

CARING FOR YOUR GREASE TRAP

A Presentation by Austin Water's
Office of Industrial Waste



Revised June 2022

Attention to Commercial Wastewater is Essential

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.



Grease Traps Help Protect the Environment

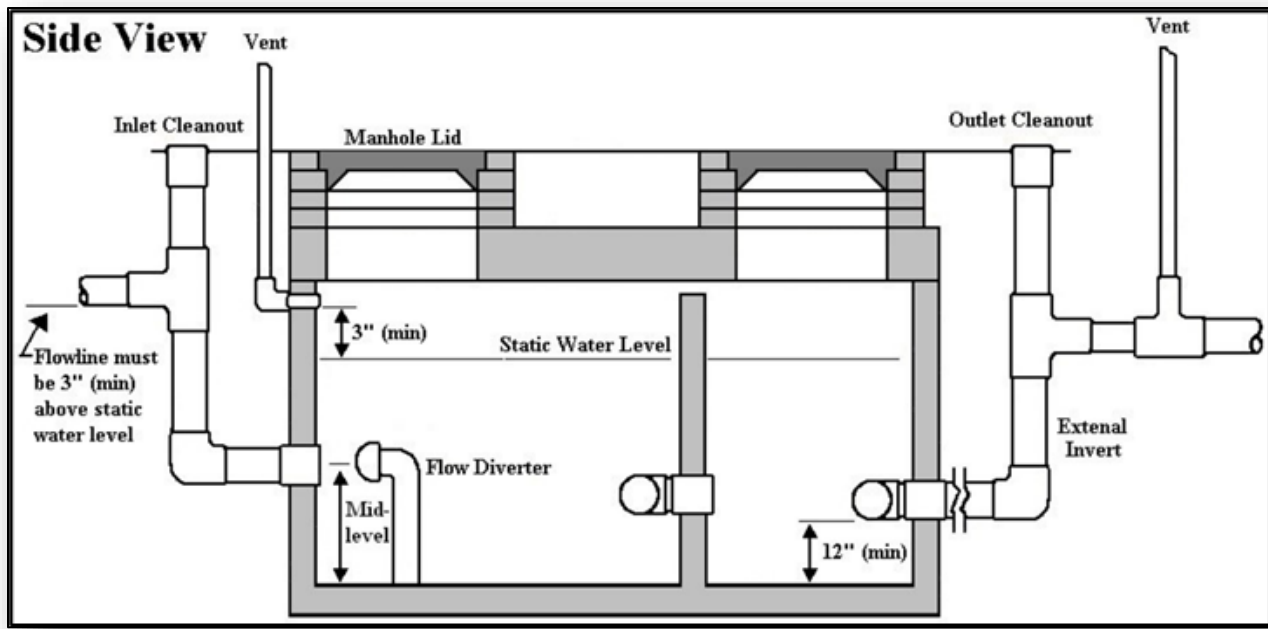
A grease trap, also known as a grease interceptor, is designed to physically separate FOG and solids from kitchen wastewater.

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.



Grease Trap Overview

As wastewater enters a grease 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.



What Should Be Plumbed to the Grease Trap?

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

Examples include (but are not limited to):

- ◆ 2 and 3-compartment pot sinks
- ◆ Prep sinks
- ◆ Dishwashers
- ◆ Floor drains
- ◆ Trench drains
- ◆ Floor sinks
- ◆ Disposers
- ◆ Wok stoves
- ◆ Tilt kettles



Hand sinks, mop sinks and drains *for condensation only* may bypass the trap.

A Properly Sized Grease Trap is Critical

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



A Properly Sized Grease Trap is Critical

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 smallest sized grease trap approved for installation today is 100 gallons.

The under-counter grease traps like the one to the right are no longer approved.



The Design of a Grease Trap is as Important as its Size

Note the short distance between the inlet and the outlet below. This old-style cylindrical trap is no longer approved for installation due to poor performance.



The Design of a Grease Trap is as Important as its Size

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



The Design of a Grease Trap is as Important as its Size

The baffle wall and piping can be seen below. Proper baffling ensures that the flow is evenly spread throughout the tank.



Installed Grease Interceptor

Below is what a 1,000-gallon interceptor looks like after installation.



Grease Trap Maintenance Requirements



The FOG and solids must be removed regularly for the grease trap to work properly.

[Chapter 15-10 of the Austin City Code](#) specifies all grease traps must be completely emptied and cleaned by a licensed hauler at least once every three (3) months. Furthermore, all traps must be cleaned when grease and solids accumulation in the final compartment