

TOWN OF SANTA CLAUS WATER QUALITY REPORT

REPORT OVERVIEW

It is the intent of this report to give water users important facts about the water we use daily. To ensure the safety of our water, the town's testing requirements are as follows: total chlorine, total coliform bacteria, lead and copper and asbestos fibers. Chlorine residual tests are run seven days per week. Total coliform tests are run four times per month to ensure that the disinfection (chlorinating) process is working. Lead and copper tests are run periodically to see if these two elements are showing up in our water. The final test required is asbestos fibers. The town utilizes asbestos cement pipe in a small portion of the system, so we monitor the corrosiveness of the water to ensure the fibers are staying in place. Do not be alarmed when you hear that there is asbestos concrete pipe in the water system, it is considered safe and used nationwide.

Now that the town is producing water, there are and will be new testing requirements. Results of current testing are included in this report. Future testing requirements and results will also be included in this report.

During the last testing year, the town had no violations. Other constituents of our water are tested daily at our water treatment plant, as well as, at Patoka Lake Treatment Plant. Those results are also included in this report.

HEALTH 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. Environmental Protection Agency (EPA) and Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk from infection by Cryptosporidium and other microbial are contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

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:

Patoka Lake Regional Water District
WATER QUALITY DATA 2016

Inorganic Contaminants(2016)

	MCL MGL	D.L. MGL	RESULT MGL
Antimony	0.008	0.001	BDL
Arsenic	0.01	0.001	BDL
Barium	2	0.002	0.024
Beryllium	0.004	0.0003	BDL
Cadmium	0.005	0.001	BDL
Chromium	0.1	0.0009	BDL
Cyanide, Total	0.2	0.02	BDL
Fluoride	4	0.1	0.6
Mercury	0.002	0.0001	BDL
Nickel	0.1	0.001	BDL
Nitrate	10	0.1	BDL
Selenium	0.05	0.002	BDL
Sodium	No MCL		2.3
Thallium	0.002	0.0003	BDL
Nitrite	1		

Radioactive Contaminants(2016)

	MCL pCi/L	RESULT pCi/L
Uranium	20.1	.01+0.00
Radium-226		.14 + .08
Radium-228		.83 + 0.45
Combined Radium	5	0.97 + 0.46

Synthetic Organic Contaminants(2016)

	MCL ug/L	D.L. ug/L	RESULT ug/L
Alachlor(Lasso)	2	0.1	BDL
Atrazine	3	0.1	BDL
Benzo(a)pyrene	0.2	0.02	BDL
Carbofuran	40	0.9	BDL
Chlordane(alpha & gamma)	2	0.1	BDL
2,4-D	70	0.1	BDL
Dalapon	200	1	BDL
DBCP	0.2	0.01	BDL
Dinoseb	7	0.1	BDL
2,3,7,8-TCDD(Dioxin)	30 pg/L	5.0 pg/L	BDL
Diquat	20	0.4	BDL
Di(2-ethylhexyl)adipate	400	0.6	BDL
Di(2-ethylhexyl)phthalate	6	0.6	BDL
Endothal	100	9	BDL
Endrin	2	0.01	BDL
Ethylene Dibromide(EDB)	50 ng/L	10 ng/L	BDL
Glyphosate (Round-Up)	700	6	BDL
Heptachlor	0.4	0.04	BDL
Heptachlor Epoxide	0.2	0.02	BDL
Hexachlorobenzene	1	0.1	BDL
Hexachlorocyclopentadiene	50	0.1	BDL
Lindane	0.2	0.02	BDL
Methoxychlor	40	0.1	BDL
Oxamyl(Vydate)	200	1	BDL
Pentachlorophenol	1	0.04	BDL
Picloram(Tordon)	500	0.1	BDL
PCBs	0.5	0.5	BDL
Simazine	4	0.07	BDL
2,4,5-TP(Silvex)	50	0.1	BDL
Toxaphene	3	1	BDL

Definitions

"MCL"	means maximum contaminant level
"BDL"	means below detectable limit
"pCi/L"	means picocuries per liter
"D.L."	means detectable limit
2012 "mg/L"	means part per million or milligrams per liter
"NTU"	means nephelometric turbidity unit
"ug/L"	means part per billion or micrograms per liter
"U.C."	means unregulated contaminates

Volatile Organic Contaminants(2016)

	MCL ug/L	D.L. ug/L	RESULT ug/L
Benzene	5	0.5	BDL
Carbon Tetrachloride	5	0.5	BDL
Chlorobenzene	100	0.5	BDL
1,2-Dichlorobenzene	600	0.5	BDL
1,4-Dichlorobenzene	75	0.5	BDL
1,2-Dichloroethane	5	0.5	BDL
1,1-Dichloroethylene	7	0.5	BDL
1,2-Dichloroethylene,cis	70	0.5	BDL
1,2-Dichloroethylene,trans	100	0.5	BDL
Dichloromethane	5	0.5	BDL
1,2-Dichloropropane	5	0.5	BDL
Ethylbenzene	700	0.5	BDL
Styrene	100	0.6	BDL
Tetrachloroethylene	5	0.5	BDL
Toluene	1000	0.5	BDL
1,2,4-Trichlorobenzene	70	0.5	BDL
1,1,1-Trichloroethane	200	0.5	BDL
1,1,2-Trichloroethane	5	0.5	BDL
Trichloroethylene	5	0.5	BDL
Vinyl Chloride	2	0.2	BDL
Total Xylenes	10000	0.5	BDL
Methyl-T-butyl ether		0.5	BDL
TOTAL TRIHALOMETHANES	80	0.5	61.4
Bromodichloromethane		0.5	4.4
Bromoform		0.5	BDL
Chlorodibromomethane		0.5	BDL
Chloroform		0.5	47

