SANDPOINT ANNUAL WATER QUALITY REPORT FOR 2015

This report covers the operation of Sandpoint's two water treatment plants for the period of January 1st to December 31st, 2014. The report summarizes results of tests that reflect the quality of water produced during that period. A few test are only required every 9-year cycle so those would be noted in footnotes. Included are details about where your water comes from, what it contains, and how it compares to standards established by the Environmental Protection Agency (EPA) and the Idaho Division of Environmental Quality (IDEQ).

The report covers results from tests conducted mostly during 2014 for over 40 potential drinking water contaminants. Not all tests conducted are included in this report due to some are for plant operational information and would not be helpful to the general public. None of the detected contaminants occurred at levels that represented a violation of any regulatory standards.

SUSCEPTIBILITY TO CONTAMINANTS

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 people, and some infants can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA/CDC 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).

WATER SOURCES

The City of Sandpoint produces potable water at two facilities: The Sand Creek Plant (water source is Little Sand Creek) and the Lake Plant (water source is Lake Pend O'reille). The water from Sand Creek source is treated (coagulated and filtered) to remove contaminants and is then disinfected (chlorinated) to protect against microbial agents. The Lake Plant has recently been upgraded to membrane filtration and has been producing high quality water since August 2012. If needed, carbon and a coagulant can be added upstream of the membrane filters but is not needed to produce very clean water. Microfiltration through membranes is a relatively new water treatment process and a significant improvement over sand filtration. The plants are operated by or under the supervision of, state-certified water treatment plant operators.

A Source Water Assessment study has been conducted by the IDEQ to establish potential sources of contamination in the watersheds for both plants. Copies of reports describing the results of this study are available for review at the office of the Public Works Department.

POTENTIAL CONTAMINANTS

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 EPA's Safe Drinking Water Hotline (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 on 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.

* Disinfection By-products (DBPs) - including halogenated and oxidized by-products formed by reaction of disinfectants (chlorine) with natural constituents. These by-products are commonly classified as THMs (trihalomethane) and HAAs (haloacetic acid).

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. The City of Sandpoint water treatment plants are operated under the jurisdiction of the EPA and IDEQ in accordance with these regulations. Contaminant limits for bottled waters are, established by the Food and Drug Administration to provide protection for consumers of these products.

WATER QUALITY DATA

There were no violations of treatment standards that necessitated regulatory actions during the 2014 testing period.

The accompanying tables show the results of monitoring for the period of January 1st to December 31st, 2014. Separate tables are provided for water produced by the Sand Creek Plant, the Lake Plant and the distribution system. Most analyses were conducted on samples of finished water collected at the water treatment plants immediately prior to introduction into the distribution system. Most of the bacteriological tests are collected from the distribution system because it can change as water flows through distribution system.

Tests for a number of potential contaminants were not conducted during 2014 either because of regulatory waivers or because testing for certain contaminants is not required on an annual basis. In accordance with the regulations that govern the content of this report, only results from the most recent tests (conducted within the last nine years) in which contaminants were actually detected are included in the tables. The Appendix to this report lists the other contaminants for which analyses were conducted (within the last nine years) but for which no residues were detected.

MORE INFORMATION

The purpose of this report is to provide you with information that describes the quality of water that is produced by the Sandpoint Water Treatment Department. We hope that it might help alleviate any concerns you may have about the safety of your drinking water. We also hope that it gives you a better understanding of the effort that is directed toward ensuring that the water delivered to you is of consistently high quality. The Sandpoint Water Treatment Department is committed to maintaining, and where feasible, improving upon these high standards.

Chlorine taste and odor - Chlorine is added to drinking water at levels required by the regulatory agencies to deactivate potential disease causing organisms, e.g., those that cause typhoid, dysentery, cholera, etc. Untold numbers of lives have been saved since chlorine was introduced as a disinfectant in drinking water in the early 1900's. (More than 25,000 people died in the U.S from typhoid alone in 1900) Despite its unmistakable benefits, many people object to the odor/taste of chlorine in their water. The water can be placed in a closed container in the refrigerator for drinking purposes or placed in an approved plastic or stainless water bottle and stored at room temperature. It's not recommended using an uncovered container as after a few hours the water may absorb taste. Most people find that this simple technique eliminates objectionable tastes and odors due to chlorine in the water. For customers with a water dispenser on your refrigerator, most have a carbon filter that will remove chlorine. Make sure the filter is periodically replaced.

Lead - The source waters do not contain dissolved lead but can be present from materials associated with service lines and home plumbing. Regulations require the city to sample from 20 representative homes every 3 years and the results have always been well below the action level of 15 parts per billion. See the contaminant chart for the last 20 sample results. The City of Sandpoint 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 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 www.epa.gov/safewater/lead.

Pharmaceuticals and personal care products (PPCPs) - In general this refers to any product used by individuals for personal health or cosmetic reasons or by agribusiness to enhance livestock growth or health. PPCPs include prescription and over-counter therapeutic drugs, veterinary drugs, fragrances, and cosmetics. Advanced technology has improved our ability to detect these chemicals down to parts per trillion. The fact that a substance is detectable doesn't mean it's harmful to humans or hasn't been there for many years. To date, research hasn't demonstrated an impact on human health from these compounds in drinking water at these low levels but research is ongoing. The best and most cost-effective way to ensure safe water at the tap is to keep source waters clean. Don't flush prescription drugs down the toilet. Also keep in mind a toilet is not a convenient trash disposal system. One flush uses up to three to five gallons for each flush.

