



2 0 0 9 WATER QUALITY REPORT

May 2009

City of Allen Water Utilities Department
305 Century Parkway Allen, Texas 75013 214-509-4500

Water Quality & Service - Our Business
Efficiency & Excellence - Our Goal

SAFE – HIGH QUALITY – DRINKING WATER – RIGHT FROM YOUR TAP

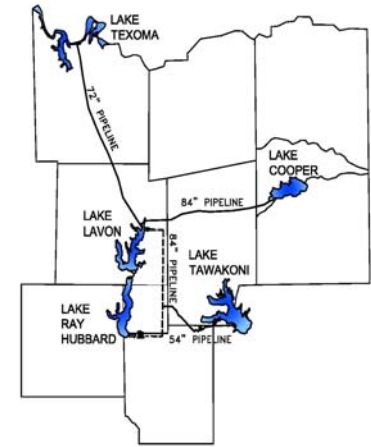
City of Allen Water Utility employees take pride in delivering safe and “superior” quality drinking water to our customers. Our water system is rated “Superior” by the Texas Commission on Environmental Quality (TCEQ). This rating reflects the hard work and efforts of our employees to protect your health by delivering and maintaining safe and reliable drinking water and recognizes the North Texas Municipal Water District for producing high quality drinking water.

The Water Utilities Department is a municipal water distribution and wastewater collection utility owned by the City of Allen. Wholesale treated water is purchased from the North Texas Municipal Water District (NTMWD) and delivered to our ground storage tanks. From there, the water is delivered to customers through the city’s distribution system.

NTMWD Raw Water Supply

NTMWD obtains surface water from five sources: Lake Lavon, Lake Texoma, Cooper Lake (now known as Lake Chapman), Lake Tawakoni, and the East Fork Raw Water Supply below Lake Ray Hubbard. Lake Lavon is the primary source with the other four sources supplementing Lake Lavon. In efforts to continue to meet the demands of the region, NTMWD is planning for another source reservoir just outside of Bonham Texas.

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, as well as substances resulting from human or animal activity. Substances that may be present in untreated water include: biological impurities such as bacteria and viruses; inorganic impurities such as salts and metals; pesticides and herbicides; organic chemicals from industry or petroleum use; and radioactive materials. The NTMWD conducts daily tests on both the raw water in Lake Lavon and the treated water they deliver to the City of Allen.



Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some impurities. The presence of impurities do not necessarily pose a health risk. The U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain impurities in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must also provide the same protection for the health of the general public.

The TCEQ has completed a Source Water Susceptibility Report for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. North Texas Municipal Water District received the assessment report. For more information on source water assessments and protection efforts of our system, contact the City of Allen Water Department for an appointment. More information about impurities and potential health effects can be obtained by calling the U.S. Environmental Protection Agency’s Safe Drinking Water Hotline (1-800-426-4791).

City of Allen Water Distribution System

The pumping and storage system is comprised of two pump stations, five ground storage tanks, and five elevated storage tanks. The ground storage capacity is 24 million gallons and the elevated storage capacity is 7.5 million gallons with a system pumping capacity of 80 million gallons per day. The Hillside Water Tower is scheduled to be replaced with a 2 million gallon tower late in 2010. The Water Distribution System is comprised of over 432 miles of water mains with 3,295 fire hydrants and 26,205 metered service connections.

City of Allen Distribution Samples Taken Last Fiscal Year

| | | | |
|-----------------------------------|------|---|------|
| Bacteriological Scheduled..... | 1080 | Disinfectant Residual Scheduled..... | 1236 |
| Bacteriological Construction..... | 74 | Disinfectant Residual Construction..... | 74 |
| Trihalomethane Samples..... | 64 | | |

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 214-509-4500.

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

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 required tests by the U.S. Environmental Protection Agency (EPA) and is presented in the following pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

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 concerns. Therefore, secondaries are not required to be reported in this document but may affect the appearance and taste of your water.

Non-regulated Substances - Non-regulated substances are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrences in drinking water and whether future regulations are warranted.

Cryptosporidium

North Texas Municipal Water District has tested the lake water and treated water for the presence of cryptosporidium for several years. **Cryptosporidium has been absent in all samples tested.** Cryptosporidium is a protozoan which is so small it can be seen only with a microscope. It affects the digestive tracts of humans and animals. At this time, there is no specific drug therapy proven to be effective, but people with healthy immune systems will usually recover from a cryptosporidium infection within two weeks. The NTMWD continues to diligently test both the source and the treated water for the presence of cryptosporidium.

