

ANNUAL

WATER QUALITY REPORT

Water testing performed in 2008



EAST RIO HONDO
WATER SUPPLY CORPORATION



PWS ID#: TX0310096/TX0310031

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (956) 748-3633.

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 2008 through December 31, 2008. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Important Health Information

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. East Rio Hondo Water Supply Corporation 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 www.epa.gov/safewater/lead.

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

Source Water Assessment

The TCEQ (Texas Commission on Environmental Quality) has completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this consumer confidence report. For more information on source water assessments and protection efforts contact TCEQ Region 15 office at (956) 425-6010.

Where Does My Water Come From?

Depending on where you live in the East Rio Hondo Water Supply Corporation (ERHWSC) service area, you receive processed Rio Grande River water from one of three treatment facilities. For 27 years, ERHWSC has operated a treatment facility on Nelson Road south of FM 1561. This plant has been expanded to process 3.2 million gallons per day (MGD); its original capacity was 1.6 MGD. Water is pumped from the Rio Grande River and transferred to this plant by Cameron County Irrigation District Number Two (CCID2). Centrally located in Cameron County, the plant can deliver water to all locations in our service area, depending upon system demands. Members of the Arroyo City area receive water produced at a 0.6 MGD treatment plant located west of Arroyo City off FM 2925 or from the Nelson Road plant through an interconnect pipeline located on FM 1847. The Arroyo City plant is also supplied water by CCID2. Members of the Combes and North Harlingen areas may receive water from Harlingen Waterworks System (HWWS) via an interconnect or from ERHWSC's Nelson Road plant. Analyses for all three water sources are included in this report. Rio Grande water for the Rio Grande Valley is stored in both Amistad and Falcon reservoirs. These reservoirs fluctuate in level, depending on inflows from other states and from Mexico. Water quality varies depending on which area of the Rio Grande watershed the inflow originates.

LT2 Rule

The U.S. EPA has created the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) for the sole purpose of reducing illness linked with the contaminant *Cryptosporidium* and other disease-causing microorganisms in drinking water. The rule will bolster existing regulations and provide a higher level of protection of your drinking water supply.

We have monitored for *Cryptosporidium* oocysts in each of our source waters monthly since March 2008. During this time, it was found in two of our three raw untreated source waters at levels ranging from 0 to 0.47 oocysts/liter. *Cryptosporidium* is a microbial parasite that may be commonly found in surface water and may come from mammal feces in the watershed. The results of our monitoring indicated that there may be *Cryptosporidium* in the untreated raw water. Although our conventional treatment and filtration removes *Cryptosporidium*, it cannot guarantee 100 percent removal. It is important to note that these results are from our raw water source only and not our treated drinking water supply. For more information, contact U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the 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 can acquire naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 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 which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be 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 types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

You are invited to participate in our public forum and to voice your concerns about your drinking water. We meet the second Monday of each month, beginning at 7 p.m. at the East Rio Hondo Water Supply Corporation (ERHWSC) Main Office, 206 Industrial Parkway, Rio Hondo, Texas.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Veronica Medrano at (956) 748-3633.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the samples were taken.

