



CITY OF SUGAR LAND

2013

WATER QUALITY REPORT





MISSION STATEMENT

The Water Utilities Division takes pride in maintaining a tradition of producing ample superior quality water, vigilantly maintaining water and wastewater infrastructure, and providing responsive and efficient customer-oriented service in a cost-effective and innovative manner emphasizing responsible environmental stewardship and compliance with all regulatory requirements.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol favor de llamar al telefono **281-275-2450**.

DIRECTOR'S MESSAGE

The City of Sugar Land is pleased to present the annual Water Quality Report for 2013. This report describes the City of Sugar Land's water supply and water quality and contains other important information regarding the water we deliver to customers. As in the past years, we supplied drinking water to our customers that exceeds the water quality standards set by the U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ).

The City assures reliable delivery of water to customer by focusing on constructing infrastructure improvements, water resource planning, routine preventative maintenance programs and short leak response times. In 2013, the City invested in the construction of a 9 million gallon a day surface water treatment plant. As part of introducing surface water into the distribution system, the City successfully changed from chlorine to chloramine disinfectant which helps keep drinking water free of harmful bacteria.

In November of 2013, the City's new surface water treatment plant began delivering drinking water to the City's main distribution system. The transition to include surface water was cautiously executed to assure the City's high quality drinking water

standard was maintained throughout the transition process. Today, the surface water plant is fully operational and can produce up to 9 million gallons of water per day that is blended with groundwater then distributed to customers. Water produced by the Surface Water Treatment Plant originates from the Brazos River and undergoes a robust pre-treatment process using state of the art membrane filters.

Surface water is an integrated component of the City's water resource management strategies. The City is committed to having ample water supplies and meeting groundwater reduction requirements regulated by the Fort Bend Subsidence District. Comprehensive water management includes using water efficiently and taking measures to minimize unnecessary use of water.

I hope you will take a few moments to read the Water Quality Report. The City has great confidence in the water we deliver to our customers and want you to have the same confidence. Please contact the Public Works Department at **281-275-2450** if you have questions or concerns about your water quality or the City's water system.

**—Robert Valenzuela, P.E., CFM
Director of Public Works**

THE CITY OF SUGAR LAND RECEIVED THE OUTSTANDING PUBLIC WATER SYSTEM AWARD FROM THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) FOR ITS EFFORTS IN ENSURING EXCEPTIONAL WATER SAFETY AND QUALITY. SUGAR LAND WAS RECOGNIZED AS ONE OF THE TOP THREE TEXAS PUBLIC WATER SYSTEMS FOR 2013 OUT OF APPROXIMATELY 7,000 PUBLIC WATER SYSTEMS IN THE STATE.

WHAT IS A WATER QUALITY REPORT?

The City takes pride in operating a superior rated water system and delivering quality drinking water to customers throughout the City. The City's team of licensed water operators and water quality professionals provides the community with clean, safe, drinkable water 24-hours-a-day.

Water samples are taken daily and tested for chemical, bacteriological and disinfectant residual contaminants. The samples are taken from various locations throughout the production and distribution system.

The Water Quality Report, also known as a Consumer Confidence Report, is an annual report on Sugar Land's drinking water quality. The Safe Drinking Water Act (SDWA) amendments signed in 1996 require the operators of every community water system to create and deliver a report to their citizens.

The Water Quality Report is an easy-to-read summary intended to inform our customers about the water they drink. It includes general health information related to water quality, a list of contaminants found in Sugar Land's water, a summary of testing results, information about the City's water delivery system and information on who to call with concerns about water quality.

The report is also used to document any monitoring or testing violations of drinking water standards set by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). All EPA and TCEQ water quality standards were met and Sugar Land's water meets all health-based drinking water criteria and aesthetic standards.

WATER SOURCES

The City's two water systems draw drinking water from 17 permitted wells at six separate groundwater plants. These deep wells have an average depth greater than 1,200 feet. The sources of the groundwater are the Chicot and Evangeline aquifers. Sugar Land's Main Water System also receives treated surface water from the Brazos River, which is channelled through the Oyster Creek canal system.

SOURCE WATER ASSESSMENT AND SAMPLING REQUIREMENTS

The TCEQ completed an assessment of the City's source water and the results indicate that some of the sources are susceptible to certain contaminants. The sampling requirements for the water system are based on this susceptibility and previous sample data. If there is any detection of these contaminants, it will be reported in this Water Quality Report. Further details about water sources and source water assessments are available through the Source Water Assessment Viewer at www.tceq.texas.gov/gis/swaview and TCEQ's Drinking Water Watch at dww.tceq.state.tx.us/DWW/. As always, the City's staff is available to answer questions at **281-275-2450**.

