

CITY OF GALENA PARK

2014 ANNUAL DRINKING WATER QUALITY REPORT

*Este reporte incluye información importante sobre el agua para tomar.
Para asistencia en español, favor de llamar al telefono (713)672-2556.*

The City of Galena Park provides this annual water quality report for the period of January 1, 2014 through December 31, 2014. The purpose of this report is to provide you with important information about your drinking water and the efforts made by the City of Galena Park to provide safe drinking water.

Your drinking water was in compliance with all drinking water standards during the reporting period. In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. This report provides data on the levels of any contaminants that were detected and likely sources of those contaminants. The state allows us to monitor for some contaminants less than once per year; therefore, some data provided in this report, although representative, is more than one year old.

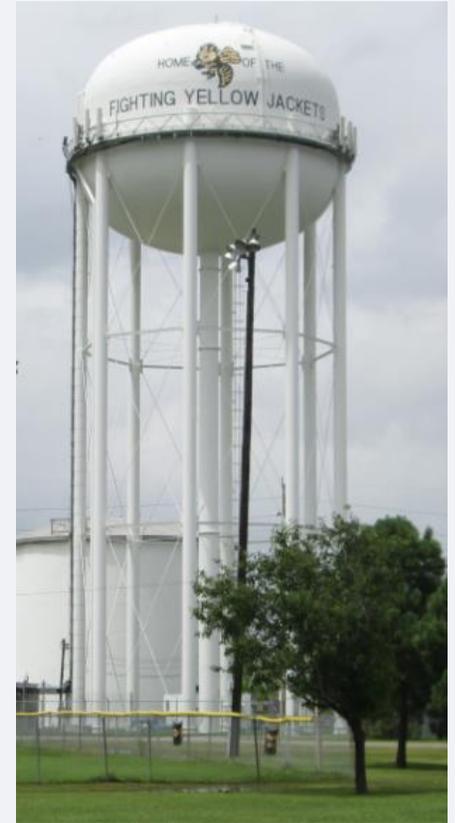
For more information regarding this report contact Tojuana Cooper, Water/Wastewater Superintendent, at 713-672-2556.

Public Participation Opportunities

The City of Galena Park encourages public interest and participation in our community's decisions that may affect the quality of the drinking water. Regular City Council meetings occur on the 1st and 3rd Tuesday of each month at 6:00 p.m. The meetings are held at City Hall; 2000 Clinton Dr.; Galena Park, TX 77547. Additional information about public meetings concerning your drinking water may be obtained by calling 713-672-2556.

Special Notice for the Elderly, Infants, Cancer Patients, 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 chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; persons 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 U.S. Environmental Protection Agency, Safe Drinking Water Hotline, at 800-426-4719.



Water Plant 2 (PWS 1010009)

Sources of Drinking Water

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. The sources of drinking water that the City of Galena Park provides to its customers are listed below.

Source Water Name	Source Water Location	Type of Water	Status	Source Water Supply
Water Well No. 3	304 Stewart St./Water Plant 1	Groundwater	Seasonal	Gulf Coast Aquifer
Water Well No. 5	1900 Keene St./Water Plant 2	Groundwater	Seasonal	Gulf Coast Aquifer
City of Houston	2300 Federal Rd. (PWS 1010013)	Surface Water	Active	East Water Purification Plant
City of Houston	12401 Strick Ln. (PWS 1010013)	Surface Water	Seasonal (*emergency supply)	East Water Purification Plant

*The emergency water supply was activated on May 24th for 2 days during system tests and flushing; August 28th for 5 hours due to relocating a valve; and September 4th for 5 days due to installation of valves and water line repairs. For water quality information, refer to City of Houston data in this report or call 713-672-2556.

Regulation of Possible Contaminants in Drinking Water

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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.

Possible Contaminants in Source Water

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 may come from 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.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- 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.
- Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color in drinking water, please contact Tojuana Cooper at 713-672-2556.

Educational Information on Lead in Drinking Water

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 Galena Park is responsible for providing high quality drinking water, but we 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 EPA's Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Educational Information on Arsenic in Drinking Water

While your drinking water meets EPA's standard for arsenic, it does **not** 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 cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

TCEQ's Assessment of Source Water

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Tojuana Cooper at 713-672-2556.

Source Water System Susceptibility Summary

Contaminant	Volatile Organic Chemicals	Drinking Water Contaminant Candidate
Metals	Medium	High

A “**Medium**” susceptibility rating means there are activities near the source water and the natural conditions of the aquifer or watershed make it somewhat likely that chemical constituents may come into contact with the source water. It does **not** mean that there are any health risks present.

