2013 PUBLIC WORKS REPORT ON WATER QUALITY

System I.D. #072207

IF YOU ARE A LANDLORD OR SOMEONE WHO RECEIVES THE BILLING FOR THE WATER CONSUMED BY LARGE POPULATIONS, PLEASE SEND A COPY OF THIS TO EACH OF YOUR RENTERS OR POST THIS REPORT IN A MANNER THAT ALL CONSUMERS HAVE UNINHIBITED ACCESS TO THIS REPORT.

Annual Drinking Water Quality Report

The City of Black Diamond is pleased to present to you our Annual Drinking Water Quality Water Report. This report is designed to inform you about the quality of water we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. The source of our drinking water is the **Black Diamond Springs**, a series of springs located within the City's watershed on the south side of the Green River within the south half of Section 19, Township 21 North, and Range 7 East. Water is chlorinated and pumped almost two miles to the City's new 4.3 million gallon reservoir located on the north side of Lawson Street across from Botts Drive intersection, where the water is treated for corrosion to raise the pH of the water and then distributed throughout the distribution system. The City does have an alternative water source with a connection to pipe line #5 with the City of Tacoma in case of an emergency to the City of Black Diamond water system or when water demands exceed the City's water rights.

VULNERABLE 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 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.

EPA/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).

A Partner for Safe Water

The United States Environmental Protection Agency (EPA) establishes national standards for public drinking water to ensure that tap water is safe to drink. The State Department of Health and EPA coordinate to establish maximum allowable levels for contaminants, as well as goals and action levels for contaminants. Because contaminants are defined as ***ANY*** substance in water, it is important to note that some substances are of concern only if they are present above certain levels. In order to remain in compliance with State and Federal regulations, the City of Black Diamond's drinking water must be below the permitted level of these substances. This report is intended to share information regarding the City's water quality with you and to explain any violations. Pursuant to Federal regulations, the City is required to provide all water customers of the City with a copy an Annual Drinking Water Report. Annual Drinking Water Reports are provided to our customers in July of each year.

BLACK DIAMOND WATER SYSTEM - 2013 - TEST RESULTS

Inorganic Contaminants - Blended Springs Sample - Tested August 2012

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL max contaminant level	Likely Source of Contamination
1. Antimony	NO	less than <0.003	Part per billion (ppb)	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
2. Arsenic	NO	< 0.001	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
3. Asbestos	NO	< 0.2	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
4. Barium	NO	< 0.01	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
5. Beryllium	NO	< 0.0003	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
6. Cadmium	NO	< 0.0001	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
7. Chromium	NO	< 0.007	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
8. Copper *(Test Date of 09/30/13)*	NO	< .02	Mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
9. Cyanide	NO	< 0.01	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
10. Fluoride	NO	< .2	Part per million (ppm)	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
11. Lead *(Test Date of 09/30/13)*	NO	< 0.001	Mg/L	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits

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Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
12. Mercury (inorganic)	NO	<0.0002	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff form landfills; runoff from cropland
13. Nitrate (as Nitrogen) *(Test Date of 06/04/13)*	NO	0.5	mg/1	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
14. Nitrite (as Nitrogen)	NO	< .1	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
15. Selenium	NO	< 0.002	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
16. Thallium	NO	< 0.001	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

Synthetic Organic Contaminants including Pesticides and Herbicides

Microbiological Contaminants - 2012 (Sampled twice monthly): No Contaminants Detected in 2012.

Volatile Organic Contaminants: No Contaminants Detected. Test Date May, 2010.

524.2 TTHM's — Chloroform: 1.3 / Bromo dichloro methane: 1.2 / Chloro dibromo methane: 0.7 / Bromoform: ND / Total Trihalomethanes: 3.2 - Test Date August, 2013.

552.2 - HAA5 — No Contaminants Detected. Test Date August, 2013.

Pipe Distribution — Asbestos — 100.1/100.2 : <0.123 *(MCLs= 7)* —Test Date June 2013.

DEFINITIONS: The following definitions may be helpful in understanding the information included within the table above:
Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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.

The results of our testing...