Why is my water cloudy? - This can happen at times because of oxygen in the water and it is not harmful. Three things affect oxygen in water: pressure, temperature and dissolved oxygen. If the water in a glass doesn't clear in a couple of minutes give the water department a call and someone will check the water.

For more information about your water, please contact Dave Pafundi (Supervisor of the Water Treatment Department: 263-3440) or Kody VanDyk (Director of Public Works: 263-3407). You are also invited to attend our regularly scheduled meetings to learn more about matters pertaining to your drinking water. The Sandpoint City Council meets on the first and third Wednesday of each month. Additional information pertaining to various aspects of water treatment can be obtained at the Internet Home Page of the American Water Works Association (www.awwa.org).

Plant Tours - The newly upgraded Lake Water Treatment Facility is a state of the art microfiltration plant and very interesting to view. If you would like to arrange for a plant tour, please call David Pafundi at 208-263-3440. We prefer to have groups of at least 6 persons.

COMMUNITY AWARENESS

In keeping with the recommendations of the Public Health Security and Bioterrorism and Response Act of 2002, citizens are urged to report any suspicious activities involving the Little Sand Creek Watershed, water treatment and distribution facilities to local law enforcement authorities or the City of Sandpoint Public Works Department.

Test Results from the Sand Creek Plant

Substance	Violation	Maximum	Average	Unit of	MCLG	MCL	Likely source of contamination
	no	Detected	Detected	Measurement			
Microbial Contaminants							
Turbidity	no	0.139	0.056	NTU	n/a	TT / 1.0	Soil Runoff, caused from heavy snow melt and thunder storms.
Turbidity is a measurement of the cloudiness of water. We measure it because it is a good indicator of water quality.							
Inorganic Contaminants							
pH	no	7.9	7.2				7.0 is neutral
Sodium	no	5.53	5.53	ppm	n/a	n/a	Natural constituent; treatment additive
Chlorine	no	1.88	1.13	ppm	4.0	4.0	Water additive used to control microbes
Calcium	no	1.61	1.61	ppm			Erosion of natural deposits
Hardness	no	11.8	8.77	ppm			Erosion of natural deposits
Total Dissolved Solids	no	27	27	ppm			Erosion of natural deposits
Arsenic	no	N/D	N/D	ppb	0	10	Erosion of natural deposits
Nitrate (N)	no	N/D	N/D	ppm	0	10	Runoff of sewage discharge and fertilizers
Nonvolatile Organic Contaminants							
Total Organic Carbon	no	1.13	0.96	ppm	n/a	TT	Naturally present in environment

Test Results from the Lake Plant

Substance	Violation	Maximum	Average	Unit of	MCLG	MCL	Likely source of contamination
	no	Detected	Detected	Measurement			
Microbial Contaminants							
Turbidity	no	0.139	0.0246	NTU	n/a	TT / .30	Soil Runoff, caused from heavy snow melt and thunder storms.
Inorganic Contaminants							
Sodium	no	6.01	5.86	ppm	n/a	n/a	Natural constituent, treatment additive
Calcium	no	22.9	22.9	ppm			Erosion of natural deposits
Chromium	no	N/D	N/D	ppb	100	100	Erosion of natural deposits
Hardness	no	82.4	82.4	ppm			Erosion of natural deposits
Total Dissolved Solids	no	97	97	ppm			Erosion of natural deposits
Magnesium	no	6.11	6.11	ppm			Erosion of natural deposits
Arsenic	no	N/D	N/D	ppb	0	10	Erosion of natural deposits
Nitrate (N)	no	N/D	N/D	ppm	0	10	Leaching of sewage discharge
Nonvolatile Organic Contaminants							
Total Organic Carbon	no	1.35	1.16	ppm	n/a	TT	Naturally present in the environment

Distribution System Samples

Substance	Violation	Maximum	Average	Unit of	MCLG	MCL	Likely source of contamination
	no	Detected	Detected	Measurement			
Disinfection By-products							
Total Trihalomethanes	no	50	25	ppb	n/a	80	By-products of chlorination
Total Haloacetic Acides	no	71	27	ppb	n/a	60	By-products of chlorination
Metals							
Copper [1]	no	454	81.93	ppb	1.3	AL=1300	Corrosion of household plumbing systems;
Lead [1]	no	11.0	3.33	ppb	0	AL=15	erosion of natural deposits
Inorganic Chemicals							
Chlorine	no	0.97	0.88		4.0	disinfectant used to control microbs	
Bacteriological							
		Highest % positive in a month					
	Violation				MCLG	MCL	
Total Coliform	no	0.0%			0	> 5%	Naturally present in the environment

Appendix

1. Samples for lead and copper analyses were collected at twenty residences throughout the distribution system in 2013.
Synthetic Organic Contaminants (SOCs) - In 2008 and 2009 both plants were tested for Simazine, picloram, 2,4-D, diquat,endothall and many others in which none of these were detected.

Terms and abbreviations used in the Tables:

* **Nephelometric Turbidity Unit (NTU)** - A measure of the clarity of the water. Turbidity (which below 5 NTU is barely noticeable to the average person) is a good indicator of the effectiveness of filtration in removing particle matter.

n/a = not applicable; **ppb** = parts per billion or micrograms per liter (equivalent to 1 pound in 500,000 tons); **ppm** = parts per million or milligrams per liter (equivalent to 1 pound in 500 tons); **pCi/L** = picocuries per liter (a measure of radiation).

* **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.
* **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
* **Action Level (AL)** - The concentration of a contaminant which, when exceeded, triggers additional treatment requirements or other corrective measures which a system must follow.