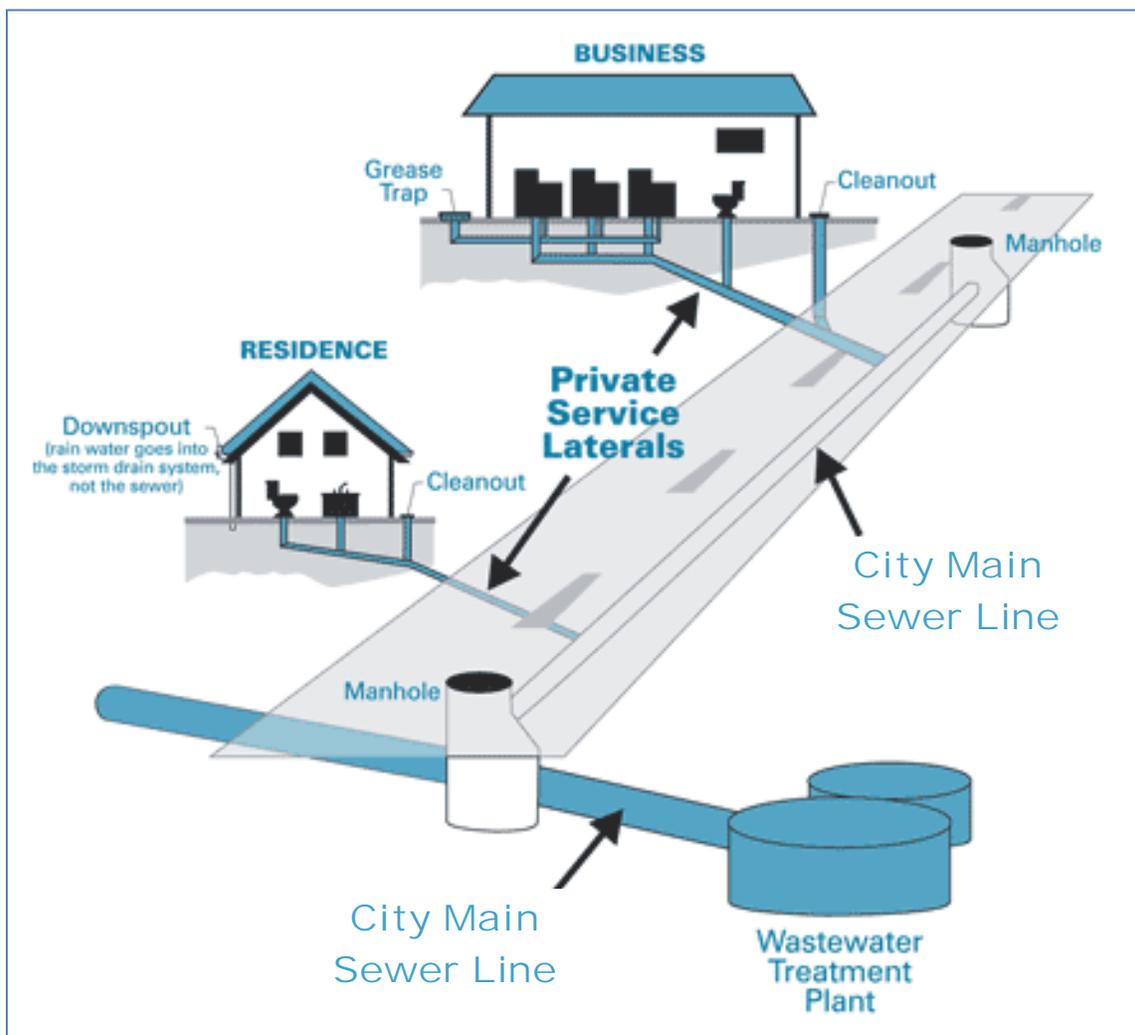


Sanitary Sewage Spill Prevention and Best Management Practices

How a Sewer System Works

The sewage system carries wastewater from inside residences and businesses to a wastewater treatment plant. Within this system, the pipes that connect private properties to the main service lines are called service laterals. Property owners are responsible for the maintenance of service laterals from their buildings until the pipes transition onto public property (generally within the street right-of-way). For more information regarding owner maintenance requirements of service laterals; contact the City of Durham, Department of Water Management at (919) 560-4381.



The sewer system transports wastewater from your property to the wastewater treatment plant.

What is a sewage spill?

A sewage spill occurs when wastewater leaks from a broken pipe or backs up and overflows through a manhole or cleanout. If it is not contained within a short amount of time, this sewage will flow over land and may eventually enter a drainage system or a local stream or lake. A sewage spill is sometimes called a sanitary sewer overflow.