Special information for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems - Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, individuals who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium are available by calling the Safe Drinking Water Hotline (1-800-426-4791).

The chart on the following page lists the contaminants detected in Allen drinking water during calendar year 2008. Numerous tests detected no other contaminants. Listed below are the definitions for abbreviations on the next page. As noted, the water quality surpasses standards for each contaminant as required by law.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health.

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.

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.

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

Action Level - The concentration of a contaminant which triggers a treatment or other requirement a water system must follow.

ppm - Parts per million, or milligrams per liter (mg/l). One part per million equals one drop of red dye in 26 gallons of water.

ppb - Parts per billion, or micrograms per liter (ug/l). One part per billion equals one drop of red dye in 26,000 gallons of water.

pCi/L - Picocuries per liter. A measure of radioactivity.

mrem/yr - Millirems per year. A measure of radiation absorbed by the body.

NTU - Nephelometric Turbidity Units. This is the unit to measure water turbidity.

Turbidity - A measure of water's clarity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Water with lower turbidity is clearer than water with higher turbidity.

THM - Trihalomethanes - a by-product of disinfection of water. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

HAA - Haloacetic Acid. A by-product of disinfection.

TOC - Total Organic Carbon.

ND - None Detected.

cysts/L - Cysts per liter.

| Substance | Range of Detection | Highest Average Sample Point | Maximum Contaminant Level | Maximum Contaminant Level Goal | Possible Source |
|---|---------------------------------|------------------------------|---------------------------|--------------------------------|--|
| Regulated at the Treatment Plants | | | | | |
| Barium (ppm) | 0.04 | 0.04 | 2 | 2 | Erosion of natural products |
| Fluoride (ppm) | 0.45-0.47 | 0.47 | 4 | 4 | Water additive, natural geology |
| Nitrate (ppm) | 0.42-0.45 | 0.45 | 10 | 10 | Fertilizer runoff |
| Chlorine Dioxide (ppm) | 0.0-0.56 | 0.04 | 0.8 | 0.8 | Disinfectant |
| Atrazine (ppb) | 0.10-0.12 | 0.12 | 3 | 3 | Agricultural herbicide runoff |
| Simazine (ppb) | ND | ND | 4 | 4 | Herbicide runoff |
| Arsenic (ppb) | ND | ND | 10 | None | Erosion of natural deposits |
| Turbidity (ntu) | 0.04-0.43 | 0.20 avg | 0.5 | N/A | Soil runoff |
| Gross Alpha Particle Activity (pCi/L) (2008 Data) | ND | ND | 15 | 0 | Erosion of natural deposits |
| Gross Beta (mrem/yr) (2008 Data) | <4 | <4 | 4 | 0 | Decay of natural and manmade products |
| Radium 228 (pCi/L) (2008) | ND | ND | 5 | 0 | Erosion of natural products |
| Dalapon (ppb) | ND | ND | 200 | 0 | Pesticide |
| Cryptosporidia and Giardia (cysts/L) | 0 | 0 | TT | 0 | Human and animal fecal waste |
| Chlorine Residuals (Chlorite) (ppm) | 0.01-0.65 | 0.49 | 1 | N/A | Disinfectant residual |
| Regulated at the Customer's Taps | | | | | |
| Lead (ppb) (2007 Test Results) | 90th Percentile Values 1.60 | | Action Level = 15 | 15 | Corrosion of customer plumbing, service connection |
| Number of Lead Samples exceeding the Action Level - 0 | | | | | |
| Copper (ppm) (2007 Test Results) | 90th Percentile Values 0.836 | | Action Level = 1.3 | 1.3 | Corrosion of customer plumbing, service connection |
| Number of Copper Samples exceeding the Action Level - 0 | | | | | |
| Regulated in Distribution System | | | | | |
| Total Coliform and Fecal Coliform | 0 | Present in 0 Samples | Present in 0 Samples | 0 | Human and animal fecal waste |
| Substance | Range of Detection | Highest Average Sample Point | Maximum Contaminant Level | Maximum Contaminant Level Goal | Possible Source |
| Total THMs (ppb) | 31.80-57.00 | 42.92 | 80 | 0 | By-Product of drinking water disinfection |
| Total HAAs (ppb) | 16.10-50.40 | 30.76 | 60 | N/A | By-Product of drinking water disinfection |
| Chlorine Residuals (ppm) | 1.45-3.67 | 2.55 | 0.5 Minimum | 4.0 Maximum | Disinfectant |
| Unregulated Substances | | | | | |
| Sulfate (ppm) | 62.4-80.4 | 80.40 | 250 Proposed | | Mineral and nutrient |
| Sodium (ppm) | 35.2-40.4 | 40.40 | Not regulated | | Mineral |
| Dibromochloromethane (ppb) | 7.10-8.30 | 7.83 | Not regulated | | By-Product of drinking water disinfection |
| Chloroform (ppb) | 11.90-29.30 | 19.00 | Not regulated | | By-Product of drinking water disinfection |
| Bromoform (ppb) | 0.00-1.10 | 1.10 | Not regulated | | By-Product of drinking water disinfection |
| Bromodichloromethane (ppb) | 12.80-19.90 | 15.73 | Not regulated | | By-Product of drinking water disinfection |
| TOC (ppm) | 2.58-4.23 | 3.29 | Not regulated | | Organic material runoff |
| Acetone (ppb) | 5.28 - 8.14 | 8.14 | Not regulated | | Cleaner |



