

Grease Control Equipment

KUB requires all FSFs to install adequately sized and properly installed grease control equipment. Under the GCP, that means traps or interceptors, depending on the amount of grease produced. KUB uses an EPA-approved grease control equipment sizing formula to help determine the proper size equipment needed.

The amount and type of food prepared or served and the plumbing fixtures in the facility are all important in determining the size and type of equipment needed. Some facilities, for example, may only serve catered food, but those facilities must also install grease control equipment that meets KUB's program requirements and local plumbing code requirements.

Plumbing fixtures also affect the type of grease control equipment needed. FSFs that use an automatic dishwasher must plumb it through a grease interceptor. KUB prohibits plumbing dishwashers through a grease trap.

Two Types of Grease Control Equipment

Grease Interceptor:

- A large tank or device used to separate and hold FOG to keep it from discharging into the sanitary sewer. Typically located outside, due to its large size.
- Grease interceptors must be safely and easily accessible so they can be inspected and maintained properly. The area above each access manhole must be free from obstruction for at least 11 feet or the depth of the interceptor (whichever is greater).
- All grease interceptors must have a mid-baffle wall and manhole access above both the inlet and outlet piping tees, and they must be plumbed to KUB's GCP specifications.



Grease Trap:

- Typically a box-shaped device that is installed inside to capture FOG from sinks or other fixtures and keep it from entering the sanitary sewer system.
- A grease trap must have a properly rated and vented flow restrictor, which must be visible and accessible, between the plumbing fixture and the trap's inlet.
- A grease trap may be installed sitting on the floor, if space allows. If it is installed beneath the floor, its top must be flush with the floor, so it can be opened, cleaned, and inspected without having to enter a crawl space or unfinished basement area.
- A grease trap must have a clear and unobstructed space above it that is greater than or equal to the depth of the grease trap to provide safe, easy access for inspection and maintenance.
- Grease traps may not use automated self-cleaning equipment or mechanisms.



Proper Maintenance Prevents Problems, Penalties

Grease control equipment captures grease to keep it from entering the sanitary sewer system. By design, solids, fats, oils, and grease build up in the equipment until they are pumped out. FSFs must clean and pump the entire contents of their grease control equipment on the required frequency (which KUB will establish) to keep it working properly. KUB can provide the FSF with a list of approved pumpers and cleaners.

Insufficient maintenance may lead to

- Discharge of grease
- Corrosion and possible equipment failure
- Costly equipment replacement
- Assessed penalties or service termination

Call 811 Before Any Digging Project

No matter what your project, always make a free call to 811 to have underground utilities marked before you dig. It's the law, and it helps protect you from dangerous, costly dig ins.



Your Safe Digging Checklist

- Make a free call to 811 at least three working days before digging.
- Give the 811 operator your name, start date/duration of project, type of excavation, and the project location.
- Outline the area where you plan to dig with white paint.
- Wait for the site to be marked. If the markings wash away or are covered, call 811 again before digging.
- Respect all markings: Dig with care in the "safety zone" (width of utility plus two feet on each side).

Remember: Customer-owned lines for water, sewer, and underground electric won't be marked. Customer-owned natural gas service lines will be marked.

Toilets Are Not Trash Cans!

Keeping FOG out of sewers is important, but you can do more to protect our environment and your plumbing:

- Never flush rags, baby/personal hygiene wipes, paper towels, feminine products, dental floss, or disposable toilet wand heads. They can clog pipes or jam pumps, leading to sewer overflows, backups into buildings, and costly repairs.
- Never flush prescription or over-the-counter drugs to help keep them out of waterways. Take drugs to collection events or the permanent collection site (open 24/7) in the lobby of the Knoxville Police Dept. Safety Building, 800 Howard Baker Jr. Ave.

Just because you can flush it doesn't mean you should. Think before you flush.



Food Service Facilities' Grease Control Guide

Keeping fats, oils, and grease (FOG) out of the sanitary sewer helps ensure reliable wastewater service for your food service facility (FSF).

It also helps protect your property—and our environment. If grease enters your drains (even just grease from washing dishes), it can build up and lead to messy, costly sewage backups in your building or overflows in our community.

Overview of KUB's Grease Control Permitting Process (See details inside)

- Call KUB's Grease Control Program (GCP) at 594-8337 to obtain a GCP permit application
- Submit completed GCP application to KUB
- Wait to purchase equipment until you receive KUB's notification of required equipment (KUB usually takes about two business days to review a properly completed and signed application)
- Call 811 to have underground utilities marked for free before any digging
- Install KUB-approved grease control equipment per KUB's GCP specifications
- Schedule a KUB inspection to ensure proper installation



Grease Control Program Mandated by EPA and TDEC

KUB is committed to providing cost-effective wastewater service and to operating our wastewater system in an environmentally responsible manner.

The Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) also require utilities like KUB to have and maintain an effective Grease Control Program (GCP). KUB instituted a GCP to protect the public from sanitary sewer overflows (SSOs), which can occur when fats, oils, and grease (FOG) build up inside sewer pipes and cause a blockage.

Overflows can pose a significant public health concern and are a potential threat to our environment. Through our GCP, KUB works with potential grease-producing facilities that may contribute to grease-related overflows to ensure that they have and maintain adequate grease control equipment.



KUB Grease Control Permitting

KUB requires all food service facilities (FSFs) to apply for and obtain a GCP permit. Both new and remodeled FSFs must contact KUB to obtain direction on how to submit information to help determine the type and size of grease control equipment needed.

Remodeling may include (but is not limited to) the addition of

- New plumbing fixtures
- New kitchen equipment
- Increased seating capacity

FSFs must renew their permit every other year and provide updated facility and contact information. They should also report any changes in the facility since the last permitting period. That helps prevent changes from going unnoticed, which may mean grease is not being adequately controlled.

KUB charges a minimum permitting fee of \$100. The fee increases if the FSF does not maintain compliance with GCP requirements or is classified as having a high potential to discharge grease.

Approval Process

KUB must always approve the type and size of grease control equipment an FSF plans to use. KUB must also approve the grease control equipment's installation to ensure safe and easy access for inspections and maintenance.

KUB works with local plumbing inspectors to help ensure equipment is sized appropriately. FSFs must obtain KUB's approval of grease control equipment in addition to obtaining all the necessary plumbing permits. If you have questions about equipment size, call KUB at 594-8337. For questions about plumbing requirements or permits in the City of Knoxville, call 215-2999. For Knox County, call 215-2325.



Inspection and Assessment

KUB's GCP personnel routinely inspect FSFs in our wastewater service area. Inspectors check the grease control equipment and maintenance records to ensure compliance with the program.

Inspectors also try to determine if the FSF has made changes it has not communicated to KUB that might impact grease control. For instance, adding a dishwasher may require additional grease control equipment because the large volume of hot water and soap discharged from a dishwasher can easily dissolve grease in a trap and flush it into KUB's sewers. KUB communicates any noncompliant issues or items that need further review to the FSF.

KUB also assigns FSFs a risk rating based on their potential risk to discharge grease. KUB rates FSFs that maintain compliance and have adequately sized equipment as low to medium risk. KUB classifies facilities as having high or unacceptable risk if they

- Fail to clean their equipment as required
- Have inadequately sized equipment
- Contribute to grease build up downstream in the collection system
- Fail to comply with KUB's GCP requirements

KUB asks high-risk FSFs to take corrective action, including possibly installing larger equipment.

Ongoing FSF Responsibilities

After going through the permitting process, FSFs must

- Train all employees in proper grease disposal practices and the requirements of KUB's GCP
- Clean equipment at the required frequency
- Maintain and conspicuously post logs on site to document cleaning events
- Post "No Grease" signs over kitchen sinks and mop sinks
- Ensure equipment remains in good operational condition
- Follow KUB requirements that prohibit the constant, regular, or scheduled use of any additives
- Notify KUB of any changes or upgrades
- Renew their GCP permit every other year

GCP Permitting, Sizing, Installation Process for Food Service Facilities

FSFs must call KUB at 594-8337 to discuss grease control requirements to prevent construction or opening delays—and to avoid having to replace incorrect or undersized equipment.

Follow these steps in the Grease Control Equipment Permitting, Sizing, and Installation process:

1. FSFs must call KUB's Grease Control Program at 594-8337 to obtain a GCP application and sizing information.
2. FSF reads KUB's Grease Control Program documentation first, and then completes the GCP application.
3. FSF submits Grease Control Permit Application to KUB [Attn: JK15] at P.O. Box 59017, Knoxville, TN, 37950-9017. **Remember:** Call KUB's GCP at 594-8337 with any questions.
4. KUB verifies submitted applications are complete and have proper signatures. KUB returns incomplete and improperly signed applications to the FSF to be corrected.
5. KUB reviews the submitted application and notifies FSF of the required grease control equipment, typically within two business days of receiving a properly completed application.
6. FSF must call 811 to have underground utilities marked for free if the equipment installation requires external digging.
7. FSF must be sure to acquire any necessary plumbing permits.
8. FSF purchases and installs KUB-approved grease control equipment per KUB's GCP specifications. **Remember:** If you have questions, a simple phone call to KUB at 594-8337 now, rather than after you purchase and install the equipment, can save you time and money.
9. FSF must call KUB at 594-8337 to schedule an inspection of the grease control equipment at least two business days in advance.
10. KUB performs the installation inspection. If the installation passes inspection, KUB issues the FSF's permit.



FSFs must call KUB at 594-8337 to discuss grease control requirements to prevent construction or opening delays or future grease issues—and to avoid having to replace incorrect or undersized equipment.