HOW IS WATER DISINFECTED?

Water disinfection is considered to be one of the major public health advances of the 20th century because it protects the population against fatal waterborne diseases. Sugar Land uses disinfectants to kill dangerous bacteria and microorganisms that could be in drinking water. Until August 2013 both the Main and RiverPark systems were disinfected using chlorine. Now, only water in the RiverPark system is disinfected with chlorine. The City changed the disinfectant in the Main System to chloramine, which is a better disinfectant for systems receiving surface water.

IS CRYPTOSPORIDIUM OR GIARDIA IN OUR WATER SUPPLY?

Cryptosporidium and *Giardia* are waterborne, pathogenic organisms. Both are naturally present in the intestines of most mammals, including humans, and are passed into the environment through urban runoff or sewage disposal system failure. Exposure to these organisms can lead to symptoms such as diarrhea, abdominal discomfort, fever, weight loss, mal-absorption and anemia. Although not life-threatening to healthy adults, *Cryptosporidium* and *Giardia* can be fatal to infants, the elderly, pregnant women and immunocompromised persons.

Neither *Cryptosporidium* nor *Giardia* is found in groundwater that is pumped from deep wells, which are protected from surface water contamination. The surface water treatment plant that supplies the City's Main System uses membrane filtration and post-filtration disinfection to remove any waterborne organisms from surface water. The filter membranes in the City's surface water treatment plant remove microbes, including *Cryptosporidium* and *Giardia*, that may be present in the raw surface water source. For more information about *Cryptosporidium* and *Giardia* and other microbial contaminants, contact the EPA's Safe Drinking Water Hotline at **800-426-4791**.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some individuals 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; persons 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. At-risk persons should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline **800-426-4791**.

WHAT ABOUT COLOR, TASTE AND ODOR?

Contaminants that may be found in drinking water can cause taste, color or odor problems. These types of problems are not necessarily cause for concern. Many constituents such as calcium, sodium or iron that are often found in drinking water can produce a taste, color and/or odor. 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 concern, but they may affect the appearance and taste of your water. Secondary Constituent information is available by calling **281-275-2450**.



ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

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. 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. Water can also 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, that 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- pesticides and herbicides, which come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff and septic systems; and
- radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at **800-426-4791**.

INFORMATION FOR LEAD

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 Sugar Land 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 two 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 at **800-426-4791** or at www.epa.gov/safewater/lead.



SUGAR LAND WATER SYSTEMS

Within the corporate limits of the City of Sugar Land are two independent public water systems; Main Public Water System 0790005 that serves the City east of the Brazos River and RiverPark Public Water System 0790354 that serves the RiverPark community west of the Brazos River. The two systems operate independently; therefore, water quality data for both systems is presented separately in this report.

Two sources supply the City's Main System: surface water from Oyster Creek and the Brazos River treated at the City's surface water treatment plant and deep groundwater wells. The City of Sugar Land's groundwater comes from the Chicot and Evangeline aquifers.

Water for the RiverPark system is pumped from deep groundwater wells. Even though Sugar Land's water is already excellent quality, chlorine is added to the RiverPark System and chloramine is added to the Main System to protect finished water against microbial contaminants as it travels through many miles of pipes and pumps. Fluoride is added to both systems to help prevent tooth decay. Corrosion inhibitors are also added to reduce corrosion of metal components in the private plumbing systems in homes and buildings.

PROFILE OF WATER SYSTEMS

Annual system demand:	6.343 billion gallons
Maximum peak daily demand:	31.605 million gallons (5%)
System capacity:	56.93 million gallons/day
Daily average demand:	16.26 million gallons
Daily average demand per capita:	231 gallons
Number of wells:	17
Average well depth:	1,250 feet
Ground storage capacity:	12.23 million gallons
Elevated storage facilities:	5 towers 6.3 million gallons
Miles of distribution line:	431
Number of water meters:	28,046
Number of fire hydrants:	3,954
Number of mainline valves:	5,372
Water loss:	311 million gallons



WATER LOSS

Each year the City is required to submit a water loss audit to the Texas Water Development Board. For the 2013 calendar year, Sugar Land's water loss during the production and delivery of drinkable water throughout the City was 5 percent of total water produced by both the Main and RiverPark Systems combined. Therefore, of the 6 billion gallons of water produced citywide in 2013, 311 million gallons were lost. Water utility division staff is committed to maintaining a water loss of less than 9 percent by repairing leaks in a timely manner, replacing old meters, watching for unauthorized water users and measuring water used for system maintenance.