	MCL ug/L	RESULT ug/L
Haloacetic Acids 6	60	37.6 Average
	2016 Range	29 To 47
Total Trihalomethanes(4)	80	39.8 Average
	2016 Range	27.5 To 60.3
	MCL	RESULT
Lead 90th percentile 2014	0.015	0.0048
Copper 90th percentile 2014	1.3	0.21

Turbidity Measurements Over 30 (2016)

	MCL 25%	Range	23.00% To 43%	Highest Turbidity Measurement 2016
Total Organic Carbon (TOC)				None
Percent Removal TOC	Average<25%		31.4%	.23 March 24 th 2016

Santa Claus Water Utility Water Quality Data for 2016

Inorganic Contaminants (2016)

	MCL	D.L.	Result
	MG/L	MG/L	MG/L
Antimony	0.006	0.001	BDL
Arsenic	0.01	0.002	BDL
Barium	2	0.002	0.121
Beryllium	0.004	0.0005	BDL
Cadmium	0.006	0.001	BDL
Chromium	0.1	0.003	BDL
Cyanide, Free	0.2	0.01	BDL
Fluoride	4	0.1	0.2
Mercury	0	0.0002	BDL
Nickel	0.1	0.0002	BDL
Selenium	0.05	0.0009	BDL
Sodium	U.C.	0.6	78.1
Sulfate	U.C.	0.5	17.2
Thallium	0.002	0.0004	BDL

Radioactive Contaminants (2011)

	MCL	Result	Result
	BDL	pCi/L	pCi/L
Radium 228	5	BDL	BDL
Gross Beta	40	5.7	pCi/L
Gross Alpha	15	BDL	pCi/L
Uranium	0.03	0.0006	Mg/L

Synthetic Organic Contaminants (2015)

	MCL	D.L.	Result
	ug/L	ug/L	ug/L
Alachlor(Lasso)	2	0.2	BDL
Atrazine	3	0.2	BDL
Benzo(a)pyrene	0.2	0.02	BDL
Carbofuran	40	0.5	BDL
Chloridane(alpha & gamma)	2	0.05	BDL
2,4-D	70	0.15	BDL
Dalapon	200	1.0	BDL
DBCP	0.2	0.01	BDL
Dinoseb	7	0.3	BDL
2,3,7,8-TCDD(Dioxin)	3x10-6	0	BDL
Disquat	20	0.66	BDL
Di(2-ethylhexyl)adipate	400	0.5	BDL
Di(2ethylhexyl)phthalate	5	1.0	BDL
Endothal	100	0.5	BDL
Endrin	2	0.02	BDL
Ethylene Dibromide(EDB)	0.05	10.0	BDL
Glyphosate (Round-Up)	700	5.0	BDL
Heptachlor	0.4	0.02	BDL
Heptachlor Epoxide	0.2	0.02	BDL
Hexachlorobenzene	1	0.1	BDL
Hexachlorocyclopentadiene	50	0.1	BDL
Lindane	0.2	0.02	BDL
Methoxychlor	40	0.1	BDL
Oxemyl(Vydate)	200	0.5	BDL
Pentachlorophenol	1	0.04	BDL
Picloram (Tordon)	500	0.15	BDL
PCBs	0.5	0	BDL
Simazine	4	0.15	BDL
2,4,5-TP (Silvex)	50	0.08	BDL
Toxaphene	3	0.08	BDL
Nitrates (2016)	10	0.09	1
Nitrites (2016)	1.0	0.06	BDL

Likely sources of Contamination

Lead: Corrosion of household plumbing systems, and erosion of natural deposits.
Copper: Corrosion of household plumbing systems.

Bacteriological/Disinfection

There were no positive bacteriological sample results in 2015, and no disinfectant residual violations.

