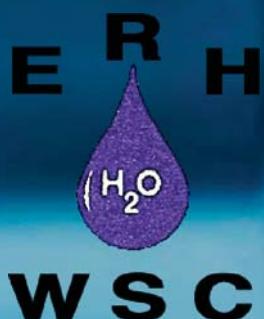


# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018



*Presented By*

**East Rio Hondo Water  
Supply Corporation**

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

PWS ID#: TX0310096/TX0310031/0310152

## Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. 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 should you ever have any questions or concerns about your water.

## 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. ERHWSC is responsible for providing high-quality drinking water, but we cannot control the variety of materials used in private plumbing components. If you have lead material in your private plumbing, 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



## Emergency/Supplemental Water Sources

WATER SOURCE	LENGTH OF TIME USED	EXPLANATION OF USE	CONTACT
<b>Harlingen Water Works</b>	365 Days	Supplement entire distribution system	HWWS (956) 440-6565
<b>Olmito WSC</b>	365 Days	Supplement southwest of distribution	OWSC (956) 350-4099
<b>North Cameron Regional WSC</b>	365 Days	Supplement north/west of distribution	ERHWSC (956) 748-3633
<b>East Rio Hondo WSC</b>	365 Days	Wholesale provider for Arroyo City	ERHWSC (956) 748-3633

## Cryptosporidium and 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; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

In 2017 ERHWSC began operating an Ultraviolet Disinfection (UV) System at the Martha Ann Simpson Water Treatment Plant on FM 510. This system is capable of neutralizing cryptosporidium and adds an extra layer of disinfection to the traditional treatment process to better safeguard our customers. In 2018 ERHWSC also completed the 2nd stage of the United States Environmental Protection Agency (USEPA) required LT2 Source Water Monitoring sampling that included cryptosporidium monitoring. Although this 2 year monitoring program resulted in sample results compliant with EPA's Source Water parameters, official USEPA sample results were not available as of date of this report.



## Water Conservation Tips

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. The ERHWSC Board of Directors typically meet the 2nd Monday of each month at 6 p.m. at the East Rio Hondo Water Supply Corporation (ERHWSC) main office at 206 Industrial Parkway, Rio Hondo, Texas.



## Water Loss Audit

ERHWSC is required by the Texas Water Development Board to conduct an Annual Water Loss Audit. During 2018 ERHWSC reported an annual water loss of 11.7% or 101.2 million gallons of total water produced. Water loss originates from water theft, water line breaks & leakage, as well as flushing mains.

## Where Does My Water Come From?

Depending on where you live in the East Rio Hondo Water Supply Corporation (ERHWSC) service area, you may receive processed Rio Grande River water from one or both of the 2 Surface Water Treatment plants operated by ERHWSC. ERHWSC has operated the 3.2 million gallon per day (MGD) Nelson Road Surface Water Treatment Plant since 1982 and began operating the 8.0 MGD Martha A. Simpson Surface Water Treatment Plant on F.M. 510 in 2009. Raw (untreated) water is pumped from the Rio Grande River by Cameron County Irrigation District #2 to both of the surface water treatment facilities. After treatment both of the plants have the capability to deliver potable water to most locations in the ERHWSC service area.

Members of the Arroyo City area receive water produced by ERHWSC through an interconnecting pipeline located on FM 1847. Members in the north and northwest areas of the system may receive water from the North Cameron Regional Water Supply Corporation Reverse Osmosis Groundwater Plant or from Harlingen Water Works System via an interconnecting pipeline and pump station with ERHWSC. Members from the southwest area may receive water from Olmito Water Supply Corporation via an interconnecting pipeline. Analyses for all five water sources are included in this report. Rio Grande water for the Rio Grande Valley is stored in both the Amistad and Falcon Reservoirs. These reservoirs fluctuate in level depending on inflows from other states and Mexico. Water quality varies depending on which area of the Rio Grande watershed the flow originates from.

