

Caring for your Grease Trap



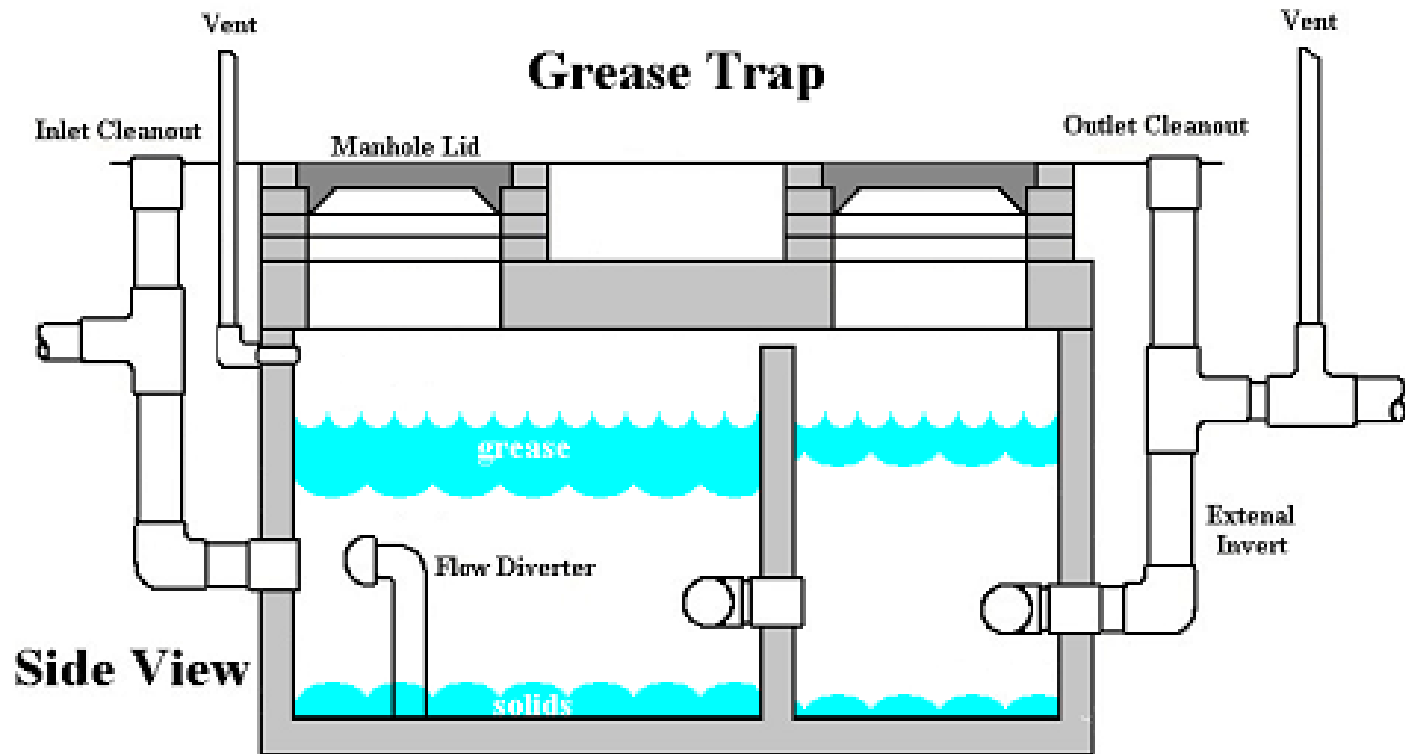
A Presentation by the
Austin Water Utility's
Office of Industrial
Waste

December, 2003



Given the prevalence of solids and fats, oils and greases (FOG) in the wastewater from commercial food establishments, preventing sanitary sewer overflows related to these discharges requires careful attention.

