CITY OF ODESSA

2018 Water Quality Report PWS No. TX0680002

This annual report provides information on the City of Odessa's drinking water. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers in the country provide a water quality report to their customers on an annual basis.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

For more information regarding this report contact: Thomas Kerr at 432-335-4634.

En español: Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (432) 335-4631 – para hablar con una persona bilingüe en español.

The City of Odessa has initiated a project that could potentially provide RO water to all, citywide. This means, better quality water, longer lasting appliances and equipment, & cost savings.

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 (Runnels County), Lake Thomas (Scurry County), and Lake Spence (Coke County). Groundwater or wells are also sources for our drinking water supply. The City may receive water from Ward and Martin Counties wells as needed to meet water system demands. The 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 detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, please contact us.

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 Contaminants that may be present in the source:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrially or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture & urban storm water runoff.

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.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production activities.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, and people with HIV/AIDS or 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 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.

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. The City of Odessa 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.

The table below lists all of the federally regulated or monitored constituent which have been found in the drinking water.

Substance	Highest Level detected	Minimal Level detected	Maximum Level Detected	MCL	MCLG	Possible Sources
Sampled for in 2018 unless noted differently.						
Arsenic (ppb)	2.4	2.4	2.4	10	0	Erosion of natural deposits.
Barium (ppm)	0.203	0.203	0.203	2	2	Drilling waste; erosion of natural deposits
Cyanide (ppb)	232	232	232	200	200	Discharge from manufacturing
Fluoride (ppm)	0.0613	0.0613	0.0613	4.0	4	Natural geology; supplement
Nitrate (ppm, measured as Nitrogen)	0.269	0.0913	0.269	10	10	Runoff from fertilizer use.
Selenium (ppb)	7.6	7.6	7.6	50	50	Discharge from petroleum refinery

Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time, because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Description	Level Detected	Limit (Treatment Techniques)	Unit of Measurement	Violation	Source of Contamination
Highest Single Measurement	0.24	1	NTU	N	Soil runoff
Lowest Monthly % Meeting Limit	100%	0.3	NTU	N	Soil runoff

Total Coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Total Coliform Bacteria	Highest Monthly % of Positive Samples	MCL	Unit of Measurement	Source of Contamination
0	0	*	Presence	Naturally present in environment.

* Presence of coliform bacteria in 5% or more of the monthly samples

Fecal Coliforms – No fecal coliform bacteria were detected in the water supply during the required monitoring for 2018.

Lead and Copper - Lead and copper is analyzed once every three years by rule. Samples are collected from 50 sites in the system based on age of area associated with plumbing codes of the time.

Year	Constituent	The 90th Percentile	# of Sites Exceeding Action Level	Action Level	MCLG	Unit of Measure	Violation	Source of Contamination
2017	Lead	2.78	2	15	0	Ppb	N	Household Plumbing
2017	Copper	0.143	0	1.3	1.3	Ppm	N	Household Plumbing

Radioactive Contaminants *EPA considers 50 pCi/L to be the level of concern for beta particles

Year	Constituent	Highest Level	Range of Levels Detected	MCL	MCLG	Unit of Measure	Violation	Source of Constituent
2017	Beta/photon Emitters	6.1	6.1 – 6.1	50	0	pCi/L	N	Decay of natural and man-made deposits
2017	Uranium	1.5	1.5 – 1.5	30	0	ug/l	N	Erosion of natural deposits

Disinfectant Residuals

Constituent	Annual Average	Range of Detected Levels from Single Sample		MRDL for Annual Average	MRDLG	Unit of Measure	Violation	Source of Constituent
		Minimum	Maximum					
Chloramines	3.935	2.01	4.49	4.21	4.0	ppm	N	Disinfectant used to control microbes

Disinfection Byproducts

Constituent	Highest Level Detected Avg.	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Constituent
Total Trihalomethanes (TTHM)	61	15.9	74.1	80	ppb	By-product of drinking water chlorination.
Total Haloacetic Acids (HAA5)	24	0	25.4	60	ppb	

Water Loss

Water loss and accountability is reported annually to the Texas Water Development Board. Water loss is based on the amount of water metered for delivery exiting the Water Treatment Plant less the amount of water accounted for as metered to the customers throughout the system. Numerous factors account for the 'loss' of water including line breaks, filter backwash, weeping mains, theft, water quality flushing, and meter inaccuracy.

Description	Produced Water (Gallons)	Metered Water (Gallons)	Water Losses (Gallons)	Lost Water Percentages	10 Year Target
Water Accountability	6,723,584,000	4,791,718,000	632,773,168	9.32%	8%

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. No meetings concerning this report are scheduled. If you have any comments or questions or would like additional conservation information, please contact us by calling 432-335-4627, write us at City of Odessa Utilities Department, P.O. Box 4398, Odessa, Texas 79760 or email us at utilities@odessa-tx.gov

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 data presented in the report is from the most recent testing done in accordance with regulations. The following abbreviations/definitions are used in the tables:

Action level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

Action Level Goal (ALG) – The level of a contaminant in drinking water below which there is no know or expected risk to health. ALGs allow for a margin of safety.

Avg – Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment – a Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – a Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasion.

