

2018

Annual Drinking Water Quality Report



WQR 2018 Lancaster Drinking Water Quality Report

Why you have received this report:

This report is produced to provide information about the Lancaster water system including source water, the levels of detected contaminants and compliance with drinking water rules. This report is also produced in order to answer your water quality questions. If you need more information, please call Lupe Muniz at 972-218-1752. Regular monthly tests are conducted on Lancaster water to ensure that it is clean and meets all water quality requirements.

Special notice for the elderly, infants, cancer patients, people with HIV/AIDS and other immune problems:

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 Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking tap 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.

Other Helpful Telephone Numbers:

Questions or concerns about water quality, field operations, water conservation, or for any questions concerning or drinking water or this report please call us at 972-275-1752. If you have questions about your water bill call Utility Billing at 972-218-1328.

Where your water comes from:

The City of Lancaster purchases its water from Dallas Water Utilities (DWU). DWU uses and treats surface water from seven sources: the Elm Fork of the Trinity River and lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard, Tawakoni and Fork. All drinking water may contain contaminants. 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 United States Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791. In order to ensure that tap water is safe to drink, United States EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. United States Food and Drug Administration, which provides the same protection for public health, prescribe regulations which establish limits for contaminants in bottled water.

Para cualquier pregunta relativa a su agua potable o el informe de este por favor llámenos al tel. 972-275-1752 para hablar con una persona bilingüe en español.

972-275-1752
(consumer confidence report)



Water Quality Data Report 2018

This is a summary of water quality data for both Lancaster and information provided by its treated water supplier Dallas Water Utilities. The list includes parameters which DWU currently tests for, in accordance with Federal and State Water Quality Regulations. The frequency of testing varies depending on the parameters and are in compliance with established standards. Dallas Water Utilities and Lancaster is a "Superior" Rated Water System by Texas Commission on Environmental Quality. All three water treatment plants are optimized and certified by meeting the Texas Optimization Program and partnership for safe drinking water criteria. Dallas and Lancaster water exceeds Federal and State water quality parameters.

| CONTAMINANT | YEAR OF RANGE | LEVEL | | | | | | Source of Contaminants |
|-------------------------------|---------------|---------|---------|---------|-----------------|------|------------------|--|
| | | Average | Minimum | Maximum | MCL | MCLG | Units of Measure | |
| Inorganic Contaminants | | | | | | | | |
| Fluoride | 2018 | 0.627 | 0.52 | 0.765 | 4 | 4 | ppm | water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories. |
| Nitrate (as N) | 2018 | 0.36 | 0.13 | 0.62 | 10 | 10 | ppm | Run-off from fertilizer use; leaching septic tanks, sewage, erosion of natural deposits. |
| Nitrite (as N) | 2018 | 0.05 | 0.05 | 0.05 | 1 | 1 | ppm | Run-off from fertilizer use; leaching septic tanks, sewage, erosion of natural deposits. |
| Cyanide | 2018 | 14 | 0 | 43 | 200 | 200 | ppb | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| Bromate | 2018 | 5 | <1 | 12 | 10 [^] | 0 | ppb | By-product of drinking water disinfection |
| Barium | 2018 | 0.027 | 0.021 | 0.032 | 2 | 2 | ppm | Discharge of drilling waste; Discharge from metal refineries; erosion of natural deposits. |
| Chromium (Total) | 2018 | 1 | 1 | 1 | 100 | 100 | ppb | Discharge from steel and pulp mills; erosion of natural deposits |

| Radioactive Contaminants | | | | | | | | |
|---------------------------------|------|-----|-----|-----|----|---|-----------|--|
| Gross Beta particle activity | 2017 | 5.1 | 4.2 | 6.6 | 50 | 0 | pCi/L**** | Decay of natural or man-made deposits. |

| Organic Contaminants | | | | | | | | |
|-----------------------------|------|------|------|------|---|---|-----|-------------------------------------|
| Atrazine | 2018 | 0.17 | 0.1 | 0.2 | 3 | 3 | ppb | Runoff from herbicide on row crops. |
| Simazine | 2018 | 0.15 | 0.11 | 0.17 | 4 | 4 | ppb | Runoff from herbicide on row crops. |

| Disinfection By Products Highest LRAA | | | | | | | | |
|--|------|-------|-------|-----|----|-----|-----|---|
| Total Haloacetic Acid*** | 2018 | 9.36 | 4.3 | 15 | 60 | N/A | ppb | Byproduct of drinking water disinfection. |
| Total Trihalomethanes | 2018 | 17.23 | 12.73 | 214 | 80 | N/A | ppb | Byproduct of drinking water disinfection. |

