



# CITY OF ODESSA

## 2004 WATER QUALITY REPORT

### **ODESSA'S DRINKING WATER EXCEEDS ALL FEDERAL PRIMARY DRINKING WATER REQUIREMENTS!**

This report is a summary of the quality of water Odessa provides its customers. The analysis was made by using the data from the most recent Environmental Protection Agency (EPA) required tests and is presented on the following pages. We hope this information helps you to become more knowledgeable about your water supply.

*En Español: El siguiente reporte contiene información sobre la calidad de nuestra agua potable. Para más información en español, favor de hablar a este teléfono 335-4625.*

**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 providers. 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 (800-426-4791).

**Where Do We Get Our Drinking Water?** The City purchases all of its water, untreated, from the Colorado River Municipal Water District (CRMWD). The majority of the water is surface water from Lake Ivie. Lake Thomas and Lake Spence are also sources of surface water for our drinking water supply. The City may also receive water from Ward and Ector Counties wells during certain times of the year to supplement the surface water supplies. TCEQ completed an assessment of Odessa source waters 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 detection of these contaminants will be found in this report. For more information, call 335-4625.

**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.

**About the Tables Contained In This Report.** The tables in this report list all of the federally regulated or monitored constituents, which have been found in Odessa's water. The EPA requires testing of up to 97 constituents. The concentrations (MCL and MCLG) of these standards are set by the EPA based on the potential health effects of the regulated constituent in the public water supply. The following terms are used in the tables:

**Maximum Contaminant Level (MCL)** - The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG 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 running annual average of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**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.

**NTU** - Nephelometric Turbidity Units.

**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 ( $\mu$ g/L).

**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 at (800) 426-4791.

**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	Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits in 95% of Samples	Unit of Measure	Source of Constituent
2003	Turbidity	0.35	100%	0.3	NTU	Soil runoff

**Inorganics**

Year	Constituent	Highest Level at any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Constituent
2002	Arsenic	4.2	4.2-4.2	10*	0*	ppb	Erosion of natural deposits. Runoff from orchards. Runoff from glass & electronics production wastes.
2002	Barium	0.186	0.186-0.186	2	2	ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
2004	Fluoride	0.40	0.4-0.4	4	4	ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
2004	Nitrate	0.93	0.93-0.93	10	10	ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
2002	Selenium	11.7	11.7-11.7	50	50	ppb	Discharge from petroleum and metal refineries. Erosion of natural deposits. Discharge from mines.
2002	Gross alpha	3.3	3.3-3.3	15	0	pCi/L	Erosion of natural deposits.
2002	Gross beta emitters	7.5	7.5-7.5	50	0	pCi/L	Decay of natural and manmade deposits.

\* These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is currently no MCLG.

**Disinfectant Residuals**

Year	Constituent	Highest Annual Average	Range of Detected Levels (low – high)	MRDL for Annual Average	Unit of Measure	Source of Constituent
2004	Chloramines	3.10	0.5-5.4	4	ppm	Disinfectant used to control microbes.

**Total Organic Carbon (TOC)**

Year	Constituent	Average	Range	MCL	MCLG	Units of Measure	Source of Constituent.
2004	Total Organic Carbon	4.73	3.86-5.67	NA	NA	ppm	Naturally occurring.

**Trihalomethanes**

Year	Constituent	Average of all Sampling Points	Range of Detected Levels, Single Measurement	MCL, Annual Average	Unit of Measure	Source of Constituent
2004	Total Trihalomethanes	43.167	21.3-56.6	80	ppb	By-product of drinking water chlorination.
2004	Total Haloacetic Acids	17.250	11.4-20.1	60	ppb	By-product of drinking water chlorination.

**Lead and Copper**

Year	Constituent	The 90 <sup>th</sup> Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Constituent
2003	Lead	3.5000	0	15	ppb	Corrosion of household plumbing systems. Erosion of natural deposits.
2003	Copper	0.1050	0	1.3	ppm	Corrosion of household plumbing systems. Erosion of natural deposits. Leaching from wood preservatives.

**Unregulated Contaminant Monitoring Rule Data (UCMR)**

Odessa participated in gathering data under the UCMR in order to assist the EPA in determining the occurrence of possible drinking water contaminants. The unregulated contaminants detected are listed below. This data may also be found on the EPA website at <http://www.epa.gov/safewater/data/ncod.html>, or by calling the Safe Drinking Water Hotline at 800-426-4791.

Year	Constituent	Average of all Sampling Points	Range of Detected Levels	Unit of Measure	Reason for Monitoring
2004	Bromoform	6.8	6.8-6.8	ppb	Byproduct of drinking water disinfection.
2004	Bromodichloromethane	1.7	1.7-1.7	ppb	Byproduct of drinking water disinfection.
2004	Chlorodibromomethane	4.3	4.3-4.3	ppb	Byproduct of drinking water disinfection.

**Secondary and Other Not Regulated Constituents as performed by the State's Laboratory**  
 (No associated adverse health effects)

Year	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2004	Bicarbonate	151	151	151	NA	ppm	Corrosion of carbonate rocks such as limestone.
2002	Calcium	119	119	119	NA	ppm	Abundant naturally occurring element.
2004	Chloride	474	474	474	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2002	Magnesium	72	72	72	NA	ppm	Abundant naturally occurring element.
2004	pH	7.3	7.3	7.3	NA	Standard units	Measure of corrosivity of water.
2002	Sodium	328	328	328	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2004	Sulfate	383	383	383	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2004	Total Alkalinity as CaCO <sub>3</sub>	124	124	124	NA	ppm	Naturally occurring soluble mineral salts.
2004	Total Dissolved Solids	1479	1479	1479	1000	ppm	Total dissolved mineral constituents in water.
2002	Total hardness as CaCO <sub>3</sub>	593	593	593	NA	ppm	Naturally occurring calcium.

**Questions or Comments?** The Utilities Department values your comments on the Water Quality Report as well as on other issues relating to water quality or provision of water service. If you have any comments or questions or would like additional conservation information, please contact us by calling 335-4625 or write us at City of Odessa Utilities Department, P.O. Box 4398, Odessa, Texas 79760.