MFL – million fibers per liter (a measure of asbestos)
Mrem – millirems per year (a measure of radiation absorbed by the body
NTU - Nephelometric Turbidity Units (a measure of turbidity)
ppb - parts per billion, or micrograms per liter (μg/L).
pCi/L - picocuries per liter (a measure of radioactivity).
ppt – parts per trillion, or nanograms per liter.
ppm - parts per million, or milligrams per liter (mg/L)
ppq – parts per quadrillion, or pictograms per liter
na – not applicable
Treatment Technique or TT – A required process intended to reduce the level of a contaminant in drinking water.

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

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

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 contamination.

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.

Violations

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems			
Violation Type	Violation Begin	Violation End	Violation explained
CCR REPORT	7/1/2018	2/07/2019	**We failed to report** to our drinking water customers an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.

Interim Enhanced SWTR			
The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water, or ground water under the direct influence of surface water. The rule builds upon the treatment technique requirements of the Surface Water Treatment Rule.			
Violation Type	Violation Begin	Violation End	Violation explained
MONITORING, ROUTINE (IESWTR/LTI), MAJOR	10/01/2018	10/31/2018	**We failed to report on time** our drinking water report for the contaminant and period indicated.

Surface Water Treatment Rule (SWTR)			
The Surface Water Treatment Rule seeks to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires that water systems filter and disinfect water from surface water sources to reduce the occurrence of unsafe levels of these microbes.			
Violation Type	Violation Begin	Violation End	Violation explained
MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	10/01/2018	10/31/2018	**We failed to report on time** our drinking water report for the contaminant and period indicated.

Total Organic Carbon			
Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of			
Violation Type	Violation Begin	Violation End	Violation explained
MONITORING, ROUTINE (DBP), MAJOR	10/01/2018	10/31/2018	**We failed to report on time** our drinking water report for the contaminant and period indicated.

Help Protect Our Environment

And Conserve Our Water

Texas Commission on Environmental Quality
and the U.S. Environmental Protection Agency

The right place in Texas
Odessa

P.O. Box 4398
Odessa, Texas 79760
(432) 335-4625

HERE'S HOW YOU CAN HELP...

Don't pour deadly chemicals down the drain!

Keep pet wastes, leaves and debris out of gutters and storm drains.

Use non-toxic products in your gardening; fertilizers and pesticides can contaminate drinking water by running off into rivers and streams or seeping into groundwater.

Leave grass clippings on the lawn.

Dispose of household hazardous wastes (used antifreeze, paint and other household chemicals) properly. Call your local solid waste department for information on proper disposal.

Dispose of used oil and oil filters at recycling facilities or at a designated collection center.

Managing waste properly keeps it out of our waterways, prevents pollution and keeps us healthier! Non-point source pollution is everyone's responsibility because we all contribute to it. Everyone can make an important contribution to protecting one of our most valuable resources - water!

Don't Be A Water Waster!

- Take short showers and shallow baths
- Turn off the water while brushing your teeth
- Use water efficient shower heads, faucets, washing machines and dishwashers
- Only run the washing machine and dishwasher with full loads
- Lose the leaks - fix them immediately
- Never water during the heat of the day or when it is windy
- Don't water the sidewalks - they won't grow
- Use mulch around your trees and plants to keep the soil cool and reduce evaporation
- Only water when your lawn or garden needs it

Fat-Free Sewers

Ever wonder why your sewer lines backup or you see manholes overflowing? Many of these problems are caused by the disposal of fats, oils and grease (FOG) into the sewer system. To help prevent expensive sewer backups, plumbing emergencies and public health issues, the City of Odessa is asking its residents to follow these DO's and DON'Ts.

DO: Scrape food scraps into the trash, not the sink.

DO: Dispose of large amounts of FOG, by mixing clay cat litter, a little at a time, with the FOG. When all of the FOG has been absorbed, pour the cat litter into a trash bag, seal the bag, and dispose of it with your regular trash.

DO: Recycle used cooking oil or properly dispose of it by pouring it into a sealable container, allowing it to solidify or absorb it with cat litter or paper towels and placing the sealed container in the trash.

DO: Wipe pots, pans and dishes with dry paper towels before rinsing or washing them.

DO: Use strainers in sink drains to prevent food scraps from entering the sewer system.

DON'T: Use cloth towels or rags to scrape plates or clean grease dishes. When they are washed, the grease will go to the sewer.

DON'T: Put grease or greasy food into the garbage disposal.

DON'T: Use hot water to rinse FOG from the dishes and pots and pans. As the water cools, the FOG will solidify and clog the pipes.

DON'T: Rely on commercial additives in detergents to dissolve grease. They only pass it down the line where it causes problems in other areas.

DON'T: Pour FOG, including salad dressings and sauces, into your drains, the toilet, the alley, or gutters.

Clogged pipes, whether in your household plumbing or in the sewer system, are a major nuisance and a public health issue. In fact, sanitary sewer overflows (SSO) from the collection system must be reported to the Texas Commission on Environmental Quality as a violation of the wastewater discharge permits they issue. We are therefore, asking our residents to help us make our sewers "fat free" so that we can reduce the number of SSOs which occur in our collection system. Your help will be greatly appreciated!!!