

WQR 2008



DALLAS DRINKING WATER QUALITY REPORT

City of Dallas

Publication #07/08-35

Why you've received this report

This report is produced to provide information about the Dallas water system including source water, the levels of detected contaminants and compliance with drinking water rules. This report is also produced in order to answer your water quality questions. If you need more information, please call Dallas' 311 Information Line.

Regular monthly tests are conducted on Dallas water to ensure that it is clean and meets all water quality requirements.

Special notice for the elderly, infants, cancer patients, people with HIV/AIDS and other immune problems

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or

other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 800/426-4791.

Where your water comes from

Dallas uses surface water from six sources: the Elm Fork of the Trinity River and lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard and Tawakoni.

All drinking water may contain contaminants

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 U.S. EPA's Safe Drinking Water Hotline (1/800/426-4791).

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

Cryptosporidium

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, *cryptosporidium* may cause cryptosporidiosis, an abdominal infection (symptoms include nausea, diarrhea, and abdominal cramps). Some of the ways *cryptosporidium* can be spread include drinking contaminated water, eating contaminated food that is raw or undercooked, exposure to the feces of animals or infected individuals (i.e. changing diapers without washing hands afterward), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill.

During 2008, Dallas continued monthly testing for *cryptosporidium* in both untreated and treated water. Dallas Water Utilities began monitoring for *cryptosporidium* in 1993. It has been found only in the untreated water supply. *Cryptosporidium* has not been found in Dallas treated drinking water. To protect your drinking water, Dallas works to protect the watershed from contamination and optimizes treatment processes.

Although Dallas' water treatment process removes cryptosporidium, immunocompromised persons should consult their doctors regarding appropriate precautions to take to avoid infection.

To request more information on cryptosporidium, please call the U.S. EPA's Safe Drinking Water Hotline (1/800/426-4791).

Source Water Assessment and Protection

TCEQ completed an assessment of Dallas' source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for Dallas' water system are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts call Dallas' 311 Information Line.

In 2004, the City of Dallas participated in gathering data under the Unregulated Contaminant Monitoring Rule (UCMR) in order to assist EPA in determining the occurrence of possible drinking water contaminants. This data may be found on EPA's web site at <http://www.epa.gov/safewater/data/ncod.html>, or you can call the Safe Drinking Water Hotline at 1-800-426-4791.

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 include:

- microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- pesticides and herbicides, which might have a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and
- radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

Contaminants may be found in drinking

water that may cause taste, color or odor problems. These type of problems are not necessarily cause for health concerns. For more information on taste, odor or color of drinking water, please contact Dallas at (214) 670-0917.

Your participation is welcome

Dallas Water Utilities is a not-for-profit department of the City of Dallas and is governed by the Dallas City Council. The City Council meets weekly on Wednesdays. For information about meetings and how to register as a speaker, contact the City Secretary's office at 214/670-3738.

Following are other helpful telephone #:

- Questions or concerns about water quality
- Dallas' 311 Information Line.
- Questions about your bill
- 214/651-1441
- For brochures on water conservation
- 214/670-3155.

Year of Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
INORGANIC CONTAMINANTS								
2006	Barium	0.02	0.014	0.027	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2008	Flouride	0.69	0.33	0.81	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
2008	Nitrate	0.63	<0.02	1.9	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
2006	Selenium	<20	<20	<20	50	50	ppb	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines
2006	Gross beta emitters	4.5	3.5	5.4	50	0	pCi/L****	Decay of natural and man-made deposits
ORGANIC CONTAMINANTS								
2008	Atrazine	0.30	0.11	0.49	3	3	ppb	Runoff from herbicide used on row crops
2008	Simazine	0.57	0.13	1.37	4	4	ppb	Runoff from herbicide used on row crops
DISINFECTION BYPRODUCTS								
2008	Total Haloacetic Acid***	18.4	9.5	31	60	NA	ppb	Byproduct of drinking water disinfection
2008	Total Trihalomethanes	25.9	5.9	57.4	80			
UNREGULATED CONTAMINANTS								
2008	Chloroform	19.4	1.9	54.5	-	-	ppb	Byproduct of drinking water disinfection
2008	Bromodichloromethane	4.5	1.0	14.5	-	-	ppb	Byproduct of drinking water disinfection
2008	Dibromochloromethane	2.0	ND	6.7	-	-	ppb	Byproduct of drinking water disinfection
TOTAL ORGANIC CARBON								
2008	Source Water	4.1	3.3	4.8	Treated Water Alkalinity / ppm <60 mg/L as CaCO3			Naturally present in the environment
DISINFECTANT								
2008	Total Chlorine Residua	3.86	Minimum 3.56	Maximum 4.22	MRDL 4.0*	MRDLG 4.0*	ppm	Water additive used to control microbes
LEAD AND COPPER								
Year of Range	Contaminant	The 90th Percentile**	Number of Sites Exceeding Action Level		Action Level	Unit of Measure	Source of Contaminant	
2006	Lead	2.6	0		15	ppb	Corrosion of household plumbing systems; erosion of natural deposits	
2006	Copper	0.263	0		1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
TURBIDITY								
Year of Range	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits		Turbidity Limits	Unit of Measure	Source of Contaminant	
2008	Turbidity	0.09	100%		0.3	NTU	Soil Runoff	
TOTAL COLIFORM								
Year of Range	Contaminant	Highest Monthly % of Positive Samples	MCL		Unit of Measure		Source of Contaminant	
2008	Total Coliform Bacteria	0.9%	5% or more of monthly samples		Found/Not Found		Naturally present in the environment	

* As annual average
 ** 90 percentile value in the distribution system
 *** Haloacetic Acids - five species
 **** 50 pCi/L - 4 mrem/yr

Definitions

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

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCL/G): 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. mrem/year: Millirem per year (measure of radiation absorbed by the body).

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

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

ND: Not detected.

Nephelometric Turbidity Units (NTU): Measure of turbidity in water.

pCi/L: Pico-curies per liter (a measure of radioactivity).

POE: Point of entry. Sample measured at the point where water enters the distribution system.

ppb: Parts per billion or micrograms per liter (ug/L).

ppm: Parts per million or milligrams per liter (mg/L).

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

Turbidity: A measure of the clarity of drinking water. The lower the turbidity, the better.

Unregulated Contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.