SSO & UD FAQ

FREQUENTLY ASKED QUESTIONS ABOUT UNAUTHORIZED DISCHARGES (UD) & SANITARY SEWER OVERFLOWS (SSO)

1. WHAT IS AN UNAUTHORIZED DISCHARGE OR SANITARY SEWER OVERFLOW?
According to the Texas Commission on Environmental Quality (TCEQ), an unauthorized discharge (UD) is any discharge of wastewater into or adjacent to any water in the state at a location not permitted. A sanitary sewer overflow (SSO) is a type of unauthorized discharge of untreated or partially treated wastewater. These typically occur within the collection system at manholes or pump stations.

2. WHAT ARE THE COMMON CAUSES OF A UD OR SSO?
In dry weather, an SSO can be caused by reduced capacity, obstructions, malfunctioning pump stations, and vandalism. In the case of obstructions or blockages, the build-up can cause the wastewater to back up and overflow from toilets, sinks, drains, manholes, or cleanouts. Pouring fats, oils, and greases (FOG) down the drain is a major contributor to blockages. Sometimes power outages, mechanical failures and accidents (such as when a construction contractor damages a pipeline) can also cause a UD or SSO.

In wet weather, an SSO can also be caused when the sewer system is overwhelmed by excess rainfall. We call this infiltration and inflow and it’s usually the result of aging and deteriorating infrastructure. Infiltration is groundwater that enters the system through leaky pipes, faulty pipe joints or defective manholes. Inflow is surface runoff from missing or defective manhole covers, uncovered or damaged cleanouts, defective pipes, or illegal storm water connections. Heavy rains can cause widespread flooding and high volumes of water flowing into sewer systems causing back-ups and overflows.
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3. WHAT ARE THE RISKS TO THE PUBLIC AND THE ENVIRONMENT?

It depends on the volume of the SSO, as well as the area and conditions in which it occurs. Because SSOs can contain everything that goes down your drain, the untreated water may have a host of bacteria, viruses and various other diseases. The wastewater may also include debris, algal blooms and even decaying organic material.

The concentration and amount of the overflow determines the level of risk involved. In times of heavy rain, the concentration of the SSO is heavily diluted so it generally poses minimal risk to the environment, especially once it's absorbed and blended into larger bodies of water. But in times of dry weather, a SSO may be more concentrated so the environmental impact can be much greater depending on the size of the overflow.

The elderly, children, and persons with a compromised immune system may be at additional risk if exposed to untreated wastewater. If the overflow is determined to be a potential health threat, NTMWD will notify the media to inform the public. In most cases, there are no impacts to public drinking water. If the SSO is near a private well, there may be an impact to those supplies. If there is an impact to the NTMWD drinking water supply, we may issue a boil water notice with specific information about how long the notice is in effect.

4. HOW DO YOU MEASURE THE AMOUNT AND DETERMINE WHO MAY BE IMPACTED?

When an SSO occurs, NTMWD sends trained wastewater professionals to the spill site to make operational adjustments to stop the spill, investigate conditions to allow for quantification of the volume, and assess cleanup approaches. A number of methods can be used to quantify volume including measuring the volume, review of system performance data, and using industry-accepted calculations.

To determine impacts, environmental specialists sample the water for key constituents and search downstream for potential environmental impacts to the affected waterways. The information collected during site inspections will help determine how to contain and clean up the spill.

5. WHEN/HOW DOES A UD OR SSO GET REPORTED?

When an unauthorized discharge or sanitary sewer overflow occurs, the NTMWD is required to notify the Environmental Compliance Manager for the Texas Commission on Environmental Quality (TCEQ) within 24 hours (but preferably within two hours) of a confirmed overflow. Utilities are required to notify appropriate local government officials and the media within 24 hours, depending on the size and location of the SSO or UD.
7. WHAT ACTION IS THE DISTRICT TAKING TO PREVENT WASTEWATER SPILLS?

In recent years, the NTMWD has invested millions of dollars to increase system capacity, rehabilitate aging infrastructure, and install back-up power generators. Ongoing improvements will be necessary to provide continued reliable service as our service area grows and infrastructure ages.

Additionally, the NTMWD and participating cities in the regional wastewater system are partnering to implement a Regional Capacity, Management, Operations and Maintenance (CMOM) program to ensure best management practices for how we operate and maintain our collections systems. This will reduce risks of UDs and SSOs.

8. WHAT CAN I DO TO PREVENT WASTEWATER PIPE OBSTRUCTIONS AND SPILLS?

Obstructions in the flow of wastewater can be caused by a build-up of solids such as a blockage from fats, oils and greases (FOG) that are washed down kitchen drains, especially in large quantities such as from restaurants. The most common sources of FOG build-ups are cooking oils used for frying, bacon grease, and other meat fats like ground beef and sausage drippings. Other culprits include milk, butter, ice cream, frosting, baked goods, chicken skins, creams, sauces and salad dressings, which solidify further down the pipeline. Non-degradable bathroom wipes or baby wipes that are flushed down toilets also cause obstructions in the flow of wastewater through the pipelines and pumps.

One of the most important things you can do is to avoid putting anything down the toilet or the drains that do not belong there. Products like paper towels, feminine hygiene products, and wipes should not be flushed. Even most “flushable” wipes aren’t actually flushable because they don’t degrade quickly enough or properly. Keeping your pipelines free of these products is very important.