A grease trap is designed to physically separate grease and solids from kitchen wastewater. As wastewater enters a trap the water slows and the grease particles, which are lighter than water, coalesce and float towards the top of the tank. The heavier solid particles settle at the bottom. The trap outlet is located near the middle of the tank to prevent the grease and solids from passing through the tank. The longer the wastewater stays in the trap, the better the separation. As the layers of grease and solids increase (thicken), the retention time in the tank is reduced, separation is less complete and grease & solids are allowed to pass through to downstream plumbing.



All kitchen fixtures located in food prep or clean up areas should be plumbed to the grease trap.

Examples include: 2 and 3-compartment pot sinks, prep sinks, dishwashers, floor drains, trench drains, floor sinks, disposers, wok stoves and tilt kettles. Hand sinks, mop sinks and drains for condensation only may bypass the trap.



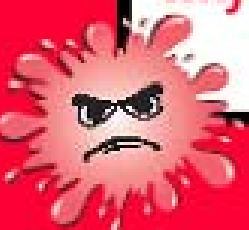
Make sure you and your staff are aware of the Do's and Don'ts of proper grease management in your kitchen.

Let's Tackle the Grease in This Kitchen!



Why should I help?

- Prevent grease buildups from blocking sewer lines.
- Stop sewer overflows into streets and storm drains.
- Save money spent on costly cleanups of sewage spills.
- Reduce the number of times you have to clean your grease trap (food service).
- Protect the quality of our water.



TCEQ Poster GI-290

This poster is available from the Texas Commission on Environmental Quality (TCEQ)
Small Business & Local Government Assistance Section

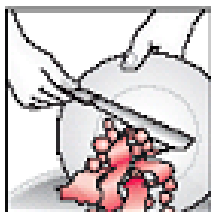
1-800-447-2827

www.tceq.state.tx.us

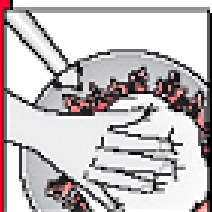
DO!



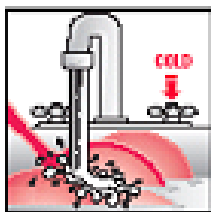
✓ Put oil and grease in covered collection containers.



✓ Scrape food scraps from dishes into trash cans and garbage bags and dispose of properly. Avoid using your garbage disposal.



✓ Remove oil and grease from dishes, pans, fryers, and griddles. Cool first before you skim, scrape, or wipe off excess grease.



✓ Prewash dishes and pans with cold water before putting them in the dishwasher.



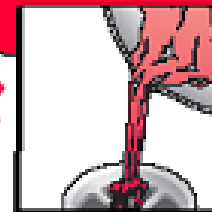
✓ Cover kitchen sink with catch basket and empty into garbage can as needed.



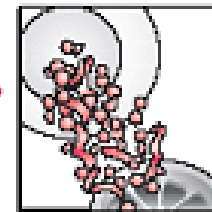
✓ Cover floor drain with fine screen and empty into garbage can as needed.

DON'T!

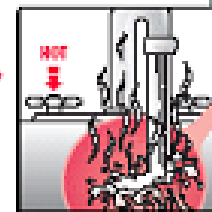
Don't pour oil and grease down the drain. ✗



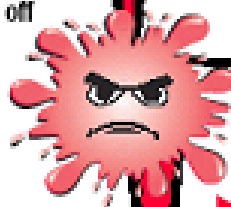
Don't put food scraps down the drain. ✗



Don't run water over dishes, pans, fryers, and griddles to wash oil and grease down the drain. ✗



Don't rinse off oil and grease with hot water. ✗



More Ways to Tackle Grease

- ▶ Use environmentally safe cleaning products instead of harsh detergents or cleaners that can damage sewer lines.
- ▶ If you generate large amounts of used cooking oil, reuse or recycle it. To find a recycler, check the phone book under "recyclers" or "rendering companies."
- ▶ If you generate small amounts of used cooking oil, reuse it as often as possible and then pour it into a container you can throw away. Never pour it down the drain.
- ▶ Start a compost pile at your home with scraps that are not meat. Find out about composting in the TCEQ publication, "A Green Guide to Yard Care" (GI-028).