Definitions

- "MCL" means maximum contaminant level
- "BDL" means below detectable limit
- "pCi/L" means picocuries per liter
- "D.L." means detectable limit
- "mg/L" means part per million or milligrams per liter
- "ug/L" means part per billion or micrograms per liter

Asbestos

MCL	D.L.	Result
7 MFL	0.102	BDL

Volatile Organic Contaminants (2016)

	MCL	D.L.	Result
	ug/L	ug/L	ug/L
Benzene	5	0.5	BDL
Carbon Tetrachloride	5	0.5	BDL
Chlorobenzene	100	0.5	BDL
1,2-Dichlorobenzene	600	0.5	BDL
1,4-Dichlorobenzene	75	0.5	BDL
1,2-Dichlorobenzene	5	0.5	BDL
1,1-Dichloroethylene	7	0.5	BDL
1,2-Dichloroethylene, cis	70	0.5	BDL
1,2-Dichloroethylene, trans	100	0.5	BDL
Dichloromethane	5	0.5	BDL
1,2-Dichloropropane	5	0.5	BDL
Ethylbenzene	700	0.5	BDL
Styrene	100	0.5	BDL
Tetrachloroethylene	5	0.5	BDL
Toluene	1000	0.5	BDL
1,2,4-Trichlorobenzene	70	0.5	BDL
1,1,1-Trichloroethane	200	0.5	BDL
1,1,2-Trichloroethane	5	0.5	BDL
Trichloroethylene	5	0.5	BDL
Vinyl Chloride	2	0.2	BDL
Total Xylenes	10000	0.5	BDL

Unregulated Volatile Organic Contaminants (2014)

Bromobenzene	0	0.5	BDL
Bromomethane	0	0.5	BDL
Chloroethane	0	0.5	BDL
2-Chlorotoluene	0	0.5	BDL
4-Chlorotoluene	0	0.5	BDL
1,3-Dichlorobenzene	0	0.5	BDL
1,1-Dichloroethane	0	0.5	BDL
1,3-Dichloropropane	0	0.5	BDL
2,2-Dichloropropane	0	0.5	BDL
1,1-Dichloropropane	0	0.5	BDL
1,3-Dichloropropane(cis&trans)	0	0.5	BDL
1,1,1,2-Tetrachloroethane	0	0.5	BDL
1,1,2,2-Tetrachloroethane	0	0.5	BDL
1,2,3-Trichloropropane	0	0.5	BDL
Dibromomethane	0	0.5	BDL
Bromodichloromethane	0	0.5	BDL
Bromoform	0	0.5	2.4
Chlorodibromomethane	0	0.5	1.9
Chloroform	0	0.5	BDL
Methyl-T-butyl ether	5000	0.5	BDL

Lead 90th Percentile (2014)

0.015 0.0026 mg

Copper 90th Percentile (2014)

1.3 0.25 mg/l

MCL RESULT

80 ug/L 24.7E Avg.

2016 Range 0 TO 54

Total Trihalomethanes 80 32.63 Avg.

2016 Range 5 to 59

☐ 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 storm 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, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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's Safe Drinking Water Hotline at 800-426-4791.

CHLORAMINE/FLUORIDE ADDITION

Patoka Lake Regional Water District, and the town utilize chloramines to disinfect your drinking water. For all normal users, chloraminated water is the same as water disinfected with chlorine. However, kidney dialysis patients should consult their doctor and fish owners should call your pet store for more information. As recommended by ADA and AWWA, Patoka Lake District, and the town participate in the State Dental Fluoridation program and adds fluoride to the treated water.

You as an end consumer of water can help to protect the sources of drinking water by increasing and promoting efforts to recycle materials and properly dispose of chemicals, used oils and petroleum products, batteries, and other household refuse.

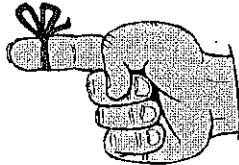
If you have any questions about the quality of your water, please attend our Waterworks board meetings. The meetings are the second Tuesday of every month beginning at 6:00 CST at the Town Hall.

Our Public Water System Identification number is IN5274010. Listed are some important contact numbers to call if you should have question concerning water quality:

Santa Claus Town Hall	812 937 2551
Russ Luthy, Utility Superintendent	812 544 3329
Water Department	812 544 2354
Patoka Lake Regional Office	800 313 5589

Emergencies weekends, holidays and after hours call 812 686 2234 (Cell phone) or page personnel at 812 481 0370 (pager). All numbers listed will be a long distance call. Please use only in emergencies.

Friendly Reminder:



For billing question call the Town Hall 812 937 2551 ext. #2

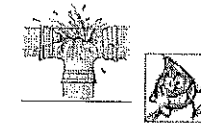
For After Hours & Holiday Emergency's call 812 686 2234

If we come and shut your water off, there will be a \$40.00 reconnect fee

When filling your pool, contact the Town Hall **prior to filling** to insure proper credit for your sewer portion.

Meter Testing Fee: If a customer requests the town to test their water meter and/or calibration of a meter 2" or smaller, there shall be a \$35.00 fee prior to testing. If an overage is found, the fee will be refunded.

Spring and Summer Time Breaks



Periodically the towns' water distribution system will experience a catastrophic failure. This can happen either by construction damage or changing ground conditions. When this happens repair crews will work to repair the lines as quickly as they can, but some times we have to put customers on a "BOIL ADVISORY". When this happens we will call you, tag your door or find other means to let you know not to drink the water. Water must be boiled first to get rid of the possible contaminates from the break in the line. You will have to be on the "BOIL ADVISORY" for 48 hours or till further notice. This is the required time for test samples to come back. Once everything is clear you will be notified that it's safe to drink the water.



Statement Addressing 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. Santa Claus Utilities 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>." Lead and copper testing is done every 3 years in accordance with required regulations.