SANDPOINT ANNUAL WATER QUALITY REPORT FOR 2009

This report covers the operation of Sandpoint's water treatment plants for the period of January 1st to December 31st, 2008. 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 2008 for over 35 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 these sources is treated (coagulated and filtered) to remove contaminants and is then disinfected (chlorinated) to protect against microbial agents. Approximately 90% of the water produced annually comes from the Sand Creek Plant under normal operating conditions. The Lake Plant is used primarily to satisfy increased demands for water during the summer months when the supply for Sand Creek Plant substantially drops. During 2008, both plants produced 737.7 million gallons of water. 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. In general, the study found that potential sources of contamination in the Sand Creek Plant watershed are minimal and primarily natural in origin. Because the Clark Fork River is the major source of water for Lake Pend O'Reille, the entire Clark Fork River basin must be taken into consideration when assessing potential contaminants for the Lake Plant. Because of the large size of this basin and its proximity to transportation corridors and various industrial and agricultural operations, the potential sources of contaminants for the Lake Plant are numerous and quite diverse. Should the proposed Rock Creek Mine become reality, that facility could represent an additional source of contamination for the Lake Plant.

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.

Contaminants that may be present in source water before treatment include:

* Microbial Contaminants - such as viruses, protozoans, and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

* Inorganic Contaminants (IOCs) - 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 (SOCs) - synthetic organic contaminants which may come from a variety of sources such as agriculture and residential uses.

* Radioactive Contaminants - which are naturally occurring.

* Organic Chemical Contaminants (SOCs and VOCs) - including synthetic (SOCs) and volatile (VOCs) 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.

* 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 derivatives) and HAAs (haloacetic acid derivatives).

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The 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 2008 testing period.

The accompanying tables show the results of monitoring for the period of January 1st to December 31st, 2008. Separate tables are provided for water produced by the Sand Creek Plant and the Lake Plant. Most analyses were conducted on samples of finished water collected at the water treatment plants immediately prior to introduction into the distribution system.

Of the 120 samples taken from treated water for coliform bacteria and e-coli analysis in 2008, none showed the presence of these organisms. Tests for a number of potential contaminants were not conducted during 2008 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. By holding water in an open container for 12 hours at room temperature, most of the chlorine will evaporate. The water can then be placed in a closed container in the refrigerator for drinking purposes. 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.

What's that pink stuff? - People sometimes discover that a pink-colored residue has appeared on moist surfaces (toilet bowels, sinks, pet dishes, etc.) in their homes. In most cases, this is caused by the growth of widely distributed bacteria known as *Serratia marcescens*. Since they are deactivated by chlorine, these airborne bacteria are not present in the water delivered to the home. Instead, these water-loving organisms are commonly transported to the site through the air on dust particles. Although the bacteria do not normally pose a serious health risk, they can cause the formation of rather unsightly residues. Keeping susceptible surfaces dry and/or treating them with diluted bleach can help minimize the problem.

Pharmaceuticals and personal care products (PPCPs)- In general refer 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 and 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 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. The higher the pressure, temperature and oxygen the more it turns cloudy when leaving the tap. 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 Public Works Committee meets on the first Wednesday of each month and the Sandpoint City Council meets on the 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).

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 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	Level Detected	Unit of Measurement	MCLG	MCL	Likely source of contamination
Microbial Contaminants						
Turbidity[1]	no	0.171 max	NTU	n/a	TT / .30	Soil Runoff, caused from heavy snow melt
	no	0.05 avg	NTU			and thunder storms.
Turbidity is a measurement of the cloudiness of water. We measure it because it is a good indicator of water quality.						
Radioactive Contaminants						
Beta/Photon emitters[2]	no	1.1	pCi/L	0	50	Decay of natural deposits
Alpha emitters[2]	no	0.4	pCi/L	0	15	Erosion of natural deposits
Inorganic Contaminants						
Fluoride[3]	no	1.2 max	ppm	4.0	4.0	Water additive
		0.0 min	ppm			
Sodium	no	6.54	ppm	n/a	n/a	Natural constituent; treatment additive.
Chlorine[4]	no	1.6 max	ppm	4.0	4.0	Water additive used to control microbes.
		.74 min	ppm			
Hardness	no	4.5	ppm			Erosion of natural deposits
Total Dissolved Solids	no	25	ppm			Erosion of natural deposits
Arsenic	no	N/D	ppb	0	10	Erosion of natural deposits
Nitrate (N)	no	N/D	ppm	0	10	Runoff of sewage discharge and fertilizers
Nonvolatile Organic Contaminants						
Total Organic Carbon[5]	no	0.95	ppm	n/a	TT	Naturally present in environment
		1.18 max	ppm			
		<1.0 min	ppm			

