	Erosion of natural deposits
Magnesium	N/A	0.05	ND	-	11.00	11.00	ND	ppm	Erosion of natural deposits
Silver	N/A	0.1	ND	-	ND	ND	ND - 0.35	ppm	Erosion of natural deposits
Sulfate	N/A	250	ND	-	1.20	1.20	0.46 - 0.51	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	49.00	49.00	121 - 141	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	ND - 3.78	ppm	Erosion of natural deposits
<b>Special Contaminants</b>									
Calcium	N/A	N/A	ND	-	27.40	27.40	ND - 23	ppm	Erosion of natural deposits
Carbon Dioxide	N/A	N/A	ND	-	8.40	8.40	0.88 - 1.7	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	0.03	0.03	ND	ppm	Erosion of natural deposits
pH	N/A	N/A	7.50	-	7.80	7.80	6.92 - 7.66	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	ND	-	0.86	0.86	0.75 - 0.95	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	ND	-	239.00	239.00	191 - 195	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Temperature	N/A	N/A	ND	-	ND	ND	19.1 - 25	°C	Naturally occurring in the environment
Total Alkalinity	N/A	N/A	ND	-	111.00	111.00	106 - 110	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	ND	-	114.00	114.00	105 - 109	ppm	Naturally occurring in the environment or as a result of treatment with water additives

## General Information

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. 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 contaminants have been detected. The EPA has determined that your water IS SAFE at these levels. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

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 Vincent Water Board** 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>.

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activities.

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk 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. All Drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. 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).

**For more information, contact:**

**The Water Works Board of the City of Vincent  
35 Florey Street P O Box 300  
Vincent, AL 35178  
Telephone: (205) 672-2878  
Monday – Friday  
8:00 AM – 4:00 PM**