2008 Annual Drinking Water Quality Report

(Consumer Confidence Report)

City of Bunker Hill Village

A TCEQ Superior Water System

Contact Person: Steve Smith (713)467-9762

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS:
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. The EPA/Centers for Disease Control and Prevention (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 (1-800-426-4791)**.

PUBLIC PARTICIPATION OPPORTUNITIES:

DATE: Council Meeting – 3rd Tuesday of every month
TIME: 5:00 p.m.
LOCATION: City Hall – 11977 Memorial Drive
PHONE NO: (713) 467-9762

OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS:
This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

WATER SOURCES: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over 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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

EN ESPANOL: Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte en espanol, favor de llamar al telefono (713) 467-9762 para hablar con una persona bilingue en espanol.

WHERE DO WE GET OUR DRINKING WATER? Our drinking water is obtained from ground water sources produced by (4) four water wells drawing water from the Gulf Coast aquifer. We also receive surface water from the City of Houston as part of a requirement to supplement our water with water from reservoirs. TCEQ completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this report. If we receive or purchase water from another system, their susceptibility is not included in this assessment. For more information on source water assessments and protection efforts at our system, please contact us.

PLANNED WATER SYSTEM IMPROVEMENTS
Your city is at work to insure that we have a safe and uninterrupted supply of water. Bunker Hill Village is required by permit, as are other cities in our area, to

reduce the amount of water we pump out of the ground for drinking water. We must supplement our supply with water from area lakes and reservoirs, otherwise known as surface water, in an effort to reduce subsidence of the ground in the Texas Gulf Coast area. In our case, local subsidence has stopped with no measured drop in the ground surface elevation for several years now.

Last year, we partnered with the City of Houston to construct a new surface water delivery line from Gessner Road to Valley Star on the western side of our city. This year, we will extend that line from Valley Star to the Bunker Hill Village water treatment facility behind City Hall. The new line will be capable of providing us up to 2.8 million gallons per day. The project is estimated at $475,000 and should begin in the fourth quarter of 2009. Also included in the project is replacement of a distribution line on the north end of Stoney Creek to improve water delivery to residents in that area. New directional drilling technology will be implemented to install these new lines with the least amount of surface disruption.

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS:

When drinking water meets federal standards, there may not be any health-based benefits to purchasing bottled water or point of use devices.

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 (1-800-426-4791).

SECONDARY CONSTITUENTS:

Many constituents (such as calcium, sodium or iron), which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

ABOUT THE FOLLOWING PAGES:

The pages that follow list all of the federally regulated or monitored constituents, which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

EFINITIONS:

Maximum Contaminant Level (MCL)
The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)
The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)
The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

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, if exceeded, triggers treatment or other requirements, which a water system must follow.

ABBREVIATIONS

NTU -- Nephelometric Turbidity Units
MFL – Million fibers per liter (a measure of asbestos)
pCi/L – Picocuries per liter (a measure of radioactivity
ppm – Parts per million, or milligrams per liter (mg/L)
ppb – Parts per billion, or micrograms per liter (ug/L)
ppt – Parts per trillion, or nanograms per liter
ppq – Parts per quadrillion, or picograms per liter

Inorganic Contaminants

Year or Range		Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	2005	Arsenic *The arsenic value was effective January 23, 2006. In the event of a violation, you will be notified.	5	2	8	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
2008	2005	Barium	0.138	0.084	0.192	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008		Fluoride	0.7	0.44	0.94	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008		Nitrate	0.39	0.01	0.77	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2008	2004	Uranium	0.60	0	12.2	30	0	ppb	Erosion of natural deposits.
2008	2004	Combined Radium 226 & 228	0.79	0	4.66	5	0	pCi/L	Erosion of natural deposits.
2008	2004	Gross beta emitters	3.82	0	10.1	50	0	pCi/L	Decay of natural and man-made deposits.
2008	2004	Gross alpha	4.44	0	10.3	15	0	pCi/L	Erosion of natural deposits.

Required Additional Health Information for Arsenic

The Maximum contaminant level (MCL) for arsenic decreased from 0.05 mb/L (50 ppb) to 0.010 mg/L (10 ppb) effective January 23, 2006. Because the highest reported arsenic level on this report is between 5 ppb and 10 ppb, the following information is required by EPA:

"While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause caner in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

Organic Contaminants

Year or Range		Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	2005	Simazine	0.07	0	0.15	4	4	ppb	Herbicide runoff.
2008	2005	Atrazine	0.24	0	0.5	3	3	ppb	Runoff from herbicide used on row crops.

Maximum Residual Disinfectant Level

Year or Range	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2008	Chlorine Residual Free	1.13	0.4	2.2	4	4	ppm	Disinfectant used to control microbes.
2008	Chlorine Residual	0.86	0.5	1.9	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	9.5	0	18.9	60	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	8.7	0	17.3	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008	Chloroform	4.95	0	9.9	ppb	Byproduct of drinking water disinfection.
2008	Bromodichloromethane	2.4	0	4.8	ppb	Byproduct of drinking water disinfection.
2008	Dibromochloromethane	0.6	0	1.2	ppb	Byproduct of drinking water disinfection.

Lead and Copper

Year or Range	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	1.7	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2007	Copper	0.084	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits

Recommended Additional Health Information for Lead

All water systems are required by EPA to report the language below starting with the 2009 CCR to be delivered to you by July of 2010. We are providing this information now as a courtesy.

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead."

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.

Year or Range	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits		
2008	Turbidity	0.8	97%	0.3	NTU	Soil runoff.

Total Coliform REPORTED MONTHLY TESTS FOUND NO COLIFORM BACTERIA.

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

Violations

Violation Type	Health Efffects	Duration	Explanation	Steps to Correct
Routine Coliform Monitoring - Major - No Routine Samples	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period, we did not correctly monitor, and therefore cannot be sure of the quality of your drinking water during this time.	5/01/2008 to 5/31/2008	Collection of the samples occurred and was delivered to the city of Houston Health Dept. Lab for testing as required by TCEQ; however; the samples were lost after delivery.	We have changed the date to take the samples earlier in the month. If results are not returned from the city of Houston lab within a week, there is time for additional sampling during the sampling period.

Year or Range		Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Contaminant
2008	2005	Aluminum	0.016	0	0.032	0.05	ppm	Abundant naturally occurring element.
2008		Bicarbonate	232	207	256	NA	ppm	Corrosion of carbonate rocks such as limestone
2008	2005	Calcium	26.5	19.6	33.4	NA	ppm	Abundant naturally occurring element.
2008		Chloride	87	66	108	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008	2005	Copper	0.021	0.006	0.037	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2008	2005	Iron	0.078	0.058	0.097	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2008	2005	Lead	0.001	0	0.002	NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
2008	2005	Magnesium	4.2	3.1	5.4	NA	ppm	Abundant naturally occurring element.
2008	2005	Manganese	0.0057	0.0052	0.0062	0.05	ppm	Abundant naturally occurring element.
2008	2005	Nickel	0.002	0	0.005	NA	ppm	Erosion of natural deposits
2008		pH	7.2	7.2	7.2	>7.0	units	Measure of corrosivity of water.
2008	2005	Sodium	97	88	107	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2008		Sulfate	29	11	46	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008		Total Alkalinity as CaCo3	190	170	210	NA	ppm	Naturally occurring soluble mineral salts.
2008		Total Dissolved Solids	402	367	436	1000	ppm	Total dissolved mineral constituents in water.
2008	2005	Total Hardness as CaCO3	84	71	96	NA	ppm	Naturally occurring calcium.
		Zinc	0.005	0	0.01	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.