# ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2015

*Presented By*

**East Rio Hondo Water Supply Corporation**

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

PWS ID#: TX0310096/TX0310031/0310152

## Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. 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 your homes and businesses. 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 of our water users.

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

## 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 p.m. at the East Rio Hondo Water Supply Corporation (ERHWSC) Main Office, 206 Industrial Parkway, Rio Hondo, Texas.

## 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.

## 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 that 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 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 the 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.

## 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.

## Source Water Assessment

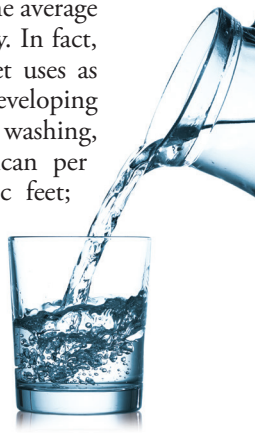
The TCEQ (Texas Commission on Environmental Quality) has completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any 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.

## UCMR3 Sampling

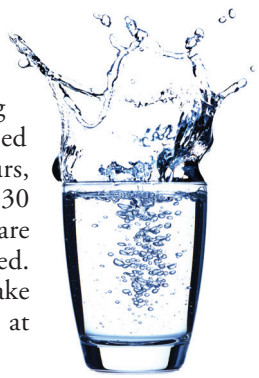
We participated in the 3rd stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking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

## What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef. According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet; twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish. To check out your own water footprint, go to goo.gl/QMoIXT.



## Lead in Home Plumbing



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 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.

## 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 two treatment facilities. Since 1982, ERHWSC has operated the 3.2 million gallon per day (MGD) Nelson Road Treatment Plant south of FM 1561. In March of 2009, the 8.0 MGD Martha Ann Simpson Treatment Plant came into operation. 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 ERHWSC through an interconnect pipeline located on FM 1847. Members of the west of Combes and North Harlingen areas may receive water from ERHWSC, North Cameron Regional Water Supply Corporation, North Alamo W.S.C, or Harlingen Waterworks System (HWWS) via an interconnect pipeline with ERHWSC. Analyses for all five water sources are included in this report. Rio Grande water for the Rio Grande Valley is stored in the 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.

| SOURCE OF THE WATER | LENGTH OF TIME USED | EXPLANATION OF USE | CONTACT |
|---|---|---|---|
| Harlingen Water Works System | 195 Days | Supplement North West of Distribution | Laboratory (956) 440-6565 (HWWS) |
| North Alamo Water Supply Corporation | 174 Days | Supplement North West of Distribution | NAWSC (956) 383-1618 (NAWSC) |
| Olmito Water Supply Corporation | 2 Days | Supplement South of Distribution | Mr. Victor Trevino (956) 350-4099 (OWSC) |

## 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 tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often 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

