

## 2010 Annual Drinking Water Quality Report

# (Consumer Confidence Report) PLAINVIEW MUNICIPAL WATER SYSTEM PHONE: (806) 296-1153

**Special Notice-Required language for ALL community public water supplies:** 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 advise 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.

#### **We Welcome Your Comments**

There are many opportunities available to learn more about the City of Plainview Water Production department and water quality. For questions or concerns about water quality, contact Felix Villarreal at (806) 296-1153. To request a speaker for your group, call (806) 296-1150. For inquiries about public participation and policy decisions, contact the City Manager at (806) 296-1106. The Water Department is part of the city government. The City Council meets the second and fourth Tuesday of each month. Call (806) 296-1107 for meeting times and location. You may make written comments to the City of Plainview at 901 Broadway, Plainview, Texas 79072.

Si tienes preguntas sobre la calidad del agua, puedes llamar a Felix Villarreal, Operario Principal, Ciudad de Plainview, (806) 296-1154. Tambien puedes escribir a Felix Villarreal, 901 Broadway, Water Treatment Plant, Plainview, Texas 79072, con sus preguntas.

**OUR DRINKING WATER IS REGULATED:** This report is a summary of the quality of the water we provide to our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

**WATER SOURCES:** 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 dissolves naturally-occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

**En Español** - Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (806) 296-1154 - para hablar con una persona bilingüe en español.

Where do we get our drinking water? Our drinking water is obtained from SURFACE AND GROUND water sources. It comes from the following Lake and Aquifer: the OGALLALA FORMATION and LAKE MEREDITH. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

#### All drinking water may contain contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

#### **Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

**About the Following Pages** 

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

#### **DEFINITIONS**

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **Maximum Contaminant Level Goal (MCLG)** 

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)

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 contamination.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**ABBREVIATIONS** 

NTU - Nephelometric Turbidity Units

MFL - Million fibers per liter (a measure of asbestos)

pCi/L - Picocuries per liter (a measure of radioactivity)

ppm - Parts per million, or milligrams per liter (mg/L)

ppb - Parts per billion, or micrograms per liter (ug/L)

ppt - Parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

#### **Inorganic Contaminants**

| Collection<br>Date | Contaminant   | Highest<br>Level | Range of<br>Levels | MCLG | MCL | Unit of<br>Measure | Source of Contaminant  |
|--------------------|---|------------------|--------------------|------|-----|--------------------|--|
| 2010               | Arsenic   | 6.3              | 5.9-6.3            | 0    | 10  | ppb                | Erosion of natural deposits; runoff from orchards;   |
|                    | * The arsenic value was effective January 23,2006. In the event of a violation, you will be notified. |                  |                    |      |     |                    | runoff from glass and electronics production wastes.   |
| 2010               | Barium  | 0.189            | 0.114-0.189        | 2    | 2   | ppm                | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.                                      |
| 2010               | Fluoride  | 2.94             | 2.17-2.94          | 4    | 4.0 | ppm                | Erosion of natural deposits; water additive which<br>promotes strong teeth; discharge from fertilizer and<br>aluminum factories. |
| 2010               | Nitrate   | 2.75             | 0.5-2.75           | 10   | 10  | ppm                | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.                                     |
| 2010               | Selenium  | 6.4              | 0-6.4              | 50   | 50  | ppb                | Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.                                |
| Radioactive (      | Contaminants  |                  |                    |      |     |                    |  |

Highest Range of Collection Contaminant Level Levels **MCLG** MCL Units Date Source of Contamination 9.7 pCi/L Decay of natural & man-mande deposits. 2010 Beta/photon emitters 7.2-9.7 0 4 Gross alpha excluding 6.5 pCi/L 5.5-6.5 2010 15 Erosion of natural deposits.

Volatile Organic Contaminants

| voicene organi | o oontammanto |         |          |      |      |       |                                     |
|----------------|---------------|---------|----------|------|------|-------|-------------------------------------|
| Collection     | _             | Highest | Range of |      |      |       |                                     |
| Date           | Contaminant   | Level   | Levels   | MCLG | MCL  | Units | Source of Contamination             |
| 2010           | Toluene       | 0.001   | 0-0.001  | 1    | 1    | ppm   | Discharge from petroleum factories. |
| 2010           | Toluene       | 0.001   | 0-0.001  | 1    | 1000 | ppm   | Discharge from petroleum factories. |
| 2010           | Toluene       | 0.001   | 0-0.001  | 1000 | 1    | ppm   | Discharge from petroleum factories. |

#### Required Additional Health Information for Arsenic

radon & uranium

The maximum contaminant level (MCL) for arsenic decreased from 0.05 mg/L (50 ppb) to 0.010 mg/L (10 ppb) effective January 23, 2006. Because the highest reported arsenic level on this report is between 5 ppb and 10 ppb, the following information is required by EPA:

