

NO GREASE!



**SCRAPE FOOD WASTE AND
GREASE INTO THE TRASH
DRY WIPE POTS AND PANS
BEFORE WASHING**



Negative Effects of Fog

It is cheaper and easier to prevent FOG than to manage after it becomes a problem. FOG buildup can clog sewer and drainage pipes resulting in messy, costly overflows. It is bad for business, the environment, and public health. The cost of a backup may include:

- Loss of business while you're closed to clean up and get the kitchen back into service
- Cleanup of the premises by staff and cleaning or restoration service
- Hiring a service to clean the sewer lines
- Repairs or replacement of the building, fixtures, and equipment
- Reimbursement for damages to neighbors and the public sewer system
- Higher insurance premiums
- Fines and penalties

Blocking a sanitary sewer line is a violation of the Federal Clean Water Act

GRDs cannot function properly if they are filled with grease and lose efficiency when only 25% full. The property and business owners are responsible for the proper installation, maintenance, and cleaning of their GRDs. The business may hire contractors to provide rendering, recycling, and exhaust/vent/hood cleaning services. The recommended cleaning frequency varies by the type of food and kitchen cleaning practices. If the establishment fails to adequately maintain its trap or interceptor, it will eventually encounter a maintenance problem with a plugged building sewer line. The blockage can create a sewer backup situation and ultimately a potential health problem in the establishment.

Drain Clogged with FOG



Clear Drain



Regulations

Sanitary sewer overflows (SSO) and sewer line maintenance due to FOG waste have been on the rise. This has prompted stricter enforcement of Ordinances and Regulations governing FOG discharge into the sewer system. If you are licensed by the Health Department or Department of Agriculture or engage in providing a large number of meals, you are required to install and properly maintain a pretreatment device commonly known as a grease removal device (GRD).

FATS, OILS & GREASE

Decreasing FOG in sanitary sewers and storm drains through Better Management Practices and Grease Removal Devices



TWSD

Troy Water and Sewer Division
248.524.3370

Fats, oils, and grease (FOG) can have negative impacts on wastewater collection and treatment systems. Most wastewater collection system blockages can be traced to FOG. These blockages are serious, causing sewage spills, manhole overflows, or sewage backups in homes and businesses.



This manual is written to provide restaurant and food service related business managers and owners with information about FOG pollution prevention techniques focused on their businesses, effective in both reducing maintenance costs for business owners, and preventing oil and grease discharges to the sewer system.

Residual FOG are the by-products that food service establishments must constantly manage. Typically, FOG enters a facility's plumbing system from washing dishes/pots, floor cleaning, and equipment cleaning.

The discharge of FOG to the sewer system is illegal. Sanitary systems are not designed or equipped to handle the FOG the accumulates on the interior of the sewer collection system pipes. Ensuring that grease trap and grease interceptors are properly installed and properly maintained is the key to avoiding enforcement action against your business.

How do Grease Removal Devices Work?

1. Your kitchen's complete plumbing system, including sinks, dishwashers, floor-drains, and mop-sinks, drains into the grease trap or grease interceptor system.
2. Wastewater flows into either an interior or exterior (usually in-ground) grease trap system. A baffle separates the inlet and outlet of the trap, keeping grease in.
3. Grease floats to the top of the grease trap, while solids settle on the bottom. The trap or interceptor must be vacuum pumped regularly by a skilled service provider to remove the entire contents of the trap.
4. Clean water then continues to flow into your sewer or septic system.

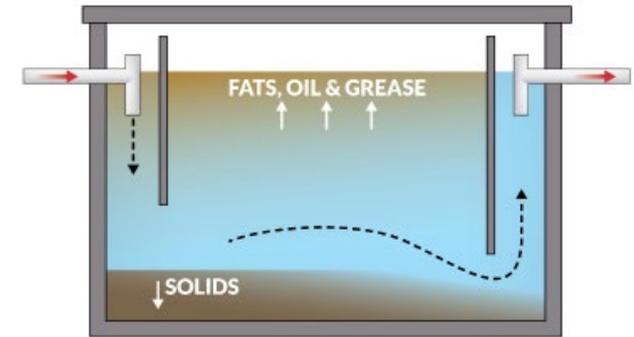
The EPA has determined that sewer pipe blockages are the leading cause of sewer overflows; FOG is the primary cause of sewer blockages.

Most Common FOG Violations

- GRD not being maintained properly
- One or more kitchen fixtures not connected to GRD
- Floor drains not connected to interceptor
- Floor mop sink not connected to GRD
- Incorrect GRD installed for the amount of wastewater that can potentially be discharged
- Wrong/unapproved device for grease removal
- Garbage disposal to GRD
- Use of hot water to wash grease away
- Failure to use baskets/strainers in sink drains to catch food scraps

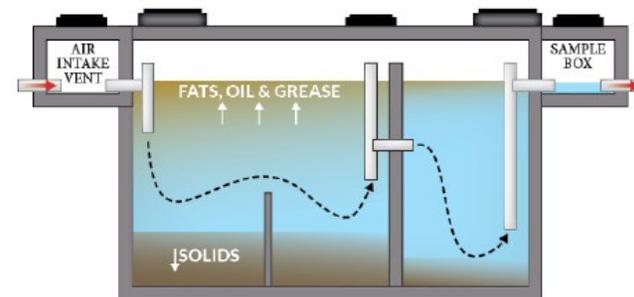
Grease Trap

Traps are intended for food and drink preparation, typically located under the sink or other kitchen fixture to which it is connected.