1. Value shown is the highest detected during the entire year. All of the measurements fell below the turbidity limits during each month. The yearly average of all average daily turbidity values was 0.030 NTU. Regulations require that 95% of all measurements must be below 0.3 NTU for each month and must never exceed 1 NTU.
2. Data are from the 2001 analysis period.
3. Average fluoride concentration for the 8-month treatment period was 0.95 ppm.
Fluoride, which is not added at the Lake Plant, is added only from November through June at the Sand Creek Plant.
4. Average chlorine residual for 2008 measured from 120 samples in the distribution system was .90 ppm.
5. Value is the average of three samples taken during 2008 for finished water.

Test Results from the Lake Plant

Substance	Violation	Level Detected	Unit of Measurement	MCLG	MCL	Likely source of contamination
Microbial Contaminants						
Turbidity[1]	no	0.132 max	NTU	n/a	TT / .30	Soil Runoff, caused from heavy snow melt
	no	0.07 avg				and thunder storms.
Radioactive Contaminants						
Beta/Photon emitters[2]	no	1.3	pCi/L	0	50	Decay of natural deposits
Alpha emitters[2]	no	1.0	pCi/L	0	15	Erosion of natural deposits
Inorganic Contaminants						
Sodium	no	2.77	ppm	n/a	n/a	Natural constituent, treatment additive
Calcium	no	23.2	ppm			Erosion of natural deposits
Barium[2]	no	0.08	ppm	2	2	Erosion of natural deposits
Chromium[2]	no	10	ppb	100	100	Erosion of natural deposits. Discharge
Total Dissolved Solids	no	75	ppm			from pulp mills.
Magnesium	no	6.52	ppm			
Sulfate[2]	no	18.4	ppm	n/a	n/a	Natural constituent
Fluoride[2]	no	0.4	ppm	4	4	Erosion of natural deposits
Arsenic	no	N/D	ppb	0	10	Erosion of natural deposits
Nitrate (N)	no	N/D	ppm	0	10	Leaching of sewage discharge
Chlorine	no	0.8			4.0	disinfectant used to control microbs
		1.13 max.			4.0	

1. Value shown is the highest detected during the entire year. All of the measurements fell below the turbidity limits during each month. Regulations require that 95% of all measurements must be below .3 NTU for each month and must never exceed 1 NTU.
2. Data are from the 2001 analysis period.

Distribution System Samples

Substance	Violation	Level Detected	Unit of Measurement	MCLG	MCL	Likely source of contamination
Disinfection By-products						
Total Trihalomethanes	no	23 max	ppm	n/a	80	By-products of chlorination
	no	19 avg	ppm			
Total Haloacetic Acides	no	34 max	ppm	n/a	60	By-products of chlorination
	no	21 avg	ppm			
Metals						
Copper [1]	no	0.36	ppm	1.3	AL=1.3	Corrosion of household plumbing
Lead [1]	no	8.0	ppb	0	AL=15	systems; erosion of natural deposits

1. Samples for lead and copper analyses were collected at twenty residences throughout the distribution system. Numbers are 90th percentile values obtained during the 2007 testing period.

Appendix

* Radioactive Contaminants - The finished water at both plants was tested for the presence of Radium 226 and Radium 228 in 2002. Neither of these contaminants was detected.

* Synthetic Organic Contaminants (SOCs) - In 2008 both plants were tested for Simazine, picloram, 2,4-D, diquat,endothall and many others in which none of these were detected.

* Inorganic Contaminants (IOCs) - The finished water from both plants was analyzed for Barium, Cadmium, Chromium, Mercury, Selenium, Cyanide, Nickel, Antimony, Beryllium, Thallium, Fluoride, Sodium, Sulfate, and Aluminum (Lake Plant only) in 2001. Except as indicated in the tables, none of these contaminants was detected.

* Volatile Organic Contaminants (VOCs) - samples from the Lake Plant were tested in 2008.
None of these contaminants was detected.

1,2,4-Trichlorobenzene	Dichloromethane	trans-1,2-Dichloroethylene	Trichloroethylene
cis-1,2-Dichloroethylene	Toluene	1,2-Dichloroethane	1,1,2-Trichloroethane
Bromoform	o-Dichlorbenzene	1,1,1-Trichloroethane	Tetrachloroethylene
Dibromochloromethane	p-Dichlorobenzene	Ethylbenzene	Monochlorobenzene
Xylenes-Total	Vinyl Chloride	Carbon Tetrachloride	Benzene
	1,1-Dichloroethylene	1,2-Dichloropropane	Styrene

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); **n/d** = Not Detected
* **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.