Annual WATER QUALITY REPORT

Reporting Year 2013

Presented By

East Rio Hondo Water Supply Corporation

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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.

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2013. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

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 the 3.2 million gallon per day (MGD) Nelson Road Treatment Plant south of FM 1561. In March 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 Water Treatment Plant located west of Arroyo City off 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 west of Combes and North Harlingen areas may receive water from ERHWSC, North Cameron Regional Water Supply Corporation, or Harlingen Waterworks System (HWWS) 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 on which area of the Rio Grande watershed the inflow originates.

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.

Important Health Information

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

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply 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.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Community Participation

You 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 6 pm at the East Rio Hondo Water Supply Corporation (ERHWSC) Main Office, 206 Industrial Parkway, Rio Hondo.

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 the TCEQ Region 15 office at (956) 425-6010.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Amanda Ramos 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. 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.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality.

REGULATED SUBSTANCES

				East Rio Hondo Water Supply Corporation		Harlingen Water Works System		Arroyo City Water Treatment Plant		North Cameron Regional Water Supply Corporation			
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	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Antimony (ppb)	2011	6	6	0.529	0.529–0.529	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder
Arsenic (ppb)	2013	10	NA	2.2	2.2–2.2	2.2	2.2–2.2	NA	NA	NA	NA	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2013	2	2	0.114	0.114–0.114	0.116	0.0989–0.116	NA	NA	0.00212[1]	0.00212–0.00212[1]	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/Photon Emitters[2] (pCi/L)	2013	50	0	6.4	6.4–6.4	NA	NA	NA	NA	NA	NA	No	Decay of natural and man-made deposits
Chloramines (ppm)	2013	[4]	[4]	0.5	0.5–5.8	NA	NA	3.0	0.5–7.0	NA	NA	No	Water additive used to control microbes
Chlorine (ppm)	2013	[4]	[4]	2.0	0.5–2.9	NA	NA	2.0	0.3–3.7	NA	NA	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2013	800	800	10.0	0.0–250	NA	NA	NA	NA	NA	NA	No	Water additive used to control microbes
Chlorite (ppm)	2013	1	0.8	0.05	0.05–0.92	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Chromium (ppb)	2011	100	100	NA	NA	NA	NA	10	10–10	0.281	0.281–0.281	No	Discharge from steel and pulp mills; Erosion of natural deposits
Combined Radium (pCi/L)	2011	5	0	NA	NA	NA	NA	NA	NA	1.0	1.0–1.0	No	Erosion of natural deposits
Di(2-ethylhexyl) Adipate (ppb)	2011	400	400	NA	NA	NA	NA	2.67	NA	NA	NA	No	Discharge from chemical factories
Fluoride (ppm)	2013	4	4	0.55	0.32–0.55	0.58	0.52–0.58	0.58[1]	NA[1]	0.15[1]	0.15–0.15[1]	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA]–Stage 1 (ppb)	2013	60	NA	NA	NA	NA	NA	31.6	31.6–31.6	NA	NA	No	By-product of drinking water disinfection
Haloacetic Acids [HAA]–Stage 2 (ppb)	2013	60	NA	17.7	ND–41.1	NA	NA	18.6	18.6–18.6	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2013	10	10	0.35	0.07–0.35	0.48	0.06–0.48	0.36	NA	0.09	0.09–0.09	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2013	1	1	0.01	0.01–0.01	NA	NA	NA	NA	0.09	0.09–0.09	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2011	50	50	NA	NA	NA	NA	NA	NA	1.67	1.67–1.67	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [Total Trihalomethanes]–Stage 1 (ppb)	2013	80	NA	NA	NA	NA	NA	37.5	37.5–37.5	NA	NA	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2013	80	NA	30.4	ND–50.6	NA	NA	24.5	24.5–24.5	NA	NA	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Coliform Bacteria (# positive samples)	2013	More than 1 positive monthly sample	0	1	NA	NA	NA	0	NA	NA	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2013	TT	NA	0.91	0.91–2.08	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment
