



# Town of Denton

## 2023 Annual Report

for

### Wastewater Treatment and Collection System

House Bill 1160, the Clean Water Act of 1999, was ratified by the North Carolina General Assembly on July 20<sup>th</sup>, 1999 and signed into law by the Governor on July 21, 1999. This legislation requires that the owner or operator of any wastewater treatment works or wastewater collection system, that treats or collects primarily domestic or municipal wastes, provide an annual report to its users or customers and to North Carolina Department of Environmental Quality that summarizes the treatment works' or collection system's performance over a 12 month period. The law states the report shall summarize the performance of the treatment works or collection system and state the extent to which any terms of its permit, federal laws, or any State laws, regulations or rules related to the protection of water quality have been violated.

The following personnel are recognized by the State of North Carolina as The Town of Denton Operators in Responsible Charge (ORC) and Back-up Operators in Responsible Charge (Back-up ORC) of their Publicly Owned Treatment Works (POTW).

#### Wastewater Treatment Plant, NPDES #0026689

ORC: Troy B. Branch/ Office 336-859-4460

Back-up ORC: Michael High/ Office 336-859-4460

#### Wastewater Collection System Water Quality Permit # WQCS00223

ORC: Troy B. Branch /Office 336-859-4460

Back-up ORC: Michael High/ Office 336-859-5885

#### Land Application Program, Permit # WQ0016966

ORC: Troy B. Branch/ Office 336-859-4460

#### ***Collection System***

The sewage collection system of the Town of Denton has approximately 13 miles of pipe with lines sized from 6 inch to 10 inch in diameter. There are 7 sewer lift stations located in and around town to convey the wastewater from our customers to the Wastewater Treatment Plant (WWTP). The sewer collection system is subject to regular inspections by the Division of Water

Resources, a branch of the North Carolina Department of Environmental Quality. The collection system was last inspected on November 18, 2021. All items/deficiencies were rectified, and a response letter was mailed to the Winston-Salem Regional Office of the Department of Environmental Quality on December 6, 2021.

**Sanitary Sewer Overflows (SSO's)**

Date	Duration	Location	Cause	Total Volume	DWR Action
1/25/2023	4 hours	Council Access Rd.	Prolonged rain and Inflow & Infiltration	11,000 gal.	Notice of Violation with Notice of Intent
1/25/2023	4.5 hours	Council Access Rd.	Prolonged rain and Inflow & Infiltration	11,500 gal.	Notice of Violation with Notice of Intent
1/25/2023	5 hours	Counsel Access Rd.	Prolonged rain and Inflow & Infiltration	16,500 gal.	Notice of Violation with Notice of Intent

**Wastewater Treatment Plant (WWTP)**

The wastewater treatment facility operates under the National Pollutant Discharge Elimination System (NPDES), an EPA mandated requirement for all wastewater treatment facilities nationwide. This permit includes monitoring requirements and discharge limits, some of which vary with seasons and have different maximums for daily, weekly, and monthly averages. All limits are prescribed to protect the stream and down-stream users of the water. During the reporting year, January 1, 2023 – December 31, 2023, the Town of Denton treated 142 million gallons of wastewater. The previous year, we treated 139 million gallons. We also received 53.85 inches of rain this past year whereas 2022 saw 44.2 inches of rain.

The WWTP is inspected regularly by the Winston-Salem Regional Office of the Division of Water Resources to ensure compliance with Federal and State regulations. The WWTP was last inspected in October 2018. The inspection showed **no violations**. The pandemic has impacted the regularity of these inspections.

The Town did **not** receive any Notice of Violations (NOV) for the Wastewater Treatment Plant (WWTP) for calendar year 2023. We did however receive an NOV in January 2023 for an incident that occurred in the latter half of 2022. We did not receive the NOV until after the Annual Report had been completed for 2022.

The following table shows and explains the NOV we received:

Parameter	Date	Infraction	Disciplinary Action	Environmental Impact
Dichlorobromo-Methane	11/30/2022	Exceeded Monthly Avg.	NOV	None

The Town of Denton WWTP is located on Council Access Road. It is an extended aeration biological process treatment plant with a permitted flow of 800,000 gallons per day. The treatment plant, at its current location, was completed in 1984 with an expansion in 2000. After solids removal and the biological treatment process has occurred, the water is disinfected with chlorine gas and subsequently de-chlorinated with Sulfur Dioxide. The outgoing water (effluent) is monitored and analyzed for some 17 permitted characteristics weekly and monthly. Annually, the wastewater is tested for an additional ~100 parameters. 6 of these analytes are tested in-house at the WWTP field parameter laboratory. The parameters include; Flow, Dissolved Oxygen, Temperature, pH, Conductivity and Ultra Low Range Chlorine Residual. Because aquatic life is more sensitive than humans to these materials, some of these parameter limits are lower than drinking water standards. The permits are complex and can be viewed upon request.

