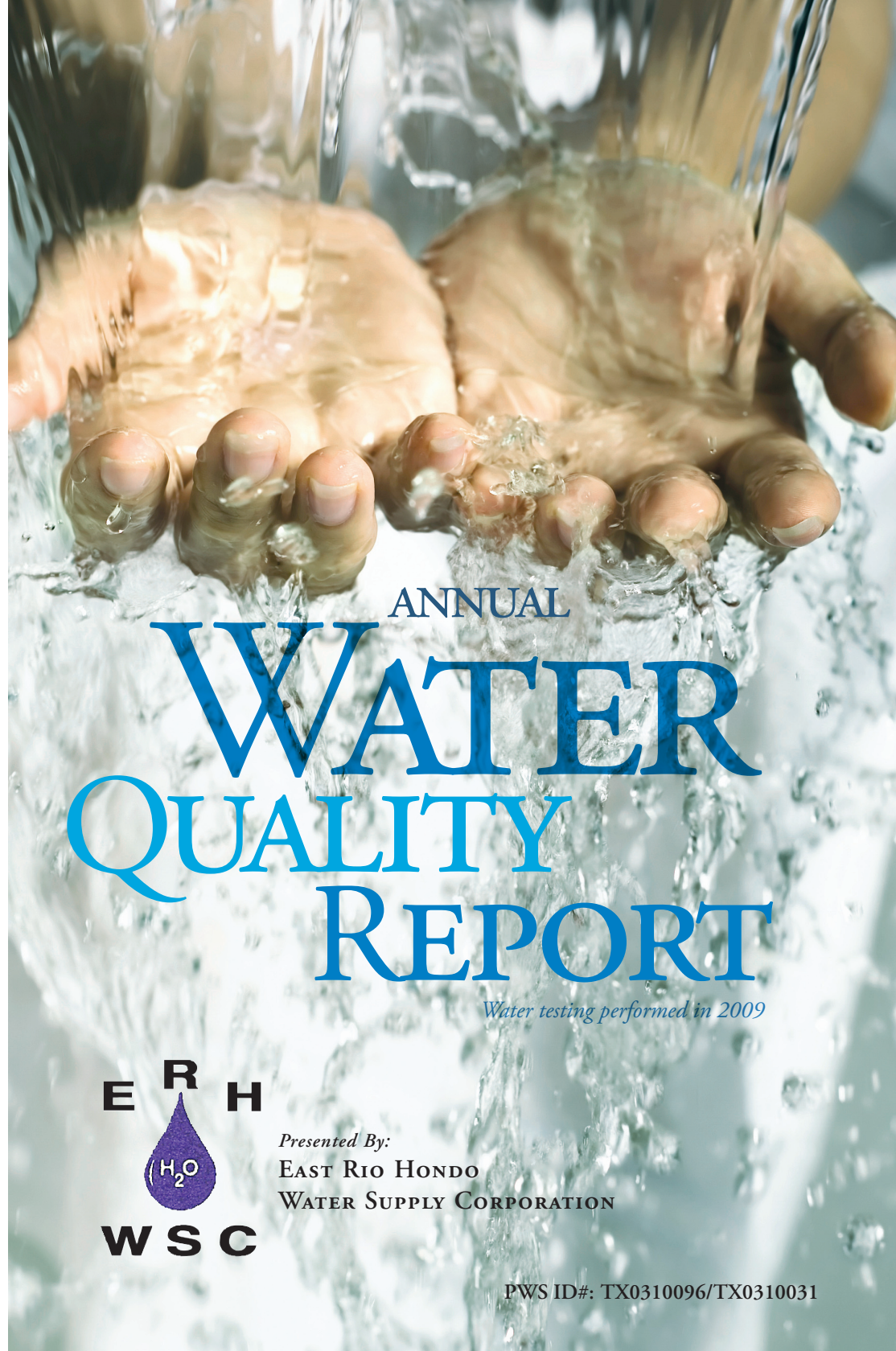


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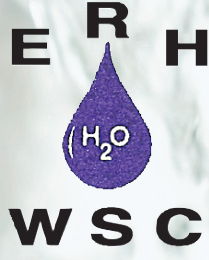
Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (956) 748-3633.

