



**NORTH
TEXAS
MUNICIPAL
WATER
DISTRICT**

TEMPORARY CHANGE IN DISINFECTANT

PROTECTING WATER QUALITY

FAST FACTS

71

COMMUNITIES SERVED

SERVICE AREA:
2,220
SQUARE MILES IN

2.2 MILLION
POPULATION SERVED



**WATER
SERVICES**



**WASTEWATER
SERVICES**



**SOLID WASTE
SERVICES**

**North Texas Municipal
Water District**

501 East Brown St.
Wylie, TX 75098

972.442.5405

www.ntmwd.com

NEED FOR DISINFECTION

Disinfection is a critical part of water treatment to keep water safe. It involves a two-step process that treats the water, then adds disinfectant to maintain water quality as it travels long distances through pipes to homes and businesses. Both steps are needed to eliminate and keep tap water free of harmful microorganisms, such as parasites and viruses.

NTMWD'S TWO-STEP WATER DISINFECTION PROCESS:

STEP 1

**OZONE AND FREE CHLORINE DISINFECTS
WATER AT THE TREATMENT PLANT.**

STEP 2

**AMMONIA IS ADDED TO FORM CHLORAMINE,
CHLORINE + AMMONIA, BEFORE IT LEAVES
THE PLANT TO KEEP WATER DISINFECTED AS IT
TRAVELS THROUGH THE SYSTEM.**

(ONLY CHLORINE-BASED DISINFECTANTS ARE APPROVED
BY THE EPA FOR THIS SECOND STEP.)

TEMPORARY CHANGE IN DISINFECTANT

For one month each spring, NTMWD temporarily suspends ammonia in the second step of disinfection, and free chlorine is used to ensure water remains disinfected as it travels to the cities we serve and on to their customers. The levels of chlorine remain similar to year-round operations. This temporary change in disinfectant helps maintain the system and high water quality year-round. NTMWD has been doing this annual maintenance for over 15 years, follows the Texas Commission on Environmental Quality (TCEQ) [regulatory guidance documents](#), and high water quality meeting health standards has always been maintained.

HYDRANT FLUSHING TO HELP THE PROCESS

During the annual change, the cities we serve may help move the blended chloramine- and chlorine-disinfected water through the system faster by flushing water from fire hydrants.

- ◆ Helps maintain local systems and water quality year-round.
- ◆ Decreases odor/taste of chlorine during the temporary change in disinfectant.
- ◆ Is standard practice for many water providers who use chloramine to maintain systems.



REGULAR TESTING SHOWS HIGH WATER QUALITY MAINTAINED

During this brief temporary change in disinfectant, NTMWD continues to deliver safe, reliable water to our communities.

ONGOING WATER SAMPLING IS PERFORMED DURING THE PROCESS

NTMWD—RESULTS ARE REPORTED TO THE TCEQ AND MADE AVAILABLE TO THE PUBLIC.

TCEQ—ALL REQUIRED STATE WATER SAMPLING CONTINUES DURING THIS TIME ON NTMWD DRINKING WATER.

CITIES SERVED BY NTMWD—SAMPLES ARE ANALYZED IN NTMWD'S STATE-CERTIFIED LABORATORY AND REPORTED TO TCEQ.

NTMWD frequently tests for the concentration of chlorine through online analyzers at our treatment plant and at multiple points in the transmission system. NTMWD also conducts weekly testing at the delivery points where the cities, in turn, distribute to their customers. NTMWD's water meets all safety standards required by the TCEQ, the EPA and the [Safe Drinking Water Act](#). Test results are available for the public to review online.