A water loss audit is a tool used by water utilities to assess the volume of water produced compared to volumes of water sold to customers. Water loss cannot be avoided as line breaks, undetected leaks and line flushing occur in any water delivery system. Keeping losses to a minimum represents a utility's commitment to efficient water management and low water rates. A low water loss indicates delivery lines are maintained, metering equipment is accurate and the utility is proficiently accounting for water used for system maintenance. If you have any questions about the water loss audit, please call the Public Works Department at **281-275-2450**.



WATER QUALITY DATA

The TCEQ is responsible for overseeing the state's environmental areas, which include the City of Sugar Land's water quality. The TCEQ collects and analyzes samples for metals, minerals, volatile and semi-volatile organic compounds, chlorine byproduct compounds and radiological compounds. In addition to TCEQ-required daily process control samples taken at the water plants and system entry points, the City of Sugar Land performs over 85 bacteriological tests monthly in its two distribution systems and collects quality assurance and quality control samples at least once a week.

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 and are not required to be reported in this document but they may affect the appearance and taste of your water. For information on secondary constituents, call the City's laboratory manager at 281-275-2450.

DEFINITIONS

ACTION LEVEL (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

AVERAGE LEVEL OF QUARTERLY DATA (AVG)

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

CONSTITUENT

Federally regulated or monitored analyte.

INORGANIC CONTAMINANTS

Salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

MAXIMUM CONTAMINANT LEVEL (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs 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. MCLGs 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 contaminant.

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.

MICROBIAL CONTAMINANTS

Viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

ORGANIC CHEMICAL CONTAMINANTS

Synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production; can also come from gas stations, urban storm water runoff and septic systems.

PESTICIDES AND HERBICIDES

These may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

RADIOACTIVE CONTAMINANTS

Naturally occurring or the result of oil and gas production and mining activities.

TREATMENT TECHNIQUE (TT)

A required process intended to reduce the level of a contaminant in drinking water.

TTHM

Total Trihalomethanes

TURBIDITY

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.

WATER QUALITY DATA TABLES

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. The tables below list the drinking water contaminants that were tested in the City's Main System and the City's RiverPark System during the calendar year of this report.

All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of

public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels.

The EPA or the state of Texas require the City of Sugar Land to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. Unless otherwise noted, the data presented in this table is from testing done in 2013.

SUGAR LAND MAIN SYSTEM - PWS 0790005

REGULATED CONTAMINANTS DETECTED IN 2013

Bacteria

CONTAMINANT	Year	MCLG	Total Coliform MCL	Highest # of Positive	Fecal Coliform or E Coli MCL	Total # of Positive E Coli or Fecal Coliform Samples	Violation (Y/N)	Likely Source of Contamination
Coliform Bacteria	2013	0	5% of monthly samples are positive	1.1%	5% of monthly samples are positive	0	No	Naturally present in the environment

Copper and Lead

CONTAMINANT	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Y/N)	Likely Source of Contamination
Copper	2012	1.3	1.3	0.495	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2012	0	15	1.86	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

ABBREVIATIONS

N/A:	Not applicable	pCi/L:	pico curies per liter; measure of radioactivity
ND:	None detected	ppm:	parts per million or milligrams per liter (mg/L)
NTU:	Nephelometric turbidity units (a measure of turbidity)	ppb:	parts per billion, or micrograms per liter (µg/L)

SUGAR LAND - MAIN SYSTEM
PWS 0790005

Disinfectants and Disinfection By-Products

CONTAMINANT	Year	Average Level of Quarterly Data	Lowest Result of a Single Sample	Highest Result of a Single Sample	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Chlorine Residual, Free	2013 (Jan - Oct)	1.41	0.46	2.94	4	4	ppm	No	Water additive used to control microbes
Chlorine Residual, Total	2013 (Sep - Dec)	1.84	0.52	4.40	4	4	ppm	No	Water additive used to control microbes
CONTAMINANT	Year	Average Level of Quarterly Data	Lowest Result of a Single Sample	Highest Result of a Single Sample	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Haloacetic acids (HAA5)	2013	8.9	0.0	8.9	No goal for the total	60	ppb	No	By-product of drinking water disinfection
TTHMs (Total trihalomethanes)	2013	3.6	0.0	6.6	No goal for the total	80	ppb	No	By-product of drinking water disinfection