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TX000103



# ANNUAL WATER QUALITY REPORT

Water testing performed in 2009



Presented By:  
**EAST RIO HONDO  
WATER SUPPLY CORPORATION**

PWS ID#: TX0310096/TX0310031

**Y**ou are invited to participate in our public forum and 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.

## Community Participation

**D**epending 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 four treatment facilities. For 27 years, ERHWSC has operated the 3.2 million gallon per day (MGD) Nelson Road Treatment Plant south of FM 1561. In March of 2009 we put into production our new 8.0 MGD Martha Ann Simpson Treatment Plant. Water is pumped from the Rio Grande River and transferred to both plants by Cameron County Irrigation District Number Two (CCID2). These two plants can deliver water to all locations in our service area, depending upon system demands. Members of the Arroyo City area receive water produced from the 0.6 MGD Arroyo City Treatment Plant, located west of Arroyo City off of FM 2925, or from ERHWSC 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 Waterworks System (HWWWS) via an interconnect pipeline with Corporation or from Harlingen Waterworks System (HWWWS) via an interconnect pipeline with ERHWSC. Analyses for all four 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 in which area of the Rio Grande watershed the inflow originates.

## Where Does My Water Come From?

**T**o ensure that tap water is safe to drink, 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 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.

**Inorganic Contaminants**, such as salts and livestock operations, or wildlife;

**Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural runoff, and other sources.

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.

## Substances That Could Be in Water

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

## Questions?

**S**ource 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 on previous sample data. Any detection of these contaminants is shown in this consumer confidence report. For more information on source water assessments and protection efforts, contact the TCEQ Region 15 office at (956) 425-6010.

**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.

It is important to note that these results are from our Rio Grande River raw water source only and not from our treated drinking water supply. For more information, contact the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Sampling of our water source has shown the following:

- Cryptosporidium*: (0-2 IFA Count)
- Giardia lamblia: (0-1 IFA Count)

## Important Health Information

**O**nce again we are proud to present our annual water quality report. This report covers all testing performed between January 1 and December 31, 2009. The events of the past few years have presented many of us with challenges in an effort to continue delivering the best quality drinking water possible. There may be other hurdles in the future but know that we will always stand behind you and the drinking water we work diligently to provide.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.



**I**f 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 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 Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://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.

## Sampling Results

During the past year we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show 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 sample was taken.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	East Rio Hondo Water Supply Corporation		Hartigen Water Works System		Arroyo Water Plant		North Cameron Regional Water Supply Corporation		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Arsenic (ppb)	2009	10	NA	2.5	2.5-2.5	NA	NA	2	2-2	NA	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine (ppb)	2009	3	3	0.11	0.11-0.11	NA	NA	NA	NA	NA	NA	No	Runoff from herbicide used on row crops
Barium (ppm)	2009	2	2	0.109	0.109-0.109	NA	NA	0.11	0.11-0.11	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters <sup>1</sup> (pCi/L)	2009	50	0	6.4	6.4-6.4	NA	NA	NA	NA	NA	NA	No	Decay of natural and man-made deposits
Chloramines (ppm)	2009	[4]	[4]	2.80 <sup>2</sup>	0.6-4.9	NA	NA	2.4 <sup>3</sup>	0.50-5.3	2.24	0.31-4.20	No	Disinfectant additive used to neutralize microbes, bacteria, and viruses
Chlorine Dioxide (ppb)	2009	800	800	190	ND-190	NA	NA	NA	NA	NA	NA	No	Water additive used to control microbes
Chlorite (ppm)	2009	1	0.8	0.51	0.01-0.92	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Fluoride (ppm)	2009	4	4	0.44	0.40-0.44	0.44	0.42	0.42	0.42-0.42	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Halocetic Acids [HAA] (ppb)	2009	60	NA	19.4	18.0-22.6	NA	NA	15.1	15.1-15.1	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2009	10	10	0.17	0.09-0.17	0.22	0.22	0.04	0.04-0.04	0.05	0.05-0.05	No	Runoff from fertilizer use; Leaching from septic tanks, sewages; Erosion of natural deposits
Selenium (ppb)	2009	50	50	5.8	5.8-5.8	NA	NA	NA	NA	NA	NA	No	Runoff from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	46.8	37.7-51.7	NA	NA	20.7	20.7-20.7	NA	NA	No	By-product of drinking water chlorination
Total Organic Carbon (ppm)	2009	TT	NA	2.05	0.84-2.05	NA	NA	1.91	0.93-1.91	NA	NA	No	Naturally present in the environment
Turbidity <sup>4</sup> (NTU)	2009	TT	NA	0.31	0.02-0.31	0.30	0.30	0.29	0.04-0.29	NA	NA	No	Soil runoff
Turbidity <sup>5</sup> (Lower monthly percent of samples meeting limit)	2009	TT	NA	100	NA	100	100	100	NA	NA	NA	No	Soil runoff