### ***Environmental Programs and Services***

As part of our commitment to support environmental awareness and promote a better understanding of our community's environmental role, Denton offers tours of the WWTP and educational materials in the form of brochures and pamphlets for FOG education, Water Conservation, and Annual Reports for water and sewer treatment. Bi-annually we post an ad in the newspaper in an attempt to educate the public on the dangers of Fat's, Oil's, and Grease (FOG) and the importance of keeping it out of the sewer system. The same ad that runs in the newspaper will also be seen on the Town's website <http://www.townofdenton.com>.

### **Prohibited pollutants or liquids include:**

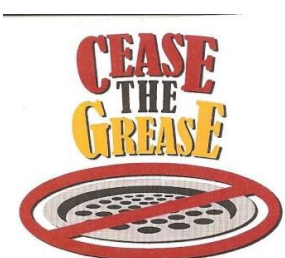
- Pollutants which create a fire or explosive hazard
- Petroleum based products
- Any wastewater having a pH of less than 5.0 or greater than 9.5.
- Storm water, surface water, ground water, roof run-off, or swimming pool drainage.
- Fats, Oils and Greases (FOG)
- Medical wastes (i.e. needles, glass fragments, razors and expired and/or unused prescriptions/medications)
- Any wastes containing detergents or other substances which may cause excessive foaming in the POTW.
- Solid or viscous substances in amounts which will cause obstruction in the flow in the POTW resulting in the interference but in no case solids larger than one half inch(1/2") in any dimension.
- Any wastewater containing pollutants, including oxygen-demanding pollutants, (BOD etc.) in sufficient quantity, either singly or by interaction with other pollutants, to cause interference with the POTW.
- Any wastewater having a temperature greater than 150° F (66°C) or which will inhibit biological activity in the POTW, but in no case wastewater which causes the temperature at the introduction into the WWTP to exceed 104° F (40°C)



Sewer line inundated with grease

### **Fats, Oils, and Grease (FOG)**

Grease is a real “pain in the drain” because it’s a major cause of problems we find in sewer lines. Blockages occur when grease (things like oil, butter, margarine,



shortening, pan drippings, and sauces) is poured down the drain. Grease can clog sewer lines. Clogged sewer lines lead to sewer spills, which are messy, bad for the environment, and can be expensive. Town of Denton does everything it can to prevent sewer spills, but we can't do it alone. We need your help!

The best way you can prevent sewer spills is to never pour grease down the drain. Instead, pour it into a used soup can, place in freezer to harden, and throw it away in the trash.

**Don't** believe the old saying (1) it's okay to pour grease down the drain as long as you run water at the same time, or (2) it's perfectly fine to dump grease if you use your garbage disposal to break it up. **These are myths!** It's never okay to pour any type of grease down the drain. Here are some more ways to "Cease the Grease"-

- Wipe or scrape your dishes before washing them.
- Remove excess oil from pots and pans with a paper towel and throw it the trash can.
- Use strainers in sink drains to collect food scraps and throw away the scraps in the trash.

Thank you for your help, and please spread the word about how important it is to "Cease the Grease". Together, we can protect our sewer system and the environment.

If you have questions or comments about this report, the sewer system, prohibited pollutants or for further information about the sewer collection and treatment system, please contact Town Hall at 336-859-4231 or the Operator in Responsible Charge of the sewer system at 336-859-4460.

### ***Check your Sewer Clean-outs!***

A sewer clean out is a pipe or pipe(s) with a cap that provides access to the sewer line so that blockages can be removed.

We ask that our residential customers check their sewer cleanouts to ensure they have not been broken. Cleanouts can be broken by lawn mowers or traffic.

Sewer Cleanouts should be *above ground level* so in the event it should be broken, water or other debris cannot flow into the sewer line. Mud/dirt, mulch and gravel are a few things that can fall into the sewer and cause sewer backups into your home.

If you notice your cleanout is broken or is below ground level, contact Town Hall and report it, a work order will be generated, and we will be out soon to repair or replace your broken cleanout.

Are you concerned that a cleanout above ground level is unsightly? There are several ways to disguise or hide the cleanout. White gravel around the cleanout, a bird bath or in a garden can camouflage the pipe. Just remember the cleanout is there for the benefit of your property so should always be accessible.