| | | | | 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 | VIOLATION | TYPICAL SOURCE |
| **Antimony** (ppb) | 2011 | 6 | 6 | NA | NA | 0.529 | 0.529–0.529 | NA | NA | No | Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder |
| **Arsenic** (ppb) | 2015 | 10 | NA | 2.6 | 2.4–2.6 | 2.06[1] | 2.06–2.06[1] | 2.4 | 2.4–2.4 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| **Barium** (ppm) | 2015 | 2 | 2 | 0.13 | 0.093–0.13 | 0.125[1] | 0.125–0.125[1] | 0.0021[2] | 0.0021–0.0021[2] | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| **Chloramines** (ppm) | 2015 | [4] | [4] | NA | NA | 3.1 | 0.5–6.7 | NA | NA | No | Water additive used to control microbes |
| **Chlorine** (ppm) | 2015 | [4] | [4] | NA | NA | 2.27 | 0.4–4.3 | NA | NA | No | Water additive used to control microbes |
| **Chlorine Dioxide** (ppb) | 2015 | [800] | [800] | NA | NA | NA | NA | NA | NA | No | Water additive used to control microbes |
| **Chlorite** (ppm) | 2014 | 1 | 0.8 | NA | NA | NA | NA | NA | NA | No | By-product of drinking water disinfection |
| **Chromium** (ppb) | 2011 | 100 | 100 | NA | NA | 1.9 | 1.9–1.9 | NA | NA | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| **Combined Radium** (pCi/L) | 2015 | 5 | 0 | NA | NA | NA | NA | NA | NA | No | Erosion of natural deposits |
| **Cyanide** (ppb) | 2014 | 200 | 200 | NA | NA | NA | NA | 80 | 80–80 | No | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories |
| **Di(2-ethylhexyl) Adipate** (ppb) | 2011 | 400 | 400 | NA | NA | 2.67 | 2.67–2.67 | NA | NA | No | Discharge from chemical factories |
| **Fluoride** (ppm) | 2015 | 4 | 4 | 0.52 | 0.35–0.52 | 0.58[1] | 0.58–0.58[1] | 0.16[2] | 0.16–0.16[2] | No | Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories |
| **Gross Beta Particle Activity**[4] (pCi/L) | 2015 | 50 | 50 | NA | NA | NA | NA | NA | NA | No | Naturally present in the environment |
| **Haloacetic Acids [HAAs]–Stage 1** (ppb) | 2015 | 60 | NA | NA | NA | NA | NA | NA | NA | No | By-product of drinking water disinfection |
| **Haloacetic Acids [HAAs]–Stage 2** (ppb) | 2015 | 60 | NA | NA | NA | 26.7 | 19.5–26.7 | NA | NA | No | By-product of drinking water disinfection |
| **Nickel** (ppb) | 2011 | 100 | 100 | NA | NA | 3.15 | 3.15–3.15 | NA | NA | No | Naturally present in the environment |
| **Nitrate** (ppm) | 2015 | 10 | 10 | 0.1 | 0.08–0.1 | 0.36 | 0.36–0.36 | 0.04[2] | 0.04–0.04[2] | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Nitrate-Nitrite** (ppm) | 2014 | 10 | 10 | NA | NA | NA | NA | NA | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Nitrite** (ppm) | 2014 | 1 | 1 | NA | NA | NA | NA | NA | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Selenium** (ppb) | 2015 | 50 | 50 | 5 | 5–6 | 7.31[1] | 7.31–7.31[1] | NA | NA | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| **Thallium Total** (ppb) | 2011 | 2 | 0.5 | NA | NA | 0.195 | 0.195–0.195 | NA | NA | No | Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories |

## REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **TTHMs [Total Trihalomethanes]–Stage 1** (ppb) | 2015 | 80 | NA | NA | NA | NA | NA | NA | NA | No | By-product of drinking water disinfection |
| **TTHMs [Total Trihalomethanes]–Stage 2** (ppb) | 2015 | 80 | NA | NA | NA | 61.8 | 33.8–33.8 | NA | NA | No | By-product of drinking water disinfection |
| **Total Organic Carbon** (ppm) | 2015 | TT | NA | NA | NA | NA | NA | NA | NA | No | Naturally present in the environment |
| **Turbidity**[6] (NTU) | 2015 | TT | NA | 0.3 | 0.18–0.3 | NA | NA | 0.28[2] | 0.08–0.28[2] | No | Soil runoff |
| **Turbidity** (Lowest monthly percent of samples meeting limit) | 2015 | TT = 95% of samples < or = 0.3 NTU | NA | 100 | NA | NA | NA | 100[2] | NA[2] | No | Soil runoff |

## REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | Olmito Water Supply Corporation AMOUNT DETECTED | Olmito Water Supply Corporation RANGE LOW-HIGH | North Alamo Water Supply Corporation AMOUNT DETECTED | North Alamo Water Supply Corporation RANGE LOW-HIGH | East Rio Hondo Water Supply Corporation AMOUNT DETECTED | East Rio Hondo Water Supply Corporation RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Antimony** (ppb) | 2011 | 6 | 6 | NA | NA | NA | NA | NA | NA | No | Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder |
| **Arsenic** (ppb) | 2015 | 10 | NA | NA | NA | NA | NA | 2.4 | 2.4–2.4 | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| **Barium** (ppm) | 2015 | 2 | 2 | 0.188 | 0.188–0.188 | NA | NA | 0.156 | 0.156–0.156 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| **Chloramines** (ppm) | 2015 | [4] | [4] | NA | NA | NA | NA | 2.95 | 0.5–6.0 | No | Water additive used to control microbes |
| **Chlorine** (ppm) | 2015 | [4] | [4] | NA | NA | NA | NA | 1.52 | 0.2–3.9 | No | Water additive used to control microbes |
| **Chlorine Dioxide** (ppb) | 2015 | [800] | [800] | NA | NA | NA | NA | 0.1 | 0.0–19 | No | Water additive used to control microbes |
| **Chlorite** (ppm) | 2014 | 1 | 0.8 | 0.0108 | 0.0108–0.0108 | NA | NA | 0.88[3] | 0.02–0.88[3] | No | By-product of drinking water disinfection |
| **Chromium** (ppb) | 2011 | 100 | 100 | NA | NA | NA | NA | NA | NA | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| **Combined Radium** (pCi/L) | 2015 | 5 | 0 | NA | NA | NA | NA | 1.5 | 1.5–1.5 | No | Erosion of natural deposits |
| **Cyanide** (ppb) | 2014 | 200 | 200 | 110[3] | 110–110[3] | NA | NA | 100[3] | 100–100[3] | No | Discharge from steel/metal factories; Discharge from plastic and fertilizer factories |
| **Di(2-ethylhexyl) Adipate** (ppb) | 2011 | 400 | 400 | NA | NA | NA | NA | NA | NA | No | Discharge from chemical factories |
| **Fluoride** (ppm) | 2015 | 4 | 4 | 0.4 | 0.38–0.4 | NA | NA | 0.42 | 0.42–0.42 | No | Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories |
| **Gross Beta Particle Activity**[4] (pCi/L) | 2015 | 50 | 50 | NA | NA | NA | NA | 8.7 | 8.7–8.7 | No | Naturally present in the environment |
| **Haloacetic Acids [HAAs]–Stage 1** (ppb) | 2015 | 60 | NA | 28.9 | 15.9–28.9 | NA | NA | NA | NA | No | By-product of drinking water disinfection |
| **Haloacetic Acids [HAAs]–Stage 2** (ppb) | 2015 | 60 | NA | NA | NA | NA | NA | 31.3 | 4.0–31.3 | No | By-product of drinking water disinfection |
| **Nickel** (ppb) | 2011 | 100 | 100 | NA | NA | NA | NA | 2.5[3] | 2.5–2.5[3] | No | Naturally present in the environment |

## REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | Olmito Water Supply Corporation AMOUNT DETECTED | Olmito Water Supply Corporation RANGE LOW-HIGH | North Alamo Water Supply Corporation AMOUNT DETECTED | North Alamo Water Supply Corporation RANGE LOW-HIGH | East Rio Hondo Water Supply Corporation AMOUNT DETECTED | East Rio Hondo Water Supply Corporation RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Nitrate** (ppm) | 2015 | 10 | 10 | 0.28 | 0.28–0.28 | NA | NA | 0.19 | 0.19–0.19 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Nitrate-Nitrite** (ppm) | 2014 | 10 | 10 | NA | NA | NA | NA | 0.17 | 0.04–0.17 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Nitrite** (ppm) | 2014 | 1 | 1 | NA | NA | NA | NA | 0.01 | 0.01–0.01 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| **Selenium** (ppb) | 2015 | 50 | 50 | 3.3 | 3.3–3.3 | NA | NA | 4.9 | 4.9–4.9 | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| **Thallium Total** (ppb) | 2011 | 2 | 0.5 | NA | NA | NA | NA | NA | NA | No | Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories |
| **TTHMs [Total Trihalomethanes]–Stage 1** (ppb) | 2015 | 80 | NA | 70.8 | 41.6–70.8 | NA | NA | NA | NA | No | By-product of drinking water disinfection |
| **TTHMs [Total Trihalomethanes]–Stage 2** (ppb) | 2015 | 80 | NA | NA | NA | NA | NA | 121.0[5] | 14–121.0[5] | No | By-product of drinking water disinfection |
| **Total Organic Carbon** (ppm) | 2015 | TT | NA | NA | NA | NA | NA | 4.27 | 3.02–4.27 | No | Naturally present in the environment |
| **Turbidity**[6] (NTU) | 2015 | TT | NA | 0.35 | 0.25–0.35 | 0.29 | 0.09–0.29 | 0.29 | 0.12–0.29 | No | Soil runoff |
| **Turbidity** (Lowest monthly percent of samples meeting limit) | 2015 | TT = 95% of samples < or = 0.3 NTU | 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 | Arroyo City Water Treatment Plant AMOUNT DETECTED (90TH%TILE) | Arroyo City Water Treatment Plant SITES ABOVE AL/ TOTAL SITES | Olmito Water Supply Corporation AMOUNT DETECTED (90TH%TILE) | Olmito Water Supply Corporation SITES ABOVE AL/ TOTAL SITES | East Rio Hondo Water Supply Corporation AMOUNT DETECTED (90TH%TILE) | East Rio Hondo Water Supply Corporation SITES ABOVE AL/ TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Copper** (ppm) | 2014 | 1.3 | 1.3 | 0.044 | 0/10 | 0.0785[7] | 1/20[7] | 0.0104[7] | 0/30[7] | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| **Lead** (ppb) | 2014 | 15 | 0 | Less than detection limit | 0/10 | 1.39[7] | 0/20[7] | 5.03[7] | 0/30[7] | No | Corrosion of household plumbing systems; Erosion of natural deposits |

