DRINKING WATER QUALITY REPORT
FOR THE YEAR 2004

(Public Water System No. 130075)

We're pleased to present this year's Annual 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 system and protect our water resources. The State of Alaska Department of Environmental Conservation, through the Alaska Drinking Water Protection Program, completed a source water assessment in 2003, and provided a final source water protection plan in 2004. Copies can be obtained from our water department. Our water source is surface water from Blue Lake. Our back-up water source is surface water from Indian River.

If you have any questions about this report or concerning your water utility, please contact Environmental Superintendent, Mark Buggins; by E-mail at markb@cityofsitka.com or by phone at 966-2256. We want our valued customers to be informed about their water utility. Tours are given periodically. E-mail or call to be added to a tour list. The City and Borough of Sitka Assembly makes the ultimate decisions related to water treatment and quality, they meet the second and fourth Tuesday of each month at Harrigan Centennial Hall.

The Sitka Public Water System routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1st to December 31st, 2004. As water travels to the source, over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. 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)/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

In the following tables you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

Not Regulated (NR) - reporting this data is not required.

Not Applicable, Not Available (NA) - does not apply or is not available.

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Method Reporting Limit (MRL) - the minimum concentration that can be measured.

Parts per million (ppm) or Milligrams per liter (mg/l) - corresponds to one part per million parts.

Parts per billion (ppb) or Micrograms per liter - corresponds to one part per billion parts.

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.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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 -The “Goal” (MCG) is 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

Waivers have been obtained for many of the regulations pertaining to sampling and monitoring of our water system. The waivers were granted only after years of test results that were less than the MCLs. Since we have waivers for Synthetic Organic Contaminants, Asbestos, Organics/Pesticides, Inorganics and Dioxins; we did not test for them during the time period covered by this report. Previous monitoring results are available. Current results are listed in the tables below.

2004 TEST RESULTS						
Contaminant	MCL Violation	Level Detected	Unit Measurement	MCLG	MCL	Likely source of contamination to the best of our present knowledge
Microbiological Contaminants						
Total Coliform Bacteria	None	ND	Colonies per 100 ml	0	Note (1)	Naturally present in the environment
Turbidity	None	9.73 Note (2)	NTU	NA	NA	Soil runoff, glacial silt, slide in August. Note (2)
Note (1) presence of Coliform bacteria in 5% of monthly samples Note (2) highest monthly value was reported in the month of August, 2002. Duration of High NTU less than 2 ½ hours. ***Total Coliform****: Coliforms are bacteria that are used as an indicator that other, potentially-harmful, bacteria may be present. None were found.* ***Turbidity****: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Blue Lake's turbidity is mostly inorganic in nature (glacial silt) and typically not associated with microbial contamination.*						
Inorganic Contaminants (Waiver except for Nitrate-N, Arsenic, Lead and Copper; Fluoride is added daily for enhanced dental health)						
Nitrate (as Nitrogen)	None	0.09	ppm	10	10	Erosion of natural deposits, animal waste
Fluoride (Voluntary)	None	Avg 1.0	ppm	4.0	4.0	Water treatment additive, natural deposits
Arsenic	None	< MRL	ppm	NA	0.05	Erosion of natural deposits

Nitrate: Infants below the age of six months, who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. Note, that your drinking water nitrate level is far less than the MCL .

Fluoride: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth. Note, that your drinking water fluoride level is controlled to the recommended range of 1.1to1.7 ppm.

Arsenic: At high concentrations arsenic is known to cause cancer in humans and is linked to other health effects such as skin damage and circulatory problems. Note that arsenic was NOT found in your drinking water.

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"At the Tap" Lead & Copper Monitoring (41 households sampled in June and again in August)					
Contaminant	AL	MCLG	Unit Measurement	May # > AL	Likely source of contamination to the best of our present knowledge
Lead	0.015	NA	ppm	2	Corrosion of household plumbing systems
Copper	1.30	NA	ppm	0	Corrosion of household plumbing systems

One annual “At the Tap” lead and copper monitoring in 20 Sitka households is required by the Alaska Department of Environmental Conservation (ADEC). This was conducted in May of 2004. To reduce the corrosive nature of our water, a sodium carbonate (soda ash) solution has been added since the start up of the Corrosion Control Facility in January 2001. This annual monitoring is required through 2005.