Inorganic Contaminants

CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Y/N)	Major Sources in Drinking Water
Arsenic	2012	3.5	3.5	3.5	n/a	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2013	0.0729	0.0729	0.0729	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2013	0.14	0.14	0.14	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	2013	1.29	0	2.56	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

ABBREVIATIONS

N/A:	Not applicable	pCi/L:	pico curies per liter; measure of radioactivity
ND:	None detected	ppm:	parts per million or milligrams per liter (mg/L)
NTU:	Nephelometric turbidity units (a measure of turbidity)	ppb:	parts per billion, or micrograms per liter (µg/L)

Synthetic Organic Contaminants including Pesticides and Herbicides

CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maxium Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Atrazine	2013	0.17	0.17	0.17	3	3	ppb	No	Runoff from herbicide used on row crops
Simazine	2013	0.2	0.2	0.2	4	4	ppb	No	Herbicide runoff

Radioactive Contaminants

CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maxium Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Beta/photon emitters*	2013	4.9	4.9	4.9	0	50	pCi/L*	No	Decay of natural and man-made deposits
Combined Radium 226 /228	2012	3	3	3	0	5	pCi/L*	No	Erosion of natural deposits

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

Turbidity

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.	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1.0 NTU	0.12 NTU	N	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff

ABBREVIATIONS

N/A:	Not applicable	pCi/L:	pico curies per liter; measure of radioactivity
ND:	None detected	ppm:	parts per million or milligrams per liter (mg/L)
NTU:	Nephelometric turbidity units (a measure of turbidity)	ppb:	parts per billion, or micrograms per liter (µg/L)



NOTICE OF SURFACE WATER MONITORING OR REPORTING VIOLATION (MINOR)

The Texas Commission on Environmental Quality (TCEQ) requires public water systems to monitor 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. On January 31, 2013, the City of Sugar Land Public Water System's contractor did not monitor the chlorite level in the water leaving the surface water treatment plant. We cannot be sure of the quality of your drinking water during the times we did not properly monitor; however, additional samples were taken in the water distribution system for chlorite on February 1, 2014, routine testing resumed on February 1, 2014 and all results were within regulatory limits. Although the City's contractor missed this one test, the additional testing results indicate that the water was safe to drink.

If you want more information about the nature and significance of this violation, you may contact Howard Christian, assistant director of public works for the City of Sugar Land, at 281-275-2450. Please share this information with all other people who drink this water, especially those who may not have received this notice directly.

SUGAR LAND - RIVERPARK SYSTEM - PWS 0790354

REGULATED CONTAMINANTS DETECTED IN 2013

Copper and Lead

Contaminant	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation (Y/N)	Likely Source of Contamination
Copper	2012	1.3	1.3	0.156	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2012	0	15	1.31	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

Disinfectants and Disinfection By-Products

CONTAMINANT	Year	Average Level of Quarterly Data	Lowest Result of a Single Sample	Highest Result of a Single Sample	MRDLG	MRDL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Chlorine Residual, Free	2013	1.34	0.79	1.65	4	4	ppm	No	Water additive used to control microbes
CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Haloacetic acids (HAA5)	2013	1.0	1.0	1.0	No goal for the total	60	ppb	No	By-product of drinking water disinfection

ABBREVIATIONS

N/A:	Not applicable	pCi/L:	pico curies per liter; measure of radioactivity
ND:	None detected	ppm:	parts per million or milligrams per liter (mg/L)
NTU:	Nephelometric turbidity units (a measure of turbidity)	ppb:	parts per billion, or micrograms per liter (µg/L)

SUGAR LAND - RIVERPARK SYSTEM PWS 0790354

Inorganic Contaminants

CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Major Sources in Drinking Water
Barium	2010	0.159	0.159	0.159	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2011	0.58	0.58	0.58	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	2013	0.03	0.03	0.03	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Contaminants Including Pesticides and Herbicides

CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Di (2-ethylhexyl) phthalate	2010	0.62*	0.62	0.62	0	6	ppb	No	Discharge from rubber and chemical factories

* Reported below method quantitation limit

Radioactive Contaminants

CONTAMINANT	Year	Average Level Detected	Minimum Level Detected	Maximum Level Detected	MCLG	MCL	Unit of Measure	Violation (Yes/No)	Likely Source of Contamination
Gross Alpha (excluding Radon & Uranium)	2008	3	3	3	0	15	pCi/L	No	Erosion of natural deposits

ABBREVIATIONS

N/A:	Not applicable	pCi/L:	pico curies per liter; measure of radioactivity
ND:	None detected	ppm:	parts per million or milligrams per liter (mg/L)
NTU:	Nephelometric turbidity units (a measure of turbidity)	ppb:	parts per billion, or micrograms per liter (µg/L)

WATER CONSERVATION TIPS

There are many ways to conserve water. Small changes can make a big difference.