A “**High**” susceptibility rating means there are activities near the source water and the natural conditions of the aquifer or watershed make it very likely that chemical constituents may come into contact with the source water. It does **not** mean that there are any health risks present.

Water Losses

The City of Galena Park submitted a Water Loss Audit to the Texas Water Development Board (TWDB) for the period of January 1, 2014 through December 31, 2014. Based on available information, our water loss for the reporting period was 11%. If you have questions about the Water Loss Audit please contact Tojuana Cooper at 713-672-2556.

How You Can Help Protect Source Water, Minimize Costs, and Conserve Water

Source Water Protection

Protection of source water is everyone's responsibility. You can help protect your community's drinking water source in the following ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- Dispose of chemicals properly (refer to container labels for proper disposal methods).

The Cost of Water Utility Services

During the reporting period, ninety-nine percent (99%) of the City of Galena Park's water was purchased from the City of Houston and one percent (1%) was supplied by our water wells. The City of Galena Park is a contract customer of the City of Houston. There is a contractual minimum monthly amount of water we must purchase from the City of Houston; and their water rates for contract customers increase annually. We use our water wells to reduce the amount of water we purchase from the City of Houston (primarily during peak water use periods). However, there are limitations, set by Harris-Galveston Subsidence District, on the amount of water we can pump from the wells.

The City of Galena Park (City) must set water utility rates at amounts that pay the costs we incur to provide water utility services. During 2013, the City hired a consultant to conduct a study of the cost of service and water utility rates. Based on recommendations resulting from the study, the City Council determined that future rate increases are required to assure our water utility systems are operated on a sound financial bases, as required by state law. Consequently, the City Council adopted an Ordinance establishing a rate plan that provides for fair and equitable annual rate increases through year 2018 (effective August 1st, annually).

The adopted rate plan provides for conservative expenses associated with water utility operations, with a few exceptions (primarily related to the wastewater system). The adopted rate plan does not take into consideration the need to evaluate and replace/rehabilitate a large amount of the City's significantly aged water utility infrastructure. The City intends to develop a Capital Improvement Plan that addresses aging infrastructure. Costs that will be realized as a result of implementing a Capital Improvement Plan, combined with the increasing cost of providing service, will likely result in future rate increases. You can help minimize the increasing cost of water utility services by conserving water.

Water Conservation:

Listed below are tips on conserving water.

Save Water - in the Bathroom:

- Replace older toilets with high-efficiency models that use less water but still deliver good performance.
- Check your toilet for leaks. Put a few drops of food coloring in the tank and do not flush the toilet for 15 to 20 minutes. If the food coloring appears in the bowl without flushing, you have a leak. Toilet leaks can be inconsistent, so you may need to perform this test several times. (Leaking toilets are often the most commonly undetected cause for a high water bill.)
- Fix dripping faucets promptly.
- Take shorter showers. If you take a bath, fill the tub half full or less.
- Turn off the water while shaving, brushing your teeth, lathering in the shower, and shampooing or conditioning your hair.
- Install water-saving aerators on your bathroom faucets and water-saving showerheads that use 2.0 gallons per minute or less.

Save Water - Outdoors:

- Check outdoor water pipes and hoses for leaks.
- Water your lawn during the early morning hours to reduce evaporation.
- Add 2 to 4 inches of organic material, such as compost or bark mulch, around trees and plants to help retain moisture in the soil and discourage weed growth. Press mulch down around the drip line of each plant to form a slight depression which will help minimize water runoff.
- Adjust your lawn mower to a higher setting. Taller grass encourages growth of deeper root systems and shades the soil to reduce moisture loss.
- Winterize outdoor water lines and spigots when temperatures are expected to drop below freezing to prevent broken pipes.
- Use your water meter to check for hidden water leaks. Turn off all indoor and outdoor faucets and water-using appliances and check your water meter at 10 to 20 minute intervals. If it continues to turn or run, a leak probably exists and needs to be located.

Save Water - Washing Clothes:

- Replace your clothes washer with a water-saving model. When shopping for a washer, check the water requirements of various models and brands. Some use less water than others.
- Only run full loads in your washing machine or if you must wash a partial load, set your machine to use the minimum amount of water required.

Save Water – in the Kitchen:

- When washing dishes by hand, don't leave the water running.
- Scrape food from plates instead of rinsing them before washing.
- Wash fruits and vegetables in a bowl or basin using a vegetable brush instead of letting the water run.
- Don't use running water to thaw frozen foods. Thaw them overnight in the refrigerator or use the defrost setting on your microwave instead.
- If you have an energy efficient dishwasher, use it rather than washing dishes by hand. (Dishwashers with an "Energy Star" label are the most water efficient.)
- Run only full loads in your dishwasher.