## 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.

## QUESTIONS?

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

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. The sample results listed on this report reflect only the substances that were at a detectable level. A full list of all constituents that were sampled are available on the Texas Commission on Environmental Quality's (TCEQ) Drinking Water Watch website located at <https://dww2.tceq.texas.gov/DWW/W/>. Our goal is always to produce safe water at or below TCEQ & USEPA maximum contaminant levels (MCL).

The state recommends monitoring 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.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements.

### REGULATED SUBSTANCES

		East Rio Hondo Water Supply Corporation			East Rio Hondo WSC-Arroyo City		
Substance (unit of measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation Range Low-High	Typical Source
Arsenic (ppb)	2017	10	0	NA	NA	NA	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Atrazine (ppb)	2018	3	3	NA	NA	NA	No
Barium (ppm)	2018	2	2	0.118	0.118-0.118	NA	Runoff from herbicide used on row crops
Chloramines (ppm)	2018	[4] <sup>3</sup>	[4]	4.9	0.5-4.9	6.74	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2018	[4] <sup>3</sup>	[4]	2.8	0.3-2.8	5.9	Water additive used to control microbes
Chlorine Dioxide (ppb)	2018	[800]	[800]	280	ND-280	NA	Water additive used to control microbes
Chlorite (ppm)	2018	1	0.8	0.99	0.02-0.99	NA	By-product of drinking water disinfection
Combined Radium (pCi/L)	2015	5	0	1.5	1.5-1.5	NA	Erosion of natural deposits
Cyanide (ppb)	2017	200	200	NA	NA	NA	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Di(2-ethylhexyl) Phthalate (ppb)	2018	6	0	NA	NA	NA	Discharge from rubber and chemical factories
Fluoride (ppm)	2018	4	4	0.34	0.34-0.34	NA	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Beta Particle Activity (pCi/L)	2018	50 <sup>4</sup>	0	6.8	6.8-6.8	NA	Naturally occurring
Haloacetic Acids [HAA] (ppb)	2018	60	NA	21.4	1.2-21.4	24.6	By-product of drinking water disinfection
Nitrate (ppm)	2018	10	10	0.37	0.06-0.37	0.35	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2018	1	1	0.954	ND-0.954	0.69	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2018	50	50	NA	NA	NA	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
THMs [Total Trihalomethanes] (ppb)	2018	80	NA	<4.0-48.1	42.9	27.9-42.9	By-product of drinking water disinfection
Total Organic Carbon <sup>5</sup> (ppm)	2018	TT	NA	4.24	2.84-4.24	NA	Naturally present in the environment
Turbidity <sup>6</sup> (NTU)	2018	TT	NA	0.77	0.12-0.77	NA	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT = 95% of samples meet the limit	NA	97	NA	NA	Soil runoff
Uranium (ppb)	2017	30	0	NA	NA	NA	Erosion of natural deposits
Xylenes (ppm)	2018	10	10	NA	NA	NA	Discharge from petroleum factories; Discharge from chemical factories