The City of Black Diamond routinely monitors for contaminants in your drinking water according to Federal and State laws. The table to the left and above, shows the results of our monitoring for the period of **January 1 to December 31, 2013**. Where the City was not required to test during this period, the most recent test results are indicated.

The City tests ***twice each month*** for the presence of coli form bacteria and ***once*** each year for nitrate. Once every ***three*** years testing is done unless a waiver is granted for in-organics, volatile organics, and synthetic organic compounds pursuant to regulations. Testing for **in-organics** in 2012 **and** testing for **volatile organics** in 2013 was completed. In 2012 testing for **synthetic organics** was completed.

Samples are collected by City Water Department Staff and then analyzed by a state certified laboratory. ***The City is required to report all instances where a contaminant is detected, even if the level is far below the EPA's Maximum Contaminant Level***.

A number of additional contaminants are tested for on a regular basis, but were Non-Detectable during the last testing period. If you would like additional information regarding the full list of contaminants that we test for, please feel free to contact **Dan Dal Santo, Utilities Supervisor at (360) 886-5700.** All 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 the water poses a health risk. It is also important to understand that **Maximum Contaminant Levels (MCLs)** are set at ***very stringent levels*** 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 the described health effect.

More information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791**.

Conservation Tips...

Toilets, Taps, Showers, Laundry, and Dishes

- 1994 was the year that federally mandated low-flow showerheads, faucets, and toilets started to appear on the scene in significant numbers.
- On average, 10 gallons per day of your water footprint (or 14% of your indoor use) is lost to leaks. Short of installing new water-efficient fixtures, one of the easiest, most effective ways to cut your footprint is by repairing leaky faucets and toilets.
- If you use a low-flow showerhead, you can save 15 gallons of water during a 10-minute shower.
- Every time you shave minutes off your use of hot water, you also save energy and keep dollars in your pocket.
- It takes about 70 gallons of water to fill a bathtub, so showers are generally the more water-efficient way to bathe.
- All of those flushes can add up to nearly 20 gallons a day down the toilet. If you still have a standard toilet, which uses close to 3.5 gallons a flush, you can save by retrofitting or filling your tank with something that will displace some of that water, such as a brick.
- Most front-loading machines are energy- and water-efficient, using just over 20 gallons a load, while most top-loading machines, unless they are energy-efficient, use 40 gallons per load.
- Nearly 22% of indoor home water use comes from doing laundry. Save water by making sure to adjust the settings on your machine to the proper load size.
- Dishwashing is a relatively small part of your water footprint—less than 2% of indoor use—but there are always ways to conserve. Using a machine is actually more water efficient than hand washing, especially if you run full loads.
- Energy Star dishwashers use about 4 gallons of water per load, and even standard machines use only about 6 gallons. Hand washing generally uses about 20 gallons of water each time.

Yards and Pools

- Nearly 60% of a person's household water footprint can go toward lawn and garden maintenance.
- Climate counts—where you live plays a role in how much water you use, especially when it comes to tending to a yard.
- The average pool takes 22,000 gallons of water to fill, and if you don't cover it, hundreds of gallons of water per month can be lost due to evaporation.

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2014 Conservation Update...

As we head into summer, **please help by using your drinking water wisely**. If you water outside, water plants and lawns in the early morning or late evening, and only water as necessary. High PEAK water use results in increased costs and unnecessary stress upon our pumping facilities. **If we do experience hot, dry weather, watering restrictions may have to be implemented.** With your voluntary assistance, we hope to avoid mandatory restrictions in 2014. **Thanks for your help!**

For More Information

We appreciate your interest in understanding the City's drinking water quality.

If you have additional questions, please feel free to contact:
Seth Boettcher for Public Relations and Technical,
Dan Dal Santo for Maintenance,
Scott Hanis for General Information at (360) 886-5700.

At the City Council level, Councilmembers **Carol Benson** and **Ron Taylor** serve as your Council Public Works Committee.

Dan Dal Santo, Ken Blakely and Jason Pittam diligently monitor and maintain the drinking water system each day to provide the public with reliable, clean safe drinking water.