The Water Department is part of the City Government. The Allen City Council meets the 2nd and 4th Tuesdays of every month at the Allen City Hall at 7:00 PM. Our email address is coa@cityofallen.org. The City of Allen Website is www.cityofallen.org

Grassy, Earthy Taste and Odor

The North Texas summer climate normally consists of high temperatures and trace amounts of rainfall. The high temperatures and lack of rainfall create an ideal environment for algae to bloom in surface water supplies.

Each summer, throughout the months of July and August, lakes and other surface water supplies experience a natural event – an “algal bloom.” Algal blooms are common to surface water supplies in warm weather climates like Texas.

As hot summer temperatures warm the reservoirs, the lack of rainfall lessens the turbidity (clarity) and allows the sunlight to penetrate the water. With the increase of water temperature and the lack of turbidity, photosynthesis will occur, providing the right environment for algae to rapidly reproduce and “bloom.”

When an algae bloom exists, there is a possibility for a grassy, earthy taste in the treated drinking water supply. **This event, although aesthetically undesirable to the public, does not alter the quality of water provided to the cities and communities for their use.** NTMWD laboratory personnel monitor the raw water quality from Lake Lavon prior to its treatment. One of the many analyses performed is an algae count. Laboratory personnel, through this daily activity, can detect the onset of algal bloom. As blue-green algae species Nostoc and Anabaena reproduce or “bloom,” they produce an oily organic substance that is responsible for the change in taste and odor of the treated drinking water.

NTMWD uses several steps to control the taste and odor produced by the algal bloom. To reduce the unpleasant taste levels, activated carbon is used as an absorption media. Potassium permanganate is added as an oxidizing agent to reduce the odor associated with an algal bloom. Both of these chemicals are removed during the treatment process prior to its delivery to the cities. Chlorine is used throughout the treatment process as a strong disinfectant. Chlorine also aids in odor reduction during the times of algal blooms.

Despite algal blooms, the quality of water remains high as regulated by the Texas Commission on Environmental Quality (TCEQ) and the U.S. Environmental Protection Agency (EPA) standards. The treated water remains safe for human consumption with no health risks created by the “algal blooms.”



www.epa.gov/watersense

Every Drop Counts! Did you know that the average American uses 100 gallons of water every day? But we can all reduce our water use by as much as 30 percent by taking a few simple steps, such as installing high-efficiency plumbing fixtures and using water efficiently in our yards. The City of Allen offers rebates for installing water conserving items. View the details on the City’s website listed below. Information and applications are also available in City Hall at the Utility Collections windows.

Water Conservation and Drought Contingency Plan! A copy of the *Water Conservation and Drought Contingency and Water Emergency Response Plan for the City of Allen, Texas* (the “Plan”) and implementing Ordinance can be found on the City’s website listed below. Please note that there are time of day restrictions prohibiting lawn irrigation watering from 10 AM to 6 PM beginning April 1 and ending October 31 of each year.

More information is available online at www.cityofallen.org or by calling 214-509-4553.

Let’s not wait to conserve water in Texas until there is not enough water to conserve.