## REGULATED SUBSTANCES

North Cameron Regional Water Supply Corporation										Omlito Water Supply Corporation			Hartlingen Water Works System		
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)	2017	10	0	3.1	3.1–3.1	NA	NA	2.6 <sup>c</sup>	2.1–2.6 <sup>c</sup>	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes				
Atrazine (ppb)	2018	3	3	NA	NA	NA	NA	0.13	0.13–0.13	No	Runoff from herbicide used on row crops				
Barium (ppm)	2018	2	2	0.0022 <sup>2</sup>	0.0022–0.0022 <sup>2</sup>	0.108	0.108–0.108	0.0974	0.0929–0.0974	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits				
Chloramines (ppm)	2018	[4] <sup>b</sup>	[4]	NA	NA	NA	NA	NA	NA	No	Water additive used to control microbes				
Chlorine (ppm)	2018	[4] <sup>b</sup>	[4]	NA	NA	NA	NA	NA	NA	No	Water additive used to control microbes				
Chlorine Dioxide (ppb)	2018	[800]	[800]	NA	NA	NA	NA	NA	NA	No	Water additive used to control microbes				
Chlorite (ppm)	2018	1	0.8	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection				
Combined Radium (pCi/L)	2015	5	0	NA	NA	NA	NA	NA	NA	No	Erosion of natural deposits				
Cyanide (ppb)	2017	200	200	70	70–70	NA	NA	90 <sup>l</sup>	80–90 <sup>l</sup>	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories				
Di(2-ethylhexyl) Phthalate (ppb)	2018	6	0	NA	NA	NA	NA	1.1	1.1–1.1	No	Discharge from rubber and chemical factories				
Fluoride (ppm)	2018	4	4	0.18 <sup>2</sup>	0.18–0.18 <sup>2</sup>	0.42	0.42–0.42	0.63	0.48–0.63	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories				
Gross Beta Particle Activity (pCi/L)	2018	50 <sup>e</sup>	0	NA	NA	NA	NA	7.0 <sup>2</sup>	5.2–7.0 <sup>2</sup>	No	Naturally occurring				
Haloacetic Acids [HAA] (ppb)	2018	60	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection				
Nitrate (ppm)	2018	10	10	0.11	0.11–0.11	0.30	0.30–0.30	0.37	0.07–0.37	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits				
Nitrite (ppm)	2018	1	1	0.020	0.002–0.020	NA	NA	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits				
Selenium (ppb)	2018	50	50	NA	NA	NA	NA	4.4	3.1–4.4	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines				
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection				
Total Organic Carbon <sup>f</sup> (ppm)	2018	TT	NA	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment				
Turbidity <sup>g</sup> (NTU)	2018	TT	NA	0.34	0.08–0.34	0.45	0.15–0.45	0.38	0.12–0.38	No	Soil runoff				
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT = 95% of samples meet the limit	NA	100	NA	99	NA	99.4	NA	No	Soil runoff				
Uranium (ppb)	2017	30	0	NA	NA	NA	NA	2.3	1.2–2.3	No	Erosion of natural deposits				
Xylenes (ppm)	2018	10	10	NA	NA	0.0008	0.0008–0.0008	NA	NA	No	Discharge from petroleum factories; Discharge from chemical factories				

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

		East Rio Hondo Water Supply Corporation				East Rio Hondo WSC-Arroyo City			
Substance (Unit of Measure)	Year Sampled	AL	MCLG	Amount Detected (90th %ile)	Sites Above AL/ Total Sites	Amount Detected (90th %ile)	Sites Above AL/ Total Sites	Violation	Typical Source
Copper (ppm)	2016	1.3	1.3	0.044	0/30	0.040 <sup>2</sup>	0/10 <sup>2</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2016	15	0	1.1	0/30	ND <sup>2</sup>	0/10 <sup>2</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>SECONDARY SUBSTANCES</b>									
Substance (Unit of Measure)	Year Sampled	SCL	MCLG	Amount Detected	Range Low-High	East Rio Hondo Water Supply Corporation	East Rio Hondo WSC-Arroyo City	North Cameron Regional Water Supply Corporation	Olmito Water Supply Corporation
Aluminum (ppb)	2018	200	NA	76.2	76.2–76.2	NA	NA	NA	34.4
Chloride (ppm)	2018	300	NA	172	172–172	NA	NA	272 <sup>2</sup>	34.4–34.4
Copper (ppm)	2017	1.0	NA	0.0331	0.0331–0.0331	NA	NA	0.0247	0.0247–0.0247
Iron (ppb)	2018	300	NA	101	101–101	NA	NA	NA	0.056–0.056
Manganese (ppb)	2018	50	NA	2.9	2.9–2.9	NA	NA	3.5 <sup>2</sup>	14.5–14.5
pH (Units)	2018	>7.0	NA	8.87	7.11–8.87	8.09	6.84–8.09	8.96	7.54–8.96
Sulfate (ppm)	2018	300	NA	294	294–294	NA	NA	126 <sup>2</sup>	126–126 <sup>2</sup>
Total Dissolved Solids [TDS] (ppm)	2018	1,000	NA	792	792–792	NA	NA	904	377–904
Zinc (ppm)	2018	5	NA	0.0147	0.0147–0.0147	NA	NA	0.0218 <sup>2</sup>	0.0218 <sup>2</sup>
<b>UNREGULATED AND OTHER SUBSTANCES<sup>7</sup></b>					East Rio Hondo Water Supply Corporation	East Rio Hondo WSC-Arroyo City	North Cameron Regional Water Supply Corporation	Olmito Water Supply Corporation	TYPICAL SOURCE
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
Alkalinity [Bicarbonate] (ppm)	2018	108	108–108	NA	NA	81 <sup>2</sup>	81–81 <sup>2</sup>	135	135–135
Alkalinity [Total] (ppm)	2018	88	88–88	NA	NA	110	60–110	111	Naturally present in the environment
Bromochloroacetic Acid (ppb)	2018	10.7	<1.0–10.7	11.0	6.9–11.0	NA	NA	18.7	By-product of drinking water disinfection
Bromodichloromethane (ppb)	2018	9.8	<1.0–9.8	9.9	6.6–9.9	NA	NA	NA	By-product of drinking water disinfection