- Take short showers. A five-minute shower uses four to five gallons of water compared to as much as 50 gallons for a bath.
- Turn off the faucet while brushing teeth, washing hair and shaving to save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install and can save up to 750 gallons of water a month.
- Run the clothes and dish washing machines only when they are full, which could save up to 1,000 gallons a month.
- Fix leaky toilets and faucets. To check toilets for a leak, place a few drops of food coloring in the tank and wait. If the blue color seeps into the toilet bowl without flushing, there is a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons of water a month.
- Water plants and lawns only when necessary, no more than 2 days a week.
- Adjust sprinklers so that only grass and landscaping is watered, not sidewalks, driveways and streets.

CROSS CONNECTION CONTROL SURVEY

The City of Sugar Land is proactive in its efforts to prevent contamination of the public water supply. A home or business may have a contamination issue from a “cross connection” in the water pipes, and the owner of the home or business may not even realize it. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. The City of Sugar Land is responsible for enforcing cross connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. The City performs cross connection assessments (free of charge) to determine whether a cross connection may exist at your home or business. If you have any of the devices listed

SOURCE WATER PROTECTION TIPS

Protection of drinking water is everyone’s responsibility. You can help protect your community’s drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides; they contain hazardous chemicals that can reach your drinking water source.

CYCLE AND SOAK METHOD

- 1** **Cycle:** Water for five minutes
Soak: Wait one hour or longer
- 2** **Cycle:** Water again for only five minutes
Soak: Wait another hour or more
- 3** **Cycle:** Water again, if necessary, for five minutes

- Operate automatic irrigation systems manually, and check for leaks and needed repairs monthly.
- Use the Cycle and Soak method to water the lawn, applying water only as fast as the soil can absorb it.
- Water during the cooler parts of the day to reduce evaporation.
- Teach children about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month’s water bill!
- Follow Sugar Land’s Irrigation Zone Schedule (See Page 16).
- Additional water conservation information is available at www.epa.gov/watersense and www.sugarlandtx.gov/waterutilities.

below, please contact the City’s Water Division at **281-275-2450** to discuss the issue, and if needed, survey your connection.

- Boiler/radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property (lake or creek water)
- Decorative pond
- Watering trough

- Pick up after your pets.
- Dispose of chemicals properly. Take used motor oil to a recycling center.
- Volunteer in your community. Contact the City’s Stormwater Program Coordinator at **281-275-2450** for more information on how to be involved in protecting our watersheds.

HOW CAN I HELP?

VOLUNTARY TWICE-A-WEEK IRRIGATION SCHEDULE (WATER ONLY WHEN NEEDED)

Following a twice-a-week irrigation schedule benefits lawns, reduces water bills and reduces pressure on the City's water wells and infrastructure. The objective of the City's voluntary Irrigation Zone Schedule is to reduce daily demands for water throughout the City. The program ensures that water usage is evenly spread throughout the week. It also promotes responsible water use during the dry summer months.

Adhering to the voluntary two days-a-week watering schedule contributes to healthy landscapes, lower monthly water bills and benefits the City in a number of ways. The Irrigation Schedule reduces peak daily water system demands, extends the lifespan of the City's water system, lowers groundwater usage and helps to achieve long-term water conservation goals.

You can find the Irrigation Zone Schedule for your neighborhood online at sugarlandtx.gov/irrigation or call the Water Utilities Department at **281-275-2450** to have the schedule sent to you.

CUSTOMER SERVICE IS OUR NUMBER ONE PRIORITY

We take pride in the water that is provided to our customers and we are continually striving to improve our service to you. To accomplish this goal, we need your help. Any time you find your water quality or service response is below your expectations, please contact us at **281-275-2450**. We will respond promptly.

OPPORTUNITIES FOR PUBLIC COMMENT ON WATER PLANNING AND WATER QUALITY

For more information about this report or participating in future public meetings concerning our drinking water please call us at **281-275-2450**. Sugar Land City Council meets regularly at 5:30 p.m. on the 1st, 3rd and 4th Tuesday of the month.



REPORT WATER LEAKS

If you see a water leak along a roadway
or in a yard, please report it to the
Public Works Department.

CALL 24/7: 281-275-2450.



