

Wastewater Collection System
Annual Report
2022

Owner:

Town of Troutman

400 N. Eastway Dr

Troutman NC 28166

Phone: (704) 528-7600

Permit Number:

WQCS00258

Operator in Responsible Charge:

Adam Lippard *Cert Number 996195*

Public Works Director

Cell: (704) 902-1451

Office: (704) 528-7616

Town of Troutman Wastewater Collections System

Overview

The Town of Troutman sends all wastewater to the City of Statesville and the Town of Mooresville for treatment. The Town of Troutman Public Works Department maintains roughly 50 miles of sewer lines, ranging from 4" to 12". This system includes 36 miles of gravity sewer line, 15 miles of force main sewer, and 18 sewer pump stations, including submersible centrifugal grinder and self-priming centrifugal pump assemblies. A SCADA alarm/monitoring telemetry system keeps track of each station's status. Some of the tasks associated with the maintenance of these systems are:

- Weekly pump station inspections include pump performance, ARV valve function, wet well condition, controls, safety guards & covers, generator testing during power fail simulation, and alarm tests. Pump hours are logged weekly, turned in at the end of each month for approval, and kept on file for state requirements.
- Monthly pump station inspections include more detailed preventative maintenance tasks such as telemetry system testing, valve exercising, generator load testing, alarm float testing, entrance road maintenance, site/security checks, and overall station cleaning.
- Diagnostic tests on the SCADA alarm system are performed monthly



Wastewater Collection System
Annual Report
2022

- Coordinating collections system permit renewal every five years
- Maintenance of all sewer lines, which includes regular manhole inspections and cleaning over 5 miles of gravity line annually for state requirements. All necessary cleaning is documented and filed for state inspection records
- I&I studies with assistance from NCRWA
- Performing root removal from known trouble areas documented as High Priority lines for records
- Performing a visual inspection of the entire sewer system by inspecting manholes annually
- Maintaining and mowing over 10 miles of sewer R.O.W.'s for accessibility.
- Perform annual maintenance on each station's on-site backup generators and pump assemblies. Including oil and filter changes, cooling system flushes, overall inspection, and load performance testing
- Performing annual maintenance on all wastewater above-ground centrifugal pumps.
 This includes pump assembly oil change, belt inspection, and efficiency testing. All maintenance completed is documented for maintenance history access.
- Maintenance of pump station sites, including weed eating and herbicide application, performed annually or as needed

Spills

Overview

The Town of Troutman has a very active sewer spill prevention program, including annual line cleaning, detailed inspections, and a FOG program. Despite these preventative measures, spills still occur. The Town is required to keep records of all sewer spills, reportable and non-reportable. The Town has implemented a Standard Operating Procedure in the event of any sewer spill. The Town experienced two documented spills in 2022, 1 being a reportable incident.

F.O.G Program

Overview

FOG is an industry term for Fats, Oils, and Grease. It includes animal fats, vegetable fats, and oils used to cook and prepare food. FOG is a solid or viscous substance that can obstruct the sewer system. FOG discharged by residential, commercial, institutional, and industrial users presents a significant problem for the town's wastewater collection and treatment system.

When grease is washed down the drain, it sticks to the inside of sewer pipes (both on your property and in the streets.) Over time, it builds up and can block an entire pipe. FOG can cause serious



Wastewater Collection System Annual Report 2022

damage to the sewage system, your property, and that of your neighbors, as well as damage to streets and waterways from sewage overflows. Also, cleanup can be very costly.

Garbage disposals do not keep grease out of the pipes - they only shred it into smaller pieces. Commercial additives (including detergents that claim to dissolve grease) may pass it down the line and cause problems away from the source.

Do This

- Remove and place all food and leftover grease into the trash, never the sink.
- Recycle large amounts of used cooking oil at the Iredell County Transfer Station.
- Wipe pots, pans, and dishes with dry paper towels before rinsing/washing them.
- Pour cooled FOG into a can with a tight lid (coffee can) and dispose of it in the garbage.
- Talk to friends and family about FOG in the sewer system and help them become proactive in preventing sewer blockages.

Do Not Do This

- Do not pour FOG down the sink drain or toilet.
- Do not use hot water to wash grease down the drain. When the water cools, FOG will solidify and clog the pipes.
- Do not rely on additives or detergents to dissolve grease. They only disperse it down the line to recollect and cause more problems.
- Do not put grease or greasy food into the garbage disposal.
- Never pour grease or used oil into the storm drains or on the ground.

SSO SANITARY SEWER OVERFLOW RESPONSE PLAN (SSO)

Procedure

- 1. Upon receiving a call from the on-call cell phone, telemetry system, customer, Police Department, or anyone else, a Public Works Staff member shall immediately respond to the address where the issue/complaint originated. Typical response time should be within one hour of receiving a complaint. This will include any odor complaints.
- 2. If an overflow is occurring, the staff member is to immediately call the ORC or backup ORC to ensure the spill is evaluated and reported according to the State requirements if needed.



Wastewater Collection System Annual Report 2022

- 3. Keep accurate records of SSO, i.e., time of call, arrival time, GPM of SSO, cause of SSO, and time it stopped spilling. If it reached surface waters, you would need to document start/stop times, the GPM that reached the *surface waters, and the name of *the surface water or location.
- 4. Pace labs are to be contacted to take upstream and downstream samples (R&A lab's contact # is 336-996-2841)
- 5. Public Works staff should immediately take measures to resolve the SSO. Call Lentz septic service (704-876-1834) immediately to vacuum up any standing water or lower the spilled amount. Once the blockage has been removed or the pump problem has been fixed, the area around the site will be cleaned and disinfected to ensure bacteria and any paper have been removed for public safety.

*Surface Waters- stream, ditch, and/or storm drain directly tied into any public water source.

6. After the line has been cleaned and the blockage removed, the line is to be inspected to ensure no structural defects. If the line has no structural damage, the area will be put on our high-priority list to ensure no future spill occurs. If the line has evidence of grease, F.O.G pamphlets are to be distributed to adjacent areas to educate residents about proper drain practices.

Reporting Procedures

- ORC or Back-Up ORC has 24hrs to visit the spill site and notify DWQ or Emergency Management of a reportable spill (SSOs over 1,000 gallons or if any of the spills reaches surface waters).
- 2. If the SSO reached surface waters and more than 1,000 gallons, we would have to issue a press release and give it to the local media outlets within 48 hours of the SSO.
- 3. When 15,000 gallons or more of untreated wastewater enters surface waters, a public notice shall be published within 10 days, and proof of publication shall be provided to the Division within 30 days.
- 4. The public notice must include the following:
 - a. Name of facility
 - b. Location of discharge
 - c. Estimated volume of untreated waste entering the Water of the State
 - d. Time and date discharge occurred
 - e. Duration of discharge
 - f. Waterbody that was discharged into including creek and river basin if applicable
 - g. Action is taken to prevent further discharge
 - h. Contact person and phone number



Wastewater Collection System Annual Report 2022

- i. In the event, a discharge of 1,000,000 gallons of wastewater or more reaches surface waters. In that case, the DWQ regional office must be contacted to determine if public notices in other counties need to be published.
- 5. A copy of public notices and proof of publication must be sent to DWQ to the attention of "NDCEU" within 30 days of publication
- 6. CS-SSO Report Form/BIMS Report must be filled out and submitted to DWQ within five business days of the SSO.