REGULATED SUBSTANCES											
				East Rio Hondo Water Supply Corporation		Harlingen Water Works System		Arroyo Water Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2008	10	0	4	4-4	NA	NA	NA	NA	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2008	2	2	0.003	0.003-0.003	NA	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters ¹ (pCi/L)	2008	50	0	3.62	ND-5.8	6.8 ²	6.7-7.0 ²	6.4 ³	6.4-6.4 ³	No	Decay of natural and man-made deposits
Chloramines ⁴ (ppm)	2008	[4]	[4]	3.45	0.70-5.70	NA	NA	2.23	1.29-3.48	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2008	800	800	320	ND-320	NA	NA	NA	NA	No	Water additive used to control microbes
Chlorite (ppm)	2008	1	0.8	0.46	0.01-0.86	NA	NA	NA	NA	No	By-product of drinking water disinfection
Fluoride (ppm)	2008	4	4	0.38	0.29-0.45	0.45	0.44-0.45	0.26	0.26-0.26	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2008	60	NA	16	ND-24.8	NA	NA	31.2	31.2-31.2	No	By-product of drinking water disinfection
Nitrate (ppm)	2008	10	10	0.17	ND-0.4	0.10	0.06-0.13	0.43	0.43-0.43	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	28.6	21.4-37.3	NA	NA	17.1	17.1-17.1	No	By-product of drinking water chlorination
Total Organic Carbon (ppm)	2008	TT	NA	1.69	0.95-2.02	NA	NA	1.40	1.15-1.82	No	Naturally present in the environment
Turbidity ⁵ (NTU)	2008	TT	NA	0.34	0.04-0.34	0.3	0.3-0.3	0.30	0.04-0.30	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	100	NA	100	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	1.3	0.129	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2007	15	0	1.4	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

				East Rio Hondo Water Supply Corporation		Harlingen Water Works System		Arroyo Water Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2008	300	NA	182	152–224	162	152–173	172	172–172	No	Runoff/leaching from natural deposits
Sulfate (ppm)	2008	250	NA	225	139–277	259	254–263	300	300–300	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2008	1000	NA	715	643–784	742	701–784	823	823–823	No	Runoff/leaching from natural deposits
Zinc (ppm)	2008	5	NA	0.022	0.022–0.022	NA	NA	NA	NA	No	Runoff/leaching from natural deposits; Industrial wastes
pH (Units)	2008	6.5-8.5	NA	7.9	7.7–8.3	7.8	7.8–7.9	7.4	7.4–7.4	No	Naturally occurring; Measure of corrosivity of water

UNREGULATED AND OTHER SUBSTANCES⁶

				East Rio Hondo Water Supply Corporation		Harlingen Water Works System		Arroyo Water Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Bromodichloromethane (ppb)	2008	4.96	ND–12.21	10.18	8.17–12.21	12.2	12.2–12.2	12.2	12.2–12.2		By-product of drinking water disinfection
Bromoform (ppb)	2008	4.84	ND–11.92	11.11	10.31–11.92	4.66	4.66–4.66	4.66	4.66–4.66		By-product of drinking water disinfection
Chloroform (ppb)	2008	2.41	ND–5.49	4.02	2.54–5.49	9.81	9.81–9.81	9.81	9.81–9.81		By-product of drinking water disinfection
Chloromethane (ppb)	2008	NA	NA	NA	NA	0.65	0.65–0.65	0.65	0.65–0.65		By-product of drinking water disinfection
Dibromochloromethane (ppb)	2008	6.78	ND–16.47	15.83	15.18–16.47	8.73	8.73–8.73	8.73	8.73–8.73		By-product of drinking water disinfection
Hardness as Ca/Mg (ppm)	2008	227	117–288	275	274–276	302	302–302	302	302–302		Naturally occurring calcium and magnesium
HAAs–IDSE ⁷ (ppb)	2008	28.5	2.4–41.1	NA	NA	30.9	23.8–40.2	30.9	23.8–40.2		By-product of drinking water disinfection
TTHMs–IDSE ⁷ (ppb)	2008	34.1	13.3–67.1	NA	NA	38.1	25–50.5	38.1	25–50.5		By-product of drinking water disinfection
Total Alkalinity [as CaCO ₃] (ppm)	2008	85	48–107	107	106–107	106	106–106	106	106–106		Naturally occurring soluble mineral salts

¹The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

²Sampled in 2005.

³Sampled in 2006.

⁴If the average is over 4.0 ppm (mg/L), then it is a violation. Our average was at 3.45 ppm (mg/L).

⁵Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

⁶Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

⁷We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. The samples are not used for compliance and may have been collected under non-standard conditions. The U.S. EPA also requires the data to be reported here.

Definitions

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant

Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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