## SECONDARY SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | SMCL | MCLG | 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 | East Rio Hondo Water Supply Corporation AMOUNT DETECTED | East Rio Hondo Water Supply Corporation RANGE LOW-HIGH | EXCEEDANCE | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** (ppb) | 2011 | 200 | NA | NA | NA | 127 | 127–127 | NA | NA | 76.6[3] | 76.6–76.6[3] | No | Erosion of natural deposits; Residual from some surface water treatment processes |
| **Chloride** (ppm) | 2011 | 300 | NA | NA | NA | 238 | 238–238 | 264[2] | 264–264[2] | 217[3] | 217–217[3] | No | Runoff/leaching from natural deposits |
| **Copper** (ppm) | 2015 | 1.0 | NA | NA | NA | NA | NA | NA | NA | 0.054 | 0.054–0.054 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| **Iron** (ppb) | 2014 | 300 | NA | NA | NA | NA | NA | 10 | 10–10 | 35[3] | 35–35[3] | No | Leaching from natural deposits; Industrial wastes |

## SECONDARY SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | SMCL | MCLG | 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 | East Rio Hondo Water Supply Corporation AMOUNT DETECTED | East Rio Hondo Water Supply Corporation RANGE LOW-HIGH | EXCEEDANCE | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Manganese** (ppb) | 2014 | 50 | NA | 60[3] | 40–60[3] | 10.2[1] | 10.2–10.2[1] | 4.9 | 4.9–4.9 | 1.2[3] | 1.2–1.2[3] | No | Leaching from natural deposits |
| **pH** (Units) | 2015 | 6.5–8.5 | NA | 7.1 | 7.0–7.0 | 7.2[1] | 7.2–7.2[1] | 8.5[1] | 8.5–8.5[1] | 7.9[1] | 7.9–7.9[1] | No | Naturally occurring |
| **Sulfate** (ppm) | 2015 | 300 | NA | 380 | 376–380 | 257[1] | 257–257[1] | 136[2] | 136–136[2] | 361 | 361–361 | Yes[8] | Runoff/leaching from natural deposits; Industrial wastes |
| **Total Dissolved Solids [TDS]** (ppm) | 2015 | 500 | NA | 1,060 | 1,007–1,060 | 773[1] | 773–773[1] | 674[2] | 674–674[2] | 969 | 969–969 | Yes[9] | Runoff/leaching from natural deposits |
| **Zinc** (ppm) | 2011 | 5 | NA | NA | NA | 0.00000506 | 0.00000506–0.00000506 | NA | NA | 0.0075[3] | 0.0075–0.0075[3] | No | Runoff/leaching from natural deposits; Industrial wastes |