Turbidity[3] (NTU)	2013	TT	NA	0.46	0.06–0.46	0.3	ND–0.3	NA	NA	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2013	TT=95% of samples <0.3 NTU	NA	98.7	NA	100	NA	NA	NA	NA	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	East Rio Hondo Water Supply Corporation AMOUNT DETECTED (90TH%TILE)	East Rio Hondo Water Supply Corporation SITES ABOVE AL/TOTAL SITES	Arroyo City Water Treatment Plant AMOUNT DETECTED (90TH%TILE)	Arroyo City Water Treatment Plant SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2013	1.3	1.3	0.0104	0/30	0.083[4]	0/10[4]	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2013	15	0	5.03	0/30	2.0[4]	0/10[4]	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	East Rio Hondo Water Supply Corporation AMOUNT DETECTED	East Rio Hondo Water Supply Corporation RANGE LOW-HIGH	Harlingen Water Works System AMOUNT DETECTED	Harlingen Water Works System RANGE LOW-HIGH	Arroyo City Water Treatment Plant AMOUNT DETECTED	Arroyo City Water Treatment Plant RANGE LOW-HIGH	North Cameron Regional Water Supply Corporation AMOUNT DETECTED	North Cameron Regional Water Supply Corporation RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum[5] (ppb)	2013	200	NA	232	232–232	87.2	36.7–87.2	127[1]	NA[1]	NA	NA	No	Erosion of natural deposits; Residual from some surface water treatment processes
Chloride (ppm)	2013	250	NA	217	159–217	190	150–190	NA	NA	267[1]	267–267[1]	No	Runoff/leaching from natural deposits
Copper (ppm)	2013	1.0	NA	0.0372	0.0372–0.0372	0.0028	0.0023–0.0028	NA	NA	0.0408[1]	0.0408–0.0408[1]	No	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	2011	4.0	NA	0.58	0.58–0.58	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Manganese (ppb)	2013	50	NA	1.6	1.6–1.6	NA	NA	10.2[1]	NA[1]	6.15[1]	6.15–6.15[1]	No	Leaching from natural deposits
pH (Units)	2013	6.5-8.5	NA	7.8	7.1–7.8	NA	NA	NA	NA	8.5[1]	8.5–8.5[1]	No	Naturally occurring
Sulfate (ppm)	2013	300	NA	353[6]	284–353	286	267–286	NA	NA	142[1]	142–142[1]	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2013	1,000	NA	956	776–956	851	701–851	NA	NA	647[1]	647–647[1]	No	Runoff/leaching from natural deposits
Zinc (ppm)	2011	5	NA	0.00506	0.00506–0.00506	NA	NA	NA	NA	0.0149	0.0149–0.0149	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED AND OTHER SUBSTANCES[7]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	East Rio Hondo Water Supply Corporation AMOUNT DETECTED	East Rio Hondo Water Supply Corporation RANGE LOW-HIGH	Harlingen Water Works System AMOUNT DETECTED	Harlingen Water Works System RANGE LOW-HIGH	Arroyo City Water Treatment Plant AMOUNT DETECTED	Arroyo City Water Treatment Plant RANGE LOW-HIGH	North Cameron Regional Water Supply Corporation AMOUNT DETECTED	North Cameron Regional Water Supply Corporation RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2013	17.1	ND–17.1	NA	NA	11.8	6.9–11.8	NA	NA	By-product of drinking water disinfection
Bromoform (ppb)	2013	16.9	ND–16.9	NA	NA	6.6	6.1–6.6	NA	NA	By-product of drinking water disinfection
Chloroform (ppb)	2013	15.6	ND–15.6	NA	NA	8	4.6–8	NA	NA	By-product of drinking water disinfection
Chloromethane (ppb)	2011	NA	NA	NA	NA	0.9	NA	NA	NA	NA
Dibromochloromethane (ppb)	2013	12.3	ND–12.3	NA	NA	11.1	6.9–11.1	NA	NA	By-product of drinking water disinfection
Hardness (ppm)	2013	213	213–213	NA	NA	NA	NA	117[1]	117–117[1]	Natural occuring soluble mineral salts
Magnesium (ppm)	2013	22.9	22.9–22.9	NA	NA	NA	NA	10.6[1]	10.6–10.6[1]	Natural occuring soluble mineral salts
Nickel (ppb)	2013	2.1	2.1–2.1	NA	NA	0.32[1]	NA	0.313[1]	0.313–0.313[1]	Erosion of natural deposits; discharge from metal factories
Sodium (ppm)	2013	170	144–170	158	122–158	136[1]	136–136[1]	189[1]	189–189[1]	Runoff/leaching from natural deposits
Total Alkalinity (ppm)	2013	102	75–102	NA	NA	NA	NA	NA	NA	Naturally occurring soluble mineral salts

[1] Sampled in 2011.
[2] The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.
[3] Turbidity 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.
[4] Sampled in 2009.
[5] Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
[6] Sulfate was detected at a level exceeding the established State Secondary MCL (SMCL), which was set to protect against unpleasant aesthetic effects such as color, taste, odor, and staining of plumbing fixtures (for example, tubs or sinks) or clothing during laundering. There are no adverse health effects expected with this exceedance.
[7] Unregulated contaminants are those for which 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 regulation is warranted.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

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.