Lead in drinking water is rarely the cause of lead poisoning, but it can add to a persons total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Copper is a secondary contaminant noticed as odor or taste, and is typically not a health risk.

Lead or copper in your drinking water does not come from the source, Blue Lake, or the city pipelines. Rather these elements are absorbed from your household water piping and fixtures. The addition of small amount of sodium carbonate (soda ash) solution at the new Jarvis Street Corrosion Control Facility has greatly reduced both lead & copper concentrations at the homeowner’s tap. Prior to 2001, 35 of 40 households sampled were above at least one Action Level. As can be seen in the table above, the May 2004 results have only 2 samples above an Action Level.

Volatile Organic Contaminants (Voluntary Reporting of Unregulated Contaminants measured annually)						
Contaminant	**MCL Violation**	**Level Detected**	**Unit Measurement**	**MCLG**	**MCL**	**Likely source of contamination to the best of our present knowledge**
Total Trihalomethane (TTHM)	None	12.6	ppb	NA	80	By-product of chlorination
Total Haloacetic Acids (HAA5)	None	18.9	ppb	NA	60	By-product of chlorination
Total Organic Carbon	None	0.085 <MDL - 0.33	ppm	NA	NNA	Naturally present in the environment

Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL over many years may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. Sitka's results are well below the MCL.

As can be seen from the above tables, our water system had no violations of any MCLs. We are 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. CBS had one monitoring violation in 2004. The first quarter, samples for TTHM's and HAA5's were taken late. **The EPA has determined that your water IS SAFE at these levels.**

Sitka's Water Treatment: Our primary source water is Blue Lake, which is nearly pure in it's natural state and therefore we are not required to filter it prior to disinfection and distribution to you the consumer. Federal and State laws require proof of proper disinfection prior to providing water to the public. Disinfection is accomplished by adding a small amount of chlorine to guarantee our drinking water is safe from harmful microorganisms. Fluoride is added to increase the natural level of fluoride in our drinking water to a level recommended by the Public Health Service and the ADEC to help reduce the incidence of tooth decay.

Following proper disinfection, sodium carbonate (soda ash) is added to the drinking water at the new Corrosion Control Facility (CCF) which is located at 103 Jarvis St. The CCF went into operation January 1, 2001. Soda ash slightly increases the pH and alkalinity of our treated water thereby reducing the leaching of lead and copper from private plumbing systems into the water. The CCF is the operations center for our water system, serving as the primary monitoring and control location for the Blue Lake Water Treatment Plant (BLWTP) and the treated water storage tanks. The Water Operators perform routine monitoring and control of the BLWTP from the Jarvis St. location. This greatly enhances our productivity in monitoring and controlling our water system, as well as providing enhanced documentation of the treatment process and water quality.

Our secondary source water is Indian River, which was the primary source water for many years prior to Blue Lake in 1984. Indian River Water Treatment Plant (IRWTP) water passes through the natural river bed gravel and sand which has a filtering affect, then through two inlet infiltration pipes in Indian River. The water flows into a reservoir beside IRWTP and then through one of a dozen infiltration pipes buried under gravel and sand in the reservoir, through which the water is filtered and passes into four wells, each with a pump. A small amount of chlorine is added to ensure the water is safe to consume. This water is supplied to the community, after public notice, when necessary to perform maintenance on BLWTP or Blue Lake penstock. IRWTP is operated on a monthly basis to insure plant readiness to produce safe drinking water in an emergency.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements to the treatment or distribution systems that will benefit all of our customers. These improvements sometimes cause short-term inconveniences or rate structure adjustments. Thank you for understanding the importance of our drinking water.

The Water Department is required to present an annual Watershed Control Report to the Alaska Department of Environmental Conservation. That report along with this Consumer Confidence Report (CCR) will be on file at the City and Borough of Sitka Public Works Office and is available for your review on the City's web site, www.cityofsitka.com.

The Sitka Water Department works to provide sufficient quantity and top quality water to each customer. We ask that everyone helps us protect our sources at Blue Lake and Indian River. These water sources are the heart of our community, our way of life and our children's future.

Thank you again for assisting your Water Department in maintaining suitable and safe water sources. Together we can preserve our especially good water for now and for future generations. Safe Drinking Water is everyone's business.