TOTAL CHLORINE RESIDUALS (mg/L) AT NTMWD TREATED WATER DELIVERY SITES

Sample Locations	01/01/2022 - 02/28/2022			Durning Maintenance Period 03/01/2022 - 03/30/2022 (data collected & averaged once per week)			01/01/2023 - 02/28/2023			Durning Maintenance Period 03/01/2023 - 03/29/2023 (data collected & averaged once per week)		
	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum
Plano #3	3.31	3.67	2.94	3.26	3.49	3.03	3.40	3.75	3.15	3.43	3.65	3.20
Famersville	3.13	3.32	2.93	2.42	2.87	1.59	3.00	3.30	2.61	2.74	2.85	2.62
Forney	2.77	3.46	2.26	2.43	3.17	2.10	3.31	3.74	2.87	2.59	2.93	2.08
Garland #2	3.00	3.41	1.94	3.34	3.45	3.24	3.21	3.69	2.59	3.23	3.41	3.01
Garland #4	3.16	3.64	1.91	3.29	3.46	3.14	3.36	3.86	2.94	3.45	3.70	3.30
McKinney	3.34	3.54	2.88	3.18	3.35	3.06	3.43	3.92	3.06	2.94	3.58	2.50
Plano #2	3.18	3.98	2.22	3.46	3.80	3.19	3.45	3.92	3.06	3.26	3.45	3.16
Princeton	3.03	3.28	2.76	2.97	3.23	2.51	3.02	3.40	2.60	2.48	2.57	2.38
Rockwall	3.40	3.72	3.21	3.45	3.98	3.03	3.33	3.63	3.16	3.01	3.27	2.78
Royse City	3.42	3.56	3.37	3.22	3.56	2.94	3.13	3.44	2.73	2.86	3.26	2.27
Shiloh	3.48	3.83	3.13	3.49	3.61	3.41	3.46	3.75	3.25	3.61	3.97	3.19
Sunnyvale	2.87	3.18	2.35	2.93	3.32	2.69	3.27	3.44	3.11	3.10	3.30	3.01

*NOTE: TCEQ/EPA requires water treatment facilities to maintain a minimum chlorine level of 0.2 milligrams per liter (mg/L) or parts per million (ppm), a minimum of 0.5 mg/L or ppm during chloramine operations and a maximum running average of 4 mg/L or ppm. These levels are deemed safe for consumption.

1 mg/L = 1 ppm (parts per million)

HOME TESTING

Homeowners who want more information about their water quality or are considering testing their water should consider these guidelines.

- 1** Review water quality information on your city or local water utility website and contact them with questions.
- 2** Use a state-certified laboratory to provide sampling instructions, containers, and ensure accurate results. You can find an accredited laboratory in Texas through TCEQ.
- 3** Pool test kits are not a reliable method to test drinking water. You can learn more at [CDC.gov](https://www.cdc.gov).

Beware of claims from companies advocating filtration for water safety. NTMWD's water is safe to drink and use without filtration. Some filters can help dissipate chlorine at the tap to reduce odor, taste and skin sensitivities.

DISINFECTION BY-PRODUCTS

Disinfection By-Products (DBPs) form when disinfectants, like chlorine, react with naturally occurring substances in the water. All commonly used disinfectants form DBPs.

NTMWD'S WATER TREATMENT PROCESS:

- Uses ozone and chloramine for most of the year, which reduces the DBPs in treated water.
- Keeps DBP levels well within the acceptable range EPA considers safe, including during its temporary, month-long change in disinfectant.
- Is regularly tested for the quality of water it produces. NTMWD voluntarily increased the frequency of DBP testing to monthly. Results are posted on [NTMWD.com](https://www.ntmwd.com).



YOUR DRINKING WATER IS SAFE AND MEETS ALL REGULATORY AND QUALITY STANDARDS

TIPS TO REDUCE CHLORINE ODOR & TASTE IN WATER

DRINKING WATER



- Refrigerate water in an open pitcher for several hours



- Add a slice of citrus or cucumber
- Consider installing filters on kitchen faucets

BATH OR SHOWER WATER



- Add a crushed 1000 mg Vitamin C tablet to bath water
- Consider installing filters on bathroom faucets or shower heads



WHAT'S DIFFERENT?