"While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

#### Organic Contaminants: TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

|   | Year | Disinfectant<br>Type | Average<br>Level | Minimum<br>Level | Maximum<br>Level | MRDL | MRDLG | Unit | Source of Chemical                     |
|---|------|----------------------|------------------|------------------|------------------|------|-------|------|--|
| ŀ | 2010 | Free CL2             | .86              | .20              | 1.76             | 4    | 4     | ppm  | Disinfectant used to Control microbes. |

#### Availability of Unregulated Contaminant Monitoring Rule Data (UCMR)

We participated in gathering data under the UCMR in order to assist EPA in determining the occurrence of possible drinking water contaminants. If any unregulated contaminants were detected, they are shown in the tables elsewhere in this report. This data may also be found on EPA's web site at http://www.epa.gov/safewater/data/ncod.html, or you can call the Safe Drinking Water Hotline at 1-800-426-4791.

#### **Disinfection Byproducts**

| Year | Contaminant            | Highest<br>Level | Range of<br>Level | MCL | Unit of<br>Measure | Source of Contaminant                     |
|------|------------------------|------------------|-------------------|-----|--------------------|---|
| 2010 | Total Haloacetic Acids | 11               | 0-24.2            | 60  | ppb                | Byproduct of drinking water chlorination. |
| 2010 | Total Trihalomethanes  | 35               | 0-85.9            | 80  | ppb                | Byproduct of drinking water chlorination. |

#### **Unregulated Initial Distribution System Evaluation for Disinfection Byproducts**

| This eva | This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The |         |         |         |     |         |   |  |  |  |
|----------|--|---------|---------|---------|-----|---------|---|--|--|--|
| samples  | samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.          |         |         |         |     |         |   |  |  |  |
|          | 0 1 1 1  | Average | Minimum | Maximum |     | Unit of |   |  |  |  |
| Year     | Contaminant  | Level   | Level   | Level   | MCL | Measure | Source of Contaminant                     |  |  |  |
| 2008     | Total Haloacetic Acids   | 15.9    | 0       | 34.6    | NA  | ppb     | Byproduct of drinking water disinfection. |  |  |  |
|          |  |         |         |         |     |         |   |  |  |  |

**Unregulated Contaminants** 

| Bromoform, chlo | romoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals the entry point to distribution. |         |         |         |         |   |  |  |  |  |
|-----------------|--|---------|---------|---------|---------|---|--|--|--|--|
| Year or         | to distribution.   | Average | Minimum | Maximum | Unit of |   |  |  |  |  |
| Range           | Contaminant  | Level   | Level   | Level   | Measure | Source of Contaminant                     |  |  |  |  |
| 2009-2008       | Chloroform   | 4.03    | 0       | 14      | ppb     | Byproduct of drinking water disinfection. |  |  |  |  |
| 2009-2008       | Bromoform  | 3.9     | 0       | 9       | ppb     | Byproduct of drinking water disinfection. |  |  |  |  |
| 2009-2008       | Bromodichloromethane   | 7.17    | 0       | 22      | ppb     | Byproduct of drinking water disinfection. |  |  |  |  |
| 2009-2008       | Dibromochloromethane   | 9.39    | 0       | 25      | ppb     | Byproduct of drinking water disinfection. |  |  |  |  |

**Lead and Copper** 

| Date    | Contaminant | The 90th<br>Percentile | Number of Sites Exceeding Action Level | Action<br>Level | MCLG | Unit of<br>Measure | Source of Contaminant   |
|---------|-------------|------------------------|--|-----------------|------|--------------------|---|
| 8/21/07 | Lead        | 1.7                    | 0                                      | 15              |      | ppb                | Corrosion of household plumbing systems; erosion of natural deposits.   |
| 8/21/07 | Copper      | 0.104                  | 0                                      | 1.3             | 1.3  | ppm                | Corrosion of household plumbing<br>systems; erosion of natural deposits;<br>leaching from wood preservatives. |

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected rick to health. ALG's allow for a margin on safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

#### Recommended Additional Health Information for Lead

"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 http://www.epa.gov/safewater/lead."