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

Substance (Unit of Measure)	East Rio Hondo Water Supply Corporation	East Rio Hondo WSC-Arroyo City	North Cameron Regional Water Supply Corporation	Olmoto Water Supply Corporation				
Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Typical Source
Bromoform (ppb)	2018	19.9	<1.0–19.9	22.0	9.0–22.0	NA	NA	By-product of drinking water disinfection
Calcium (ppm)	2018	71.1	71.1–71.1	NA	NA	26.6 <sup>2</sup>	26.6–26.6 <sup>2</sup>	Naturally present in the environment
Chloroform (ppb)	2018	4.8	<1.0–4.8	4.6	3.2–4.6	NA	NA	By-product of drinking water disinfection
Dibromoacetic Acid (ppb)	2018	13.1	<1.0–13.1	13.1	5.9–13.1	NA	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2017	16.4	<1.0–16.4	17.7 <sup>1</sup>	7.1–17.7 <sup>1</sup>	NA	NA	By-product of drinking water disinfection
Dichloroacetic Acid (ppb)	2018	9.8	<1.0–9.8	8.0	4.1–8.0	NA	NA	By-product of drinking water disinfection
Hardness Total (as CaCO <sub>3</sub> ) (ppm)	2018	278	278–278	NA	NA	160	60–160	Naturally present in the environment
Hexadecanoic Acid (ppb)	2016	5.4	5.4–5.4	NA	NA	NA	NA	Naturally present in the environment
Magnesium (ppm)	2018	24.3	24.3–24.3	NA	NA	9.88 <sup>2</sup>	9.88–9.88 <sup>2</sup>	Naturally present in the environment
Monochloroacetic Acid (ppb)	2018	NA	NA	2.0	<1.0–2.0	NA	NA	By-product of drinking water disinfection
Octadecanoic Acid (ppb)	2016	3.7	3.7–3.7	NA	NA	NA	NA	Naturally found in the environment
Nickel (ppm)	2018	0.0021	0.0021–0.0021	NA	NA	NA	0.0024	Naturally present in the environment
Potassium (ppm)	2018	6.64	6.64–6.64	NA	NA	1.79 <sup>2</sup>	1.79–1.79 <sup>2</sup>	Naturally present in the environment
Sodium (ppm)	2018	144	144–144	NA	NA	199 <sup>2</sup>	199–199 <sup>2</sup>	Runoff/leaching from natural deposits
Tetradecanoic Acid (ppb)	2018	5.3	5.3–5.3	NA	NA	NA	NA	Naturally occurring
Trichloroacetic Acid (ppb)	2018	1.9	<1.0–1.9	1.5	<1.0–1.5	NA	24.3	1.7–24.3

<sup>1</sup>Sampled in 2018.  
<sup>2</sup>Sampled in 2017.

<sup>3</sup>The MCL is based on an annual running average and not an individual sample result.  
<sup>4</sup>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.  
<sup>5</sup>The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

## Definitions

**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 do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. MRDLs are set as close to the MCLGs as feasible using the best available treatment technology.

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

**IRAA (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 TTHMs and HAAs are reported as the highest LRAs.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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).

**SCL (Secondary Contaminant Level):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

**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.

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

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