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL MCLG	East Rio Hondo Water Supply Corporation		Arroyo Water Plant		VIOLATION	TYPICAL SOURCE
			AMOUNT DETECTED (90TH %TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %TILE)	AL/TOTAL SITES		
Copper (ppm)	2007	1.3	0.129 <sup>1</sup>	0/30	0.083 <sup>6</sup>	0/10 <sup>6</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2007	15	1.4 <sup>3</sup>	0/30	2 <sup>6</sup>	0/10 <sup>6</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits

### SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	MCLG	East Rio Hondo Water Supply Corporation		Hartigen Water Works System		Arroyo Water Plant		North Cameron Regional Water Supply Corporation		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppb)	2009	200	NA	42	42-42	NA	NA	58	58-58	NA	NA	No	Erosion of natural deposits; Residue from some surface water treatment processes
Chloride (ppm)	2009	250	NA	219	155-219	199	141-141	141	141-141	NA	NA	No	Runoff/leaching from natural deposits
Iron (ppb)	2009	300	NA	16	16-16	NA	19	19	19-19	NA	NA	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2009	50	NA	29	29-29	NA	64	64	64-64	NA	NA	No	Leaching from natural deposits
pH (Units)	2009	6.5-8.5	NA	7.4	7.2-7.4	7.4	7.3	7.3	7.3-7.3	NA	NA	No	Naturally occurring; Measure of corrosivity of water
Sulfate (ppm)	2009	250	NA	286	263-286	301	253	253	253-253	NA	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2009	1000	NA	895	732-895	847	719	719	719-719	NA	NA	No	Runoff/leaching from natural deposits
Zinc (ppm)	2009	5	NA	0.02	0.02-0.02	NA	0.02	0.02	0.02-0.02	NA	NA	No	Runoff/leaching from natural deposits; Industrial wastes

### UNREGULATED SUBSTANCES<sup>7</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	East Rio Hondo Water Supply Corporation		Hartigen Water Works System		Arroyo Water Plant		AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH			
Bromodichloromethane (ppb)	2009	9.4	4.3-13.5	NA	NA	NA	NA	10	10-10	NA	NA	By-product of drinking water disinfection
Bromoform (ppb)	2009	10.4	4.5-19.6	NA	NA	NA	NA	3.9	3.9-3.9	NA	NA	By-product of drinking water disinfection
Chloroform (ppb)	2009	5.4	3.5-6.9	NA	NA	NA	NA	6.4	6.4-6.4	NA	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2009	12.9	7.3-17.9	NA	NA	NA	NA	7.4	7.4-7.4	NA	NA	By-product of drinking water disinfection
Hardness as Ca/Mg (ppm)	2009	290	290-290	NA	NA	NA	NA	NA	NA	NA	NA	Naturally occurring calcium and magnesium
Sodium (ppm)	2009	122	122-122	NA	NA	NA	NA	125	125-125	NA	NA	Runoff/leaching from natural deposits
Total Alkalinity [as CaCO3] (ppm)	2009	110	93-110	99	88-110	NA	NA	NA	NA	NA	NA	Naturally occurring soluble mineral salts

## Definitions

**AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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 Unit):** 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.

<sup>1</sup> The 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

<sup>2</sup> The MRDL/MRDGL of 4.0 mg/L is based on a running annual average. After analyzing over 500 samples that include a range of locations representing the vast area of East Rio Hondo W.S.C.'s distribution coverage, our annual running average of Chloramine residual was 2.8 mg/L in 2009.

<sup>3</sup> The MRDL/MRDGL of 4.0 mg/L is based on a running annual average. After analyzing over 300 samples that include a range of locations representing the vast area of Arroyo City's distribution coverage, our annual running average of Chloramine residual was 2.4 mg/L in 2009.

<sup>4</sup> Turbidity is a measure of the degree to which the water loses its transparency due to the presence of suspended particulates. Turbidity in water is considered as a measurement of the quality of the water and is caused by sediments, algae, and runoff.

<sup>5</sup> Texas Commission on Environmental Quality has established a 3-year lead and copper sampling interval for East Rio Hondo W.S.C. The data reported is from the most recent sampling done in 2007. The next sampling is scheduled for the later part of 2010.

<sup>6</sup> Arroyo City water system was sampled for lead and copper in 2009.

<sup>7</sup> Unregulated 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 EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data, visit [www.epa.gov/safewater/ucm/ucem2/index.html](http://www.epa.gov/safewater/ucm/ucem2/index.html), or call the Safe Drinking Water Hotline at (800) 426-4791.