## UNREGULATED SUBSTANCES[11]

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | 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 | East Rio Hondo Water Supply Corporation AMOUNT DETECTED | East Rio Hondo Water Supply Corporation RANGE LOW-HIGH | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|
| **Bromochloromethane** (ppb) | 2015 | 13.1 | 9.6–13.1 | NA | NA | 20.7 | 2.3–20.7 | By-product of drinking water disinfection |
| **Bromoform** (ppb) | 2015 | 26.6 | 8.1–26.6 | NA | NA | 54.4 | 5.2–54.4 | By-product of drinking water disinfection |
| **Chloroform** (ppb) | 2015 | 5.8 | 2.9–5.8 | NA | NA | 5.4 | 1.0–5.4 | By-product of drinking water disinfection |
| **Chloromethane** (ppb) | 2011 | 0.9 | 0.9–0.9 | NA | NA | NA | NA | By-product of drinking water disinfection |
| **Dibromochloromethane** (ppb) | 2015 | 22.7 | 9.8–22.7 | NA | NA | 40.9 | 5.3–40.9 | By-product of drinking water disinfection |
| **Sodium** (ppm) | 2014 | 136 | 136–136[1] | 191 | 191–191 | 188[3] | 188–188[3] | Runoff/leaching from natural deposits |

## OTHER SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | 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 | East Rio Hondo Water Supply Corporation AMOUNT DETECTED | East Rio Hondo Water Supply Corporation RANGE LOW-HIGH | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|---|
| **Alkalinity** (ppm) | 2011 | 63 | 63–63 | 55[2] | 55–55[2] | NA | NA | Naturally present in the environment |
| **Alkalinity Bicarbonate** (ppm) | 2011 | 63 | 63–63 | NA | NA | 120[3] | 120–120[3] | Corrosion of carbonate rock such as limestone |
| **Bromochloroacetic Acid** (ppb) | 2015 | 12.3 | 12.3–12.3 | NA | NA | 13.4 | 1.0–13.4 | By-product of drinking water disinfection |
| **Calcium** (ppm) | 2011 | 74.3 | 74.3–74.3 | 25.4[2] | 25.4–25.4[2] | 85.8[3] | 85.8–85.8[3] | Naturally present in the environment |
| **Dibromoacetic Acid** (ppb) | 2015 | 18 | 9.7–18 | NA | NA | 20.3 | 1.0–20.3 | By-product of drinking water disinfection |
| **Dichloroacetic Acid** (ppb) | 2015 | 8.6 | 6.8–8.6 | NA | NA | 9.3 | 1–9.3 | By-product of drinking water disinfection |
| **Hardness [Calcium & Magnesium]** (ppm) | 2011 | 284 | 284–284 | NA | NA | 394[10] | 106–394[10] | Naturally present in the environment |
| **Hardness, Total [as CACO3]** (ppm) | 2014 | NA | NA | 106 | 106–106 | 346[3] | 346–346[3] | Naturally present in the environment |
| **Hardness, Total** (ppm) | 2009 | 259 | 259–259 | NA | NA | NA | NA | Naturally present in the environment |
| **Heptanal** (ppm) | 2005 | 1.23 | 1.23–1.23 | NA | NA | NA | NA | Runoff/leaching from natural deposits; Industrial wastes |
| **Magnesium** (ppm) | 2011 | 24 | 24–24 | NA | NA | 32.1[3] | 32.1–32.1[3] | Naturally present in the environment |
| **Potassium** (ppm) | 2014 | NA | NA | 1.63 | 1.63–1.63 | 6.83[3] | 6.83–6.83[3] | Naturally present in the environment |
| **Trichloroacetic Acid** (ppb) | 2015 | 1.9 | 1.4–1.9 | NA | NA | 2.4 | 1–2.4 | By-product of drinking water disinfection |

[1] Sampled in 2011.
[2] Sampled in 2014.
[3] Sampled in 2015.
[4] 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.
[5] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their livers, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
[6] 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.
[7] Sampled in 2013.
[8] 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, sinks, or clothing during laundering). There are no adverse health effects expected with this exceedance.
[9] Elevated levels of total dissolved solids can result in your water having a bitter or salty taste; creating encrustations, films, or precipitates on fixtures; corrosion of fixtures, and reduced efficiency of water filters and equipment.
[10] Sampled in 2012.
[11] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of monitoring unregulated contaminants is to assist the 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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for Stage 2 TTHMs and HAAs are reported as LRAAs.

**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.