

**2010 Annual Drinking  
Water Quality Report  
(Consumer Confidence Report)**

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**CITY OF NEDERLAND**

*Phone Number: 409-723-1540*

*Robert Sangster, Water Plant Supervisor*

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**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 such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with or other immune system disorders can be particularly at risk infections. You should seek advice about drinking water your physician or health care provider. Additional guidelines appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

**Public Participation  
Opportunities**

**Date: July 25, 2011**

**Time: 4:30 p.m.**

**Location: 1400 Boston Avenue  
Nederland City Hall**

**Phone Number: 409-723-1503**

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

**OUR DRINKING WATER  
IS REGULATED**

This report is a summary of the quality of the water we provide 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.

**Source of Drinking Water**

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 include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**En Español**

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

# Where do we get our drinking water?

The source of drinking water used by **CITY OF NEDERLAND** is Surface Water. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes 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 allows us to focus source water protection strategies. Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. 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 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.

## Required 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>.

## 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
- ppt - parts per trillion, or nanograms per liter
- ppq - parts per quadrillion, or picograms per liter

## Definitions

|  |  |
|--|--|
| Maximum Contaminant Level Goal or MCLG:            | 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.   |
| Maximum Contaminant Level or MCL:                  | 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.                                    |
| Maximum residual disinfectant level goal or 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 contaminants. |
| Maximum residual disinfectant level or MRDL:       | 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.                        |
| Avg:   | Regulatory compliance with some MCLs are based on running annual average of monthly samples.   |
| ppm:   | milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.  |
| ppb:   | micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.  |
| na:  | not applicable.  |
| Definitions:                                       | The following tables contain scientific terms and measures, some of which may require explanation.   |

## 2010 Regulated Contaminants Detected

### Coliform Bacteria

Fecal coliform/E. coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

| Maximum Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest number of positive samples | Fecal Coliform or E. coli Maximum Contaminant Level   | Total No. of Positive E. coli or Fecal Coliform Samples | Violation | Likely Source of Contamination        |
|--------------------------------|--|------------------------------------|---|---|-----------|---------------------------------------|
| 0                              | 1 positive monthly sample                | 1                                  | Fecal Coliform or E. coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive | 1   | N         | Naturally present in the environment. |

### Maximum Residual Disinfectant Level

Systems must complete 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.

| Disinfectant Type | Average Level | Min Level | Max Level | MRDL | MRDLG | Unit | Source                                |
|-------------------|---------------|-----------|-----------|------|-------|------|---------------------------------------|
| Chloramine        | 2.43          | 1.13      | 3.83      | 4    | 4     | ppm  | Disinfectant used to control microbes |

### Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

ALGs allow for a margin of safety.

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

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination   |
|-----------------|--------------|------|-------------------|-----------------|-----------------|-------|-----------|--|
| Copper          | 06/28/2010   | 1.3  | 1.3               | 0.27            | 0               | ppm   | N         | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems |
| Lead            | 06/28/2010   | 0    | 15                | 2               | 0               | ppb   | N         | Corrosion of household plumbing systems; Erosion of natural deposits.                                  |

## 2010 Regulated Contaminants Detected

### Regulated Contaminants

| Disinfectants and Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG                  | MCL | Units | Violation | Likely Source of Contamination            |
|--|-----------------|------------------------|--------------------------|-----------------------|-----|-------|-----------|---|
| Haloacetic Acids (HAA5)*                   | 2010            | 25                     | 9.2-24.9                 | No goal for the total | 60  | ppb   | N         | By-product of drinking water chlorination |
| Total Trihalomethanes (TThm)*              | 2010            | 12                     | 5.3-11.6                 | No goal for the total | 80  | ppb   | N         | By-product of drinking water chlorination |

| Inorganic Contaminants         | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination   |
|--------------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|--|
| Nitrate [measured as Nitrogen] | 2010            | 0.03                   | 0.03-0.03                | 10   | 10  | ppm   | N         | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |

### Turbidity

|                                | Limit (Treatment Technique) | Level Detected | Violation | Likely Source of Contamination |
|--------------------------------|-----------------------------|----------------|-----------|--------------------------------|
| Highest single measurement     | 1 NTU                       | 0.52 NTU       | N         | Soil runoff                    |
| Lowest monthly % meeting limit | 0.3 NTU                     | 98.89%         | N         | Soil runoff                    |

Turbidity 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.

### Total Organic Carbon

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

| Year | Contaminant  | Average Level | Minimum Level | Maximum Level | Unit of Measure | Source of Contaminant                |
|------|--------------|---------------|---------------|---------------|-----------------|--------------------------------------|
| 2010 | Source Water | 6.26          | 4.89          | 9.27          | ppm             | Naturally Present in the Environment |