

# 2009 WATER QUALITY REPORT

## *Black Diamond Water System -- System I.D. # 072207*

### 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 south 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 June of each year.

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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. If you would like more copies, please contact City Hall @ 360-886-2560. Thank You!

## 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 below shows the results of our monitoring for the period of **January 1<sup>st</sup> to December 31<sup>st</sup>, 2008**. 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 for in-organics volatile organics, and synthetic organic compounds pursuant to regulations. In 2007, testing for **in-organics and volatile organics** was completed. In 2008 **synthetic organics** was completed. The 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) 886-2560 extension 212.**

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** to understand the possible health effects.



### THE BOTTOM LINE...

All of the City's test results in 2008 were in **full compliance** with the State Department of Health and EPA regulations.

## CITY NOW IN FULL COMPLIANCE ON COPPER...

The water that the City delivers to the customers meets all requirements for lead and copper. The City is also required to test the lead and copper levels in sample homes at the tap after 8 hrs of no use to determine if

Majority of the water used in an average home is in the bathroom.

- The average older model toilet uses 3.5 to 7 gallons of water per flush.

The new ultra low flush uses 1.6 gallons.

- Fix leaks—a slow drip can add up to 20 gallons per day to your consumption.

- Remember wasted water is raising your water and sewer bill.

lead and copper is leaching from pipes and plumbing fixtures. The City's water system did exceed the regulated Action Level for copper at a limited number of homes during testing in 1996. The City entered into a Bilateral Compliance Agreement for Lead and Copper with the Department of Health in 1998.

After the City added a corrosion control facility to raise the pH and reduce the corrosiveness of the city water, the City has retested the same homes and found very low lead and copper levels. Even though the water the City of Black Diamond is

delivering to you is no longer as corrosive as it used to be and meets all Department of Health water quality requirements, it is still a good idea to let the water run until the water runs a little colder when drawing water for drinking or cooking. This will flush out the water that has warmed up and sat in the household pipes and fixtures for many hours. After flushing your lines you could also fill a pitcher of water for drinking and place it in your refrigerator.

## BLACK DIAMOND WATER SYSTEM - 2008 - TEST RESULTS

### Inorganic Contaminants - Blended Springs Sample - Tested August 2007

| Contaminant                              | Violation Y/N | Level Detected | Unit Measurement       | MCLG | MCL max contaminant level | Likely Source of Contamination  |
|--|---------------|----------------|------------------------|------|---------------------------|---|
| 1. Antimony                              | NO            | less than (<)5 | Part per billion (ppb) | 6    | 6                         | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder   |
| 2. Arsenic                               | NO            | < 2            | ppb                    | n/a  | 50                        | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes                              |
| 3. Asbestos                              | NO            | < 2            | MFL                    | 7    | 7                         | Decay of asbestos cement water mains; erosion of natural deposits   |
| 4. Barium                                | NO            | < .1           | ppm                    | 2    | 2                         | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits  |
| 5. Beryllium                             | NO            | < 3            | ppb                    | 4    | 4                         | Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries            |
| 6. Cadmium                               | NO            | < 2            | ppb                    | 5    | 5                         | Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints |
| 7. Chromium                              | NO            | < 10           | ppb                    | 100  | 100                       | Discharge from steel and pulp mills; erosion of natural deposits  |
| 8. Copper<br>(SEE NOTE ON COPPER, BELOW) | NO            | < .02          | ppm                    | 1.3  | AL=1.3                    | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives                              |
| 9. Cyanide                               | NO            | < 50           | 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                                 | NO            | < 2            | ppb                    | 0    | AL=15                     | Corrosion of household plumbing systems, erosion of natural deposits  |

**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.

**Maximum Contaminant Level Goal** - The "Goal" (MCLG) 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.

*Continued on next page*

**CITY OF BLACK DIAMOND**

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BLACK DIAMOND, WA 98010

Phone: 360-886-2560  
Fax: 360-886-2592

**FOR MORE INFORMATION...**

We appreciate your interest in understanding the City's water system and drinking water quality. If you have questions about this information, please feel free to contact **Public Works Director, Seth Boettcher or Dan Dal Santo, Utilities Supervisor @ (360) 886-2560**. At the City Council level, Councilmembers **Geoff Bowie** and **Kristine Hanson** serve as your **Council Utilities Committee**. Utility Workers **Ken Blakely** and **Jason Pittam** work hard each day to keep your drinking water flowing and safe.

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| Contaminant  | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination  |
|--|---------------|----------------|------------------|------|-----|---|
| 12. Mercury (inorganic)                              | NO            | <.5            | ppb              | 2    | 2   | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland |
| 13. Nitrate (as Nitrogen)<br>(Test Date of 07/22/08) | NO            | 0.5            | ppm              | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits                       |
| 14. Nitrite (as Nitrogen)                            | NO            | < .2           | ppm              | 1    | 1   | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits                       |
| 15. Selenium   | NO            | < 5            | ppb              | 50   | 50  | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines                  |
| 16. Thallium   | NO            | < 2            | ppb              | 0.5  | 2   | Leaching from ore-processing sites; discharge from electronics, glass, and drug factories                         |

**Synthetic Organic Contaminants including Pesticides and Herbicides:**

No Contaminants Detected. Test Date July 22, 2008. Waiver 2005-2007. Next Test Date 2011.

**Microbiological Contaminants - 2008 (Sampled twice monthly)**

No Contaminants Detected in 2008.

**Volatile Organic Contaminants:**

No Contaminants Detected. Test Date June, 2007. Next Test Date 2010.

**2008 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 2009. **Thanks for your help!**