Grease Interceptor

Interceptors are intended for food and drink operations, typically located outside as an underground vault to accommodate a large capacity for FOG materials.



The required maintenance frequency for trap/interceptor devices depends greatly on the amount of FOG a facility generates, as well as any Best Management Practices (BMPs) that the establishment implements to reduce FOG discharged into its sanitary sewer system.

Fats Oils Grease

To Do	Why?	Benefits
Train employees	Employees help eliminate grease blockages and sewer spills	Avoid sewer blockage, fines, and environmental issues
Display “No Grease” information in the workplace	Reminds employees to reduce FOG in the kitchen	Minimize grease discharge; reduce cleaning and disposal costs
Scrape or dry-wipe excess food and grease from cookware; dispose in trash	Keeps grease out of traps and interceptors	Less frequent cleaning, reduce maintenance costs
Install removable screens on all kitchen drains	Prevents food from clogging the sewer system	Reduce grease and food in traps and interceptors
Keep hot water to drains less than 140°F	Hot water dissolves grease and pushes it to the sewer pipe	Reduce costs to heat water; prevent FOG “pass through” in grease interceptor
Don’t overfill FOG containers	Prevents slippery FOG spills	Employee safety
Pour cooking grease and liquid oil into covered grease container	Reduces the amount of grease discharge to sewer	Reduce grease waste and garbage fees
Use Spill Kits	Absorb spilled grease and oil	Reduce material in grease traps and interceptors
Routinely clean kitchen exhaust system filters/hoods	Grease and oil in kitchen exhaust system can accumulate on the roof and may enter the storm drain system when it rains	Protect local waterways. Avoid penalties or fines for polluting water

For more information contact the Troy Water and Sewer Department 248.524.3370



How homeowners can help protect their plumbing and our environment?

- Never pour grease down sinks, toilets, or any drains
- Scrape grease and food scraps into a can or the trash for disposal
- Use strainers in sinks to catch food scraps and empty the strainers into the trash
- Don't rely on a garbage disposal to get rid of grease- it grinds food into smaller pieces, but it doesn't keep grease from going down the drain
- Wipe or scrape cookware and dishes well before washing- commercial additives in detergents only dissolve grease temporarily
- Clean kitchen exhaust system filters routinely
- Talk with your friends and neighbors about the grease problem, so that the community is aware of the risk
- *Please use caution when pouring hot grease or wait for it to cool slightly- hot grease can burn skin!*

What can you do?

CAN YOUR GREASE! Dispose of grease in a way that is good for your plumbing.

A metal coffee can with a plastic lid or empty metal soup or vegetable cans make great grease cans. Line your can with disposable heat-resistant oven bags. Throw the liners away after the grease cools and reuse the cans.

Following these guidelines will help avoid costly plumbing repairs associated with clogged pipes, drains, or other plumbing and avoid potential fines, penalties, or invoices for damage to sewer systems.

Safety Tip

If you have a grease-related sewer backup, avoid direct contact or wash thoroughly with soap and water. The Centers for Disease Control and Prevention (CDC) says skin contact isn't a serious health risk, but swallowing bacteria or a virus may cause illness. Always wash your hands before preparing or eating food, after using the bathroom, and after touching objects exposed to a backup.



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phone: 248.524.3370

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Clogged Drain

Clear Drain

Why is cooking grease a problem?

When you pour cooking grease down your drains, it may build up, block your pipes, and cause unpleasant odors or messy, costly sewage backups in your home. It can also clog sewer lines. In fact, grease is the leading cause of dry weather sewer overflows, which are a potential threat to our health, homes, and environment.

Contrary to popular belief, running hot water after pouring grease down the drain doesn't work. The grease eventually cools, then congeals and coats pipes. When enough grease builds up, it can block your plumbing, sewer lines, and even pumps. It is important to can, cool, and trash grease.

These blockages in the wastewater collection system are serious, causing sewage spills, manhole overflows, or sewage backups in homes and businesses.

COOKING GREASE IS THE #1 CAUSE OF SEWER BACKUPS IN HOMES



Never pour grease down the drain.

Scrape grease and food scraps from all cookware and dishes into a trash can for proper disposal.

Common Sources of FOG

-  Fried foods
-  Cooking meats
-  Gravy and sauces
-  Mayonnaise and salad dressings
-  Butter, ice cream, and other dairy products

What problems are caused by grease?

- Clogged drains or toilets
- Sewage backups into your home
- Sewer overflows in neighborhood parks, yards, and streets
- Unpleasant odors
- Expensive cleanup, repair, and replacement of damaged property (often paid by you, the homeowner)
- Potential contact with bacteria and viruses that can cause illness
- Higher operating and maintenance costs to the municipality, potentially resulting in higher sewer bills for you



Can It



Cool It



Trash It