<u>Turbidity</u>

Furbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches

| Year | Contaminant | Highest Single<br>Measurement | Lowest Monthly % of<br>Samples Meeting Limits | Turbidity<br>Limits | Unit of<br>Measure | Source of Contaminant |
|------|-------------|-------------------------------|---|---------------------|--------------------|-----------------------|
| 2010 | Turbidity   | 0.21                          | 100.00  | 0.3                 | NTU                | Soil runoff.          |

#### Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

|              |   | Highest Monthly Number |     | Unit of  |                                      |  |  |  |  |
|--------------|---|------------------------|-----|----------|--------------------------------------|--|--|--|--|
| Year         | Contaminant   | of Positive Samples    | MCL | Measure  | Source of Contaminant                |  |  |  |  |
| 2010         | Total Coliform Bacteria                                 | 2                      | *   | Presence | Naturally pesent in the environment. |  |  |  |  |
| * Two or mor | Two or more coliform found samples in any single month. |                        |     |          |                                      |  |  |  |  |

### Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

| Violation Type                         | Violation Begin | Violation End | Viola       | ation Explanation   |
|--|-----------------|---------------|-------------|---|
| PUBLIC NOTICE RULE LINKED TO VIOLATION | 07/31/2010      |               |             | ately notify you, our drinking water<br>lation of the drinking water regulations. |
| Violation Type                         | Health Effects  | Duration      | Explanation | Steps to Correct  |

Coliforms are bacteria that are naturally present in the environment TOTAL COLIFORM NON-ACUTE MCL-NO FECAL FOUND 1 Global Foliation of the City of Plainview collects 360 collected indicated possible coliform contamination.

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Secondary and Other Constituents Not Regulated

| (No associated   | adverse health eff           | ects)            |                  |                  |                    |                    |   |
|------------------|------------------------------|------------------|------------------|------------------|--------------------|--------------------|---|
| Year or<br>Range | Constituent                  | Average<br>Level | Minimum<br>Level | Maximum<br>Level | Secondary<br>Limit | Unit of<br>Measure | Source of Constituent   |
| 2008-2005        | Aluminum                     | 0.01             | 0                | 0.033            | .05                | ppm                | Abundant naturally occurring element.   |
| 2009-2007        | Bicarbonate                  | 250              | 225              | 272              | NA                 | ppm                | Corrosion of carbonate rocks such as limestone.   |
| 2008-2005        | Calcium                      | 47.2             | 42.3             | 53.5             | NA                 | ppm                | Abundant naturally occurring element.   |
| 2009-2007        | Chloride                     | 80               | 13               | 155              | 300                | ppm                | Abundant naturally occurring element;<br>used in water purification; byproduct<br>of oil field activity.      |
| 2008-2005        | Copper                       | 0.017            | 0                | 0.089            | 1                  | ppm                | Corrosion of household plumbing<br>systems; erosion of natural deposits;<br>leaching from wood preservatives. |
| 2008-2007        | Hardness as<br>Ca/Mg         | 262              | 224              | 280              | NA                 | ppm                | Naturally occurring calcium and magnesium.  |
| 2008-2005        | Iron                         | 0.012            | 0                | 0.085            | .3                 | ppm                | Erosion of natural deposits; iron or stee water delivery equipment or facilities.                             |
| 2008-2005        | Magnesium                    | 33.3             | 28.2             | 35.5             | NA                 | ppm                | Abundant naturally occurring element.   |
| 2008-2005        | Manganese                    | 0.0011           | 0                | 0.0042           | .05                | ppm                | Abundant naturally occurring element.   |
| 2008-2005        | Nickel                       | 0.002            | 0.001            | 0.002            | NA                 | ppm                | Erosion of natural deposits.  |
| 2009-2007        | pН                           | 7.8              | 7.4              | 7.9              | >7.0               | units              | Measure of corrosivity of water.  |
| 2009-2005        | Sodium                       | 72               | 41               | 122              | NA                 | ppm                | Erosion of natural deposits; byproduct of oil field activity.   |
| 2009-2007        | Sulfate                      | 57               | 20               | 104              | 300                | ppm                | Naturally occurring; common industrial byproduct; byproduct of oil field activity                             |
| 2009-2007        | Total Alkalinity<br>as CaCO3 | 245              | 216              | 272              | NA                 | ppm                | Naturally occurring soluble mineral salts   |
| 2009-2007        | Total Dissolved<br>Solids    | 501              | 368              | 659              | 1000               | ppm                | Total dissolved mineral constituents in water.  |
| 2008-2005        | Zinc                         | 0.005            | 0                | 0.009            | 5                  | ppm                | Moderately abundant naturally occurrin<br>element; used in the metal industry.                                |

The City maintains a drought contingency plan to preserve the water supply in case of emergency conditions. The plan can be easily implemented if emergency or drought conditions persist for any length of time. The drought contingency plan ensures that ample water will always be available to meet the most critical needs of residents and business. The City of Plainview urges everyone to be water wise. During the summer, 50% - 80% of a household's water consumption is used outdoors. By all working together, we can each do our part to help conserve this most precious commodity! For more information on being a smart water consumer for a free brochure on the subject, feel free to contact the City of Plainview Water Production Department at 806-296-1153.

Return Service Requested

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PLAINVIEW, TEXAS

City of Plainview 901 Broadway Plainview, Texas 79072