| Total Organic Carbon TT (no MCL)***** | | | | | | | | |
|--|------|------|------|------|----------------------|--|-----|---------------------------------------|
| Total Organic Carbon | 2018 | 3.21 | 2.31 | 4.09 | 35% removal/SUVA ≤ 2 | | ppm | Naturally present in the environment. |

| Disinfectant | YEAR OF RANGE | Minimum | | Maximum | | MRDL | MRDLG | Units of Measure | |
|-------------------------|---------------|---------|-----|---------|----|------|-------|---|--|
| | | | | | | | | | |
| Total Chlorine Residual | 2018 | 2.23 | 136 | 3.8 | 4* | 4* | ppm | In distribution system- Water additive used to control microbes | |

| Lead and Copper 90th in percentile** # of sites exceeding action level Action Level Units of Measure | | | | | | | | |
|---|------|---------|---|-------|-----|---|--|--|
| Lead | 2018 | 0.00108 | 0 | AL=15 | ppb | Corrosion of household plumbing systems; erosion of natural deposits | | |
| Copper | 2018 | 0.2005 | 0 | AL=13 | ppm | Corrosion of household plumbing systems; erosion of natural deposits. | | |

| Turbidity | YEAR OF RANGE | Highest single measurement | | monthly % of samples | | Turbidity Limits | | Units of Measure | |
|-----------|---------------|----------------------------|------|----------------------|-----|------------------|--|------------------|--|
| | | | | | | | | | |
| Turbidity | 2018 | 0.2 | 100% | 0.3 (TT) | NTU | Soil Runoff. | | | |

| Total Coliforms Highest Monthly % of Positive Samples Units of measure | | | | | | | | | |
|---|------|-------|--|--|-------------------------------|-----------------|---------------------------------------|--|--|
| Total Coliforms Bacteria | 2018 | 0.00% | | | 5% or more of monthly samples | Found/Not Found | Naturally present in the environment. | | |

* as annual average

*** Haloacetic Acids - five species

** 90 percentile value in the distribution system

**** 50 pCi/L - 4 mrem/yr

***** Treatment technique requires 35% removal or SUVA ≤ 2. The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements.

Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800) 426-4791.

| CONTAMINANT | YEAR OF RANGE | LEVEL | | | | | | Source of Contaminants |
|----------------------|---------------|---------|---------|---------|-----|------|-----------------|---|
| | | Average | Minimum | Maximum | MCL | MCLG | Unit of Measure | |
| Chloroform | 2018 | 8.55 | 129 | 21 | N/A | 70 | ppb | Byproduct of drinking water disinfection. |
| Bromodichloromethane | 2018 | 4.28 | 2.46 | 6.22 | N/A | 0 | ppb | Byproduct of drinking water disinfection. |
| Dibromochloromethane | 2018 | 3.41 | 2.79 | 3.95 | N/A | 60 | ppb | Byproduct of drinking water disinfection. |
| Bromoform | 2018 | 0.77 | 0 | 2.3 | N/A | 0 | ppb | Byproduct of drinking water disinfection. |

Lead and Copper

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 want 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>.

Contaminants may be found in drinking water that may cause taste, color and odor problems. These types of problems are not necessarily cause for health concerns. For more information on taste, odor or color of drinking water, please contact City of Lancaster, Field Operations Office at 214-218-2324.

Definitions:

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

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed 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 risk to health. MRDLGs allow for a margin of safety.

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 contaminants.

Maximum Residual Disinfectant Level (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.

ND: Not detected.

mrem/year: Millirems per year (measure of radiation absorbed by the body).

Nephelometric Turbidity Units (NTU): Measure of turbidity in water.

pCi/L: Pico-curies per liter (a measure of radioactivity).

POE: Point of entry. Sample measured at the point where water enters the distribution system.

ppb: Parts per billion or micrograms per liter ($\mu\text{g/L}$).

ppm: Parts per million or milligrams per liter (mg/L).

ppt: Parts per trillion or nanograms per liter (ng/L).

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. Turbidity: A measure of the clarity of drinking water. The lower the turbidity, the better.

Level 1 Assessment:

A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment:

A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

The City of Lancaster was not required to perform a Level 1 or Level 2 assessment for 2018.