Signs of a Sewer Spill

Sewage spills may be water gushing from a manhole or a slow leak. The sewage is likely to be gray and will probably stink. You and your staff should keep an eye out for:

- Drains backing inside of your building(s)
- Unaccounted for wet areas (ground/landscape around a building, sidewalks, external walls)
- Water leaking or gushing around manhole lids, cleanouts, or outside drains

Common Causes of Sewage Spills

- **Grease** is the most common cause of pipe blockages that lead to overflows. Grease builds in pipes and eventually blocks the flow of wastewater. It is important to never put grease, fats, or oils down any drain that leads to the sewer system! Grease gets into the sewer from household drains and from poorly maintained commercial grease traps and interceptors.
- **Structural problems** caused by tree roots, broken/cracked pipes, missing or broken cleanout caps, or undersized sewers can cause blockages and spills.
- **Sewage pump failure** caused by lack of maintenance, obstruction, or an electrical problem can also lead to wastewater backing up in a system. (Note: Sewage pumps are typically used when the City's sewer main is elevated more than the private service line. Not all private service lines use them.)
- **Infiltration and inflow** happen when groundwater or rainwater enters the sewer system through pipe defects and illegal connections. Pipes are not large enough to carry rain water along with wastewater and this can cause wastewater to back up in a system.

Who's Responsible?

You are responsible for a sewage spill caused by a blockage or break within your private service sewer line(s). Allowing sewage from your property to discharge to a gutter, storm drain, or a waterway may subject you to penalties and/or out-of-pocket costs to reimburse the City for clean-up and enforcement efforts.

If there is a spill caused by a blockage or break in one of the City's main sewer trunk lines please report it to the City's Water Management Department. During normal business hours call (919) 560-4344. After 5:00 p.m. and on weekends call (919) 560-4384.



TIP: Sewage typically contains high levels of bacteria, nitrogen, and oxygen depleting compounds. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment and local waterways.

How You Can Prevent Sewage Spills

Landlords can prevent grease blockages by educating their tenants about proper grease disposal. This includes never pouring grease down garbage disposals, drains, or toilets. Plates and pans should be scraped into the trash before being washed. A handout (in both English and Spanish) outlining this information is available online for you to print off and give to your residents at: www.durhamnc.gov/stormwater in the Education section.

Other ways landlords can reduce the risk of sewage spills include:

- Perform routine inspections of your pipes
- Periodically clean pipes to eliminate grease, debris and roots
- Repair any structural problems
- Stop any rainwater entering your pipes

How to Respond to a Sewage Spill from Your Private Service Line

A quick response is essential. Having the necessary materials, contact information, and a plan of action will allow you to quickly respond to a sewer spill. You or a contractor working on your behalf are required to **immediately**:

1. **Notify:**
 - Durham's Stormwater Services Division at (919) 560-7946
 - Durham's Water Sewer Maintenance Division at (919) 560-4344 during normal business hours or at (919) 560-4384 after normal business hours
 - North Carolina's Department of Water Quality at their 24-hour emergency response number (800)-858-0368 for sewage spills that reach waters of the state or which are 500 gallons or larger
2. **Control and minimize the spill.** Keep spills contained on private property and out of gutters, storm drains, and public waterways by shutting off or not using the water.
3. **Use sandbags, dirt, and/or plastic sheeting** to contain the spilled sewage.
4. **Find the source(s) of the spill and stop it** (see the Common Causes of Sewage Spills above). Ideally you should call a plumbing professional to clear blockages and make necessary repairs.
5. **Clean up** the spilled sewage (both solids & liquids) and properly dispose of it. Small spills (< 25 gallons) can be cleaned up with a mop and a bucket whereas larger spills (> 25 gallons) require mechanical methods such as pumping and/or vacuuming and should be handled by an environmental clean-up contractor. Affected areas can include, but are not limited to the ground, the storm drainage system, and waterways such as streams, ponds, and wetlands. Proper disposal of sewage consists of disposing of it in a permitted treatment system. Failure to respond promptly often results in much higher cost of cleanup.
6. **Apply hydrated lime** to reduce bacteria levels in the affected areas (hydrated lime is white powder lime available at most home improvement stores). *Caution: Do not apply lime to waterways or in the storm drainage system!*



Caution: Untreated sewage has high levels of disease causing viruses and bacteria. Keep people and pets away from the affected area. [Call your local health care agency](#) for more information. Always wear gloves and wash your hands when handling untreated sewage.

What You Should Have Available to Deal with a Sewer Spill

Being properly prepared can save you a lot of time, effort, and headaches when there is a sewer spill on your property. You should prepare a plan that contains the following:

- steps to follow if a spill happens (if a management company is in use you should include permission to contract those necessary to immediately deal with any problems before they become bigger and more expensive)
- a list of important contact numbers including two plumbers, two environmental contractors, the notification numbers for spills, and important phone numbers such as for the property owners or a corporate office
- a preventative maintenance plan and log of maintenance activities and sewer line inspections
- a map or diagram of the property that shows the location of underground sewer pipes and the underground or above ground drainage system (storm drains and pipes, ditches, creeks)
- a list of spill response materials (such as those needed for containment and hydrated lime), directions on how to use them, and where they are stored