By trapping the FOG and solids normally found in food prep operations, the grease trap stands as the last line of defense against potential sewer blockages, overflows and the ensuing fallout.

A properly sized grease trap is critical. A trap that is too small will not be able to remove the FOG and solids efficiently.



The under-counter grease traps like this one are no longer approved. The smallest sized grease trap approved for installation today is 100 gallons.



A trap that is too large may be just as problematic. Oversized traps may become stagnant, causing odor problems and/or corrosive conditions that drastically shorten the trap's useful life.

The design of the trap is as important as its size. Note the short distance between the inlet and the outlet. This old style cylindrical trap is no longer approved for installation because of its poor performance.



Note the flow diverter on inlet side of this new installation. This helps to eliminate channeling effects or “short circuiting.”



Here, the baffle wall and piping can be seen. Proper baffling insures that the flow is evenly spread throughout the tank.





This is what a 1000 gallon interceptor looks like after installation.

A grease interceptor should not be confused with the oil rendering container shown to the right. This container holds the old fryer oil (also known as yellow grease) and is hauled off-site periodically.



Do not put old fryer oil into kitchen sinks and drains!

The City periodically samples the discharge from each individual commercial food establishment as a part of the Surcharge Program. As a part of this program, wastewater charges are determined for each particular establishment based on the quality of the wastewater discharged. As such, the inadequate control of FOG and solids discharges can result in very expensive utility bills for an individual establishment.





Maintenance Requirements

The FOGs and solids must be removed regularly in order for the grease trap to work properly.

The Austin City Code specifies all grease traps must be completely emptied and cleaned by a licensed hauler at least once every three months **or more frequently if**, before three months, the grease and solids in the trap's final compartment accumulate to 50% or more of the wetted height of the trap.



The perfect clean-out frequency will vary for each business. Most grease traps should be pumped at least once every 30 to 45 days.

Ask your grease trap maintenance service provider to take periodic grease and sludge layer measurements to determine the right frequency for your business.



Enzymes, Bacteria & Other Agents



The Austin City Code prohibits the use of enzymes, bacteria and/or other agents that would cause the contents of a grease trap to pass through the grease trap.

There is no substitute for regular cleaning and pumping!

Documentation Requirements

A document titled "WASTE TRAP MANIFEST INFORMATION" from the Austin Travis County Health Department. The document is a form with three main sections: "WASTE PRODUCER INFORMATION", "WASTE TRANSPORTER INFORMATION", and "RECIPIENT PLANT OPERATOR INFORMATION". Each section contains fields for Name, Address, City, State, and Zip, along with checkboxes for various waste types. The form is filled out with handwritten information and signatures. The document is dated 4-9-2015 and has a reference number A 192-989. At the bottom, there is a statement: "Each person signing is authorized to be certifying that the information on this manifest is true and correct." and a signature line.

The Austin City Code specifies that grease trap waste manifest records must be made available for up to the past three years in which the facility has been in business.

It is important that you do not treat your sinks and drains like a garbage can.

Garbage disposers tend to get abused and can overload a grease interceptor with solids, making it much less efficient and requiring it to be pumped out more frequently.





A neglected trap may result in:

- Much higher utility surcharge fees,
- Expensive plumbing repairs and clean-up costs,
- Fines of up to \$2,000 for each violation,
- Loss of business during service interruption,
- Environmental impacts, and
- A public relations backlash if neighbors are adversely effected.

Grease traps do not last forever. If the trap is not pumped and cleaned out regularly, acids will form as the grease turns septic.



These acids are very destructive and over time can cause baffles, piping, and tank walls to simply crumble apart. Notice the black lines on tank wall of the trap shown above. This is exposed wire rebar.

Grease traps are very expensive to install and/or replace. Making sure they are cleaned and pumped out on a regular schedule is very important.



Proper maintenance will protect the wastewater lines downstream from grease build-up and potential sewer overflows and it will ensure a long healthy life for your grease trap.