NTMWD first disinfects water using ozone and chlorine as part of the treatment process to eliminate bacteria and viruses. Then, for most of the year, NTMWD also adds chloramine (chlorine + ammonia) as a secondary disinfectant to keep drinking water clean as it travels from the treatment plants through miles of pipes to homes and businesses.

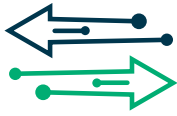
Each spring for one month, NTMWD temporarily suspends the use of ammonia and uses free chlorine as the secondary disinfectant to maintain water quality year-round.

This is a preventive measure to maintain the system and high water quality year-round.

Individuals sensitive to chlorine may notice a stronger smell or taste for a few weeks in the spring during NTMWD's temporary change in drinking water disinfectant.



FREQUENTLY ASKED QUESTIONS



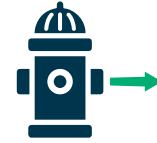
WHAT IS THE TEMPORARY CHANGE IN WATER DISINFECTION?

NTMWD first disinfects water using ozone and chlorine as part of the treatment process to eliminate bacteria and viruses. Then, for most of the year, NTMWD also adds ammonia (to form chloramines) as a secondary disinfectant to keep drinking water clean as it travels from the treatment plants through miles of pipes to homes and businesses. Each spring for one month, NTMWD temporarily suspends the use of ammonia and uses free chlorine as the secondary disinfectant to maintain water quality year-round.



IS THE CHLORINE LEVEL TESTED DURING THIS PERIOD?

Yes, during this 28-day period, as well as year-round, chlorine levels in treated drinking water plus many other compounds are monitored continuously. NTMWD conducts over 140,000 tests each year in a state-certified laboratory to monitor, adjust treatment operations and report on water quality. NTMWD voluntarily monitors and reports above what is required.



WHY ARE FIRE HYDRANTS FLUSHED DURING THIS PROCESS?

Hydrant flushing is performed year-round to maintain water quality by shortening water age. During the temporary change, local water providers (cities or utility districts) who receive NTMWD treated water may help move water through the system faster by flushing water out of fire hydrants. Frequent flushing helps maintain the system, ensure high water quality and reduce the chlorine odor and taste. Performing system flushing in the spring also helps save valuable water during the summer months.



WHAT CAN I DO IF I DON'T LIKE THE CHLORINE TASTE OR SMELL?

The closer you live to the water treatment plant, the more noticeable the chlorine odor or taste may be. Some tips include refrigerating water in an open pitcher, adding a slice of citrus/cucumber or using a NSF International (NSF/ANSI) approved water filter. Check out more tips at [NSF.org](https://www.nsf.org).



WHY IS THIS TEMPORARY CHANGE NECESSARY?

This change is a common water system maintenance practice among water providers in states with warmer climates. NTMWD uses it to maintain the system and ensure high water quality. NTMWD follows the Texas Commission on Environmental Quality (TCEQ) regulatory guidance documents.



WHAT DID THE 2023 TEST RESULTS SHOW?

Regular testing confirms NTMWD's chlorine levels during its temporary disinfectant change are within the chlorine residual levels required by TCEQ and EPA. Test results also indicate monthly chlorine levels remain consistent with the rest of year and within annual average amounts required by TCEQ and EPA.



WHEN DOES THE TEMPORARY CHANGE OCCUR?

The temporary change usually occurs for about a month each year from around the end of February through early April. It is done before the hotter summer temperatures which can increase the potential for bacterial growth in pipes.



WHERE CAN I SEE THE TEST RESULTS?

Monthly and annual water quality reports can be found at www.NTMWD.com/water-quality-reports. NTMWD also posts chlorine levels and results from monthly testing for DBPs at www.NTMWD.com/water-testing/.



NORTH TEXAS MUNICIPAL WATER DISTRICT

FOR MORE INFORMATION

Contact us at 972-442-5405 or ntmwd.com/safewater