Detected Contaminants

The following tables in this report contain scientific terms and measures that are explained below.

Abbreviations:

AL	Action Level
EPA	United States Environmental Protection Agency
MCLG	Maximum contaminant level goal
MCL	Maximum contaminant level
MRDL	Maximum residual disinfectant level
MRDLG	Maximum residual disinfectant level goal
NTU	Nephelometric Turbidity Units (a measure of turbidity)
pCi/L	Picocuries per Liter (a measure of radioactivity)
ppb (or µg/L)	Parts per Billion (or micrograms per liter, µg/L) (or one ounce in 7,350,000 gallons of water)
ppm (or mg/L)	Parts per Million (or milligrams per liter, mg/L) (or one ounce in 7,350 gallons of water)
PWS	Public Water System
TCEQ	Texas Commission on Environmental Quality

Definitions:

Action Level of AL:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Average or AVG:	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal or MCLG:	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.
Maximum Residual Disinfectant Level or 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.
Maximum Residual Disinfectant Level Goal or 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.
Turbidity:	A condition of water quality characterized by the presence of suspended solids and/or organic material.

Regulated Contaminants Detected – City of Galena Park (PWS 1010009)

Coliform Bacteria (Microbial Contaminant)

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	0	0	No	Naturally present in the environment.

Lead and Copper (Inorganic Contaminants) (Data presented in the table below is from the most recent testing done in accordance with TCEQ requirements.)

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/06/2013	1.3	1.3	0.0427	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/06/2013	0	15	3.87	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Residual Disinfectant Levels (Inorganic Contaminant)

Disinfectant Type	Average Level of Quarterly Data	Minimum Level Detected	Maximum Level Detected	MRDL	MRDLG	Unit	Violation	Likely Source
Chloramines	2.36	.05	3.9	4	4	ppm	No	Disinfectant used to control microbes

Volatile Organic Compounds

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2014	22	8.8 - 37.4	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2014	35	29.8 - 41.5	No goal for the total	80	ppb	No	By-product of drinking water disinfection.

Regulated Contaminants (Inorganic Contaminants) (Data presented in the table below is from the most recent testing done in accordance with TCEQ requirements.)

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics 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 cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.	01/13/2011	7	2.3 - 7	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	01/13/2011	0.248	0.079 - 0.248	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2014	200	0 - 200	200	200	ppb	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2014	0.33	0.31 - 0.33	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2014	0.46	0.39 - 0.46	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

(Data presented in the table below is from the most recent testing done in accordance with TCEQ requirements.)

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	05/12/2010	5	0 - 5	0	50	pCi/L*	No	Decay of natural and man-made deposits.

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

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2014	0.12	0.12 - 0.12	3	3	ppb	No	Runoff from herbicide used on row crops.

Unregulated Contaminants Detected – City of Galena Park (PWS 1010009)

Unregulated contaminants are those for which the 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 regulations are warranted.

Unregulated Contaminants – City of Galena Park

Type Contaminant	Contaminant	Average Level Detected	Range of Levels Detected	Units
Inorganics	Molybdenum, Total	1.98	1.93-2.02	µg/L
Inorganics	Strontium, Total	299.17	289-306	µg/L
Inorganics	Vanadium, Total	0.56	0.491-0.608	µg/L

Additional Information Provided by City of Houston

**Regulated Contaminates from City of Houston Source Water
Information provided by East Water Purification Plant (PWS 1010013)**

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2014	0.0386	0.0386 – 0.0386	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2014	0.24	0.24 – 0.24	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	2014	0.51	0.51 – 0.51	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2014	0.39	0.39 - 0.39	3	3	ppb	No	Runoff from herbicide used on row crops

Turbidity

Monthly (2014)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Monthly Turbidity Samples	186	168	186	180	186	180	186	186	180	186	180	186
# of samples above 0.3 NTU	0	0	0	0	0	0	0	0	0	0	0	0
Average Turbidity (NTU)	0.11	0.12	0.11	0.10	0.13	0.11	0.09	0.06	0.07	0.10	0.09	0.11
Max Turbidity Reading (NTU)	0.27	0.26	0.24	0.20	0.20	0.18	0.12	0.11	0.30	0.21	0.16	0.19

The lowest monthly percentage of samples less than 0.3 NTU was 100%.