2021 Water Quality Report for Village of Suttons Bay (WSSN 6500)

This report covers the drinking water quality for Village of Suttons Bay for the 2021 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2021. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from 4 groundwater wells, each over 103 ft in depth. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is:

Well 1-Low	Well 3-Low
Well 2-Moderatly Low	Well 4-Low

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by updating and maintaining our well head protection area. Educating residence and inspecting for cross connections throughout the system.

If you would like to know more about this report, please contact: Village of Suttons Bay Utilities Department at 231-271-1032 EXT1 Paul Whiteford Operator in Charge. Our The utilities office is located at 1522 Richter road.

Contaminants and their presence in 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 U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

Vulnerability of sub-populations: 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 systems 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. U.S. EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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:

- **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 and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **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 stormwater runoff, and septic systems.

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2021 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2021. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- 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 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 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppb: parts per billion or micrograms per liter
- ppm: parts per million or milligrams per liter
- pCi/l: picocuries per liter (a measure of radioactivity).
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct the problems that were found during these assessments.

- ***Level 1 Assessment***: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

- The village had two- level one assessments in the months of July and August, after each occurrence disinfection was applied and an investigation was conducted. It was determined that the water storage tank had minor deficiencies in the sealing of the venting and access hatches. Both tank cells were drained, cleaned, inspected, and then put back online. Status updates were provided to EGLE during this project.

1Monitoring Data for Regulated Contaminants

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Nitrate (ppm)	10	10	4.25	ND-4.25	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	1.1	ND-1.1	2021	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium[1] (ppm)	250	250	9.63	1.97-9.63	2021	No	Erosion of natural deposits
Chlorine[2] (ppm)	250	250	14	4-14	2021	No	Water additive used to control microbes
Sulfate (ppm)	250	250	15	9-15	2021	No	
Total Coliform (total number or % of positive samples/month)	TT	N/A	2	2 out of 4	2021	No	Naturally present in the environment
Per- and polyfluoroalkyl substances (PFAS)							
Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
We are required to submit samples for testing by EGLE, all samples for calendar year 2021 came back Non-Detect							
Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water[3]	Range	Year Sampled	Number of Samples above AL	Typical Source of Contaminant
Lead (ppb)	15	15	4	0-5	2021	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.8	0-0.9	2021	0	Corrosion of household plumbing systems; Erosion of natural deposits

Information about Lead and Copper

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. Suttons Bay is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. If you have a lead service line it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. 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 at 1-800-426-4791 or at http://water.epa.gov/drink/info/lead.
Infants and children who drink water containing lead more than the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
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Copper is an essential nutrient, but some people who drink water containing copper more than the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Our water supply has 118 lead service lines and 0 service lines of unknown material out of a total of 347 service line

Additional Monitoring

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. Monitoring helps the U.S. EPA determine where certain contaminants occur and whether regulation of those contaminants is needed.

Unregulated Contaminant Name	Average Level Detected	Range (ppm)	Year Sampled	Comments
Hardness (ppm)	Wells 1&2: 222 Wells 3&4: 200	200-222	2021	Naturally Occurring Minerals
Iron (ppm)	Wells 1&2: ND Wells 3&4: 0.54	ND-0.54	2021	Naturally Occurring Minerals

1 Sodium in not a regulated contaminant.
2 Chlorine "Level Detected" is calculated using a running average.
3 Ninety (90) percent of the samples collected were at or below the level reported for our water.

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2021.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at the village hall located at 420 Front St. This report will be sent to you and available online at https://www.suttonsbayvillage.org/default.asp

We invite public participation in decisions that affect drinking water quality. Council meetings are the third Monday of the month at 5:30pm. For more information about your water, or the contents of this report, contact Paul Whiteford, Operator in charge for the Village of Suttons Bay at 231-271-1032 EXT 1 or sbutilities@centurytel.net For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater.