

could, if improperly managed or released, impact the water quality in the watershed.

What are the Risks for our System?

The entire Nehalem drinking water protection area is identified as being sensitive to contamination based on the setbacks from the creek and a large area of high soil erosion potential. The sensitive areas are those where the potential contamination sources, if present, have a greater potential to impact the water supply. The two area-wide potential contaminant sources identified in Nehalem's drinking water protection area extend throughout the protection area and are located in the sensitive areas and pose a high- to moderate-risk to the water supply. The information in this assessment provides a basis for prioritizing areas in and around our community that are most vulnerable to potential impacts and can be used by the Nehalem community to develop a voluntary Drinking Water Protection Plan.

Need More Information?

The City of Nehalem's Source Water Assessment Report provides additional details on the methodology and results of this assessment. The full report is available for review at Nehalem City Hall, 35900 8th Street in Nehalem. Contact the City at (503) 368-5627 if you would like additional information on the City's Source Water Assessment Results.

Conclusion

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 that will benefit all of our customers. These improvements are sometimes reflected in rate structure adjustments. The City is continuing with its Water Main Replacement and Extension project: Highway 101 is complete with the replacement of North Fork expected by the end of June 2007. Projects remaining include the replacement of a majority of lines in the Bayside Gardens area, McDonald Road, and nearly ever line within the City itself with two separate "pressure zones" which will guarantee a higher degree of water pressure for each of our customers as well as ensure a greater fire flow capacity all-around. As does sometimes happen, these ongoing Projects may result in temporary interruptions to your water service. We apologize for those interruptions (past and present), but know that once the Project is complete, the City will be able to guarantee a higher level of water service to each of our customers by eliminating undersized, leaking and broken old water mains.

It is our continuing Commitment to serve you in the most professional, accountable, efficient and effective manner possible to continue to provide the safest, cleanest water available for all of our customers. We ask all to continue to be "water wise" and conserve where possible. Only together can we ensure the safest, cleanest drinking water for our families and our community.

Thank you,

Michael A. Nitzsche,
City Manager



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CITY OF NEHALEM

9TH ANNUAL DRINKING WATER QUALITY REPORT

& SOURCE WATER ASSESSMENT SUMMARY



*JANUARY - DECEMBER,
2006*

Tel: (503) 368-5627

Introduction

We're pleased to present to you the 9th Annual Drinking Water Quality Report for the year 2006. This report, which is required by State and Federal Law, is designed to inform you about the quality of our water and the 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 treatment process and protect our water resources. We are committed to ensuring the quality of your water.

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

Our water source is Bob's Creek, which is a surface water source north of the City of Nehalem. The City has a Master Water Plan and Filtration Plant Addendum on file at City Hall that provides more information on the City's water system and source water. The City's address is 35900 8th Street in Nehalem. The City tests the water for 84 different types of contaminants which include Microbiological (Coliform, E. Coli, Turbidity, etc.), Radioactive (Alpha emitters, Combined Radium, Uranium, etc.), Inorganic (Arsenic, Cyanide, Fluoride, Lead, Mercury, Nitrate, etc.) Synthetic Organic (2,4-D, PCBs, etc.), Volatile Organic (Benzene, Chlorobenzene, etc.) contaminants. In addition to those contaminants, the City also tests for 13 unregulated Synthetic Organic contaminants (Butachlor, Methomyl, etc.) and 33 unregulated Volatile Organic contaminants (Chloroform, Napthalene, etc.). Turbidity is measured daily while Bacteriological testing is done bi-monthly.

Findings

We are required to monitor your drinking water for these contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the 2006 monitoring year, we did not complete all of the monitoring or testing for all of the contaminants listed above due to confusion over the frequency of when these required tests are to be performed. Therefore, we cannot be sure of the quality of your drinking water during the reporting period. Based on the fact that we have never detected levels of contaminants anywhere close to the Maximum Contaminant Levels (MCLs), we are confident that our drinking water is still the safest it possibly can be. However, to ensure the safety and quality of our water and to get back to a regular testing schedule, we will perform the required tests in June and July of 2007 to ensure that your drinking water is still of the highest and safest quality possible.

If you have any questions about this report or concerning your water utility, or would like to be informed of the results of the latest tests, please contact the City at (503) 368-5627, by mail at PO Box 143, Nehalem, OR 97131, or by email at nehalemch@nehalem1.net. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Council Meetings, held on the second Monday of each month at 7:30 p.m.

at City Hall; or you can just drop by City Hall or call during normal business hours to learn more.

Overview

The City of Nehalem routinely monitors for constituents in your drinking water according to Federal and State laws. The table listed herein shows the results of our monitoring for the period of January 1st to December 31st, 2006. As water travels 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 water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Definitions

Action Level - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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" (MCLG) is the level of a contaminant in drinking water below that there is no known or expected risk to health. MCLGs allow for a margin of safety.

Million Fibers per Liter (MFL) - A measure of the presence of asbestos fibers that are longer than 10 micrometers.

Millirems per year (mrem/yr) - Measure of radiation absorbed by the body.

Nephelometric Turbidity Unity (NTU) - A Measure of the clarity of water. Turbidity in excess of 5 NTUs is just noticeable to the average person.

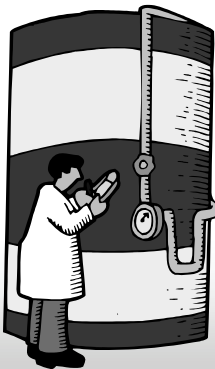
Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Parts per billion (ppb) or Micrograms per liter - Corresponds to one minute in 2,000 years, or a single penny in \$10 million.

Parts per million (ppm) or Milligrams per liter (mg/l) - Corresponds to one minute in two years or a single penny in \$10,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - Corresponds to one minute in 2 billion years or one penny in \$10 trillion.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - Corresponds to one minute in 2 million years or a single penny in \$10 billion.



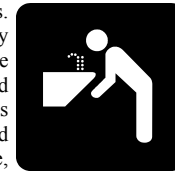
Picocuries per liter (pCi/L) - A measure of the radioactivity in water.

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

What Does This Mean?

While we had a few detects, you can see by the corresponding table that our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. While some constituents have been detected, the EPA has determined that your water IS SAFE at these levels. MCL's are set at very stringent levels. To understand the possible health effects for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having an adverse health effect. Yet with the continued successful operation of the Filtration Plant, we can ensure that the water we serve always exceeds the Safe Drinking Water Act's MCLs and provide the best quality of water

that we possibly can to our customers. Please note: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches. However, as shown in the table, our system shows detects (but no violations) of 4 out of a more than 100 tested microbiological constituents and other contaminants. Those that were detected were well below their respective MCLs.



Final Notes

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can include microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contami-

Test Results								
Contaminant	Violation?	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination		
Inorganic Contaminants (Test taken 2004. Next scheduled test in Fall of 2013)								
Sodium	No	10.7	ppm	20	20	Natural deposits in soil		
Inorganic Contaminants (Test taken 2005. Next scheduled test in Summer 2007)								
Nitrate	No	1.0	ppm	10	10	Runoff from fertilizer; sewage; erosion of natural deposits		
Microbiological Contaminants (Tested Daily - 2006)								
		MCL	MCLG	Level Found	Range	Sample Date	Violation?	Typical Source
Turbidity		TT=5 NTU	0	0.40 NTU	n/a	Highest level detected in November	No	Soil Runoff
		TT=percentage of samples <0.5 NTU		100%	n/a			
Lead & Copper Testing (Test taken August 7th, 2003 - next test in July 2007)								
Substance	Units	Goal	Action Level (AL)	90th Percentile	Homes Exceeding AL	Complies?	Source of Contaminate	
Copper	ppm	1.3	1.3	0.77	0	Yes	Household Plumbing Corrosion	
Lead	ppm	0	.015	0.003	0	Yes	Household Plumbing Corrosion	

The 90th percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results. EPA requires testing for lead and copper at customers' taps most likely to contain these substances based on when the house was built. The EPA determined that if the sample results exceeded the Action Level (AL), the City must take action in reducing the risk of leaching of lead and/or copper. As you can see by the table above, your water was well below the Action Level on our last round of testing in 2003. next scheduled test will be in 2007.

nants does not necessarily indicate that the water poses 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791. EPA and CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are also available from the Safe Drinking Water Hotline listed above.

Source Water Assessment Summary

What is a Source Water Assessment?
The Source Water Assessment was completed on May 10th, 2001, by the Department of Environmental Quality (DEQ) and the Oregon Health Division (OHD) to identify the surface areas (and/or subsurface areas) that supply water to City of Nehalem's public water system intake and to inventory the potential contaminant sources that may impact the water supply.

Why was it completed?
The Source Water Assessment was completed to provide information so that City of Nehalem's public water system staff/operator, consumers, and community citizens can begin developing strategies to protect the source of their drinking water, and to minimize future public expenditures for drinking water treatment. The assessment was prepared under the requirements and guidelines of the Federal Safe Drinking Water Act (SDWA).

What Areas are Included in City of Nehalem's Drinking Water Protection Area?
The drinking water for the City of Nehalem is supplied by an intake on Bob's Creek. We serve approximately 1,600 total customers on our water system. The intake is located in the Cook Creek/Lower Nehalem River Watershed in the Nehalem Sub-Basin of the Northern Oregon Coastal Basin. The geographic area providing water to Nehalem's intake (the drinking water protection area) extends upstream just over one mile (1.15 miles) and encompass a total area of approximately 0.66 square miles. The boundaries of the Drinking Water Protection Area are illustrated on a map viewable at City Hall.

What are the Potential Sources of Contamination to the City of Nehalem's Public Drinking Water Supply?
The primary intent of this inventory was to identify and locate significant potential sources of contaminants of concern. Managed forest lands exclusively dominate the delineated drinking water protection area. The potential contaminant sources identified in the watershed include large areas of managed forest owned both by the City and by private timber interests. This provides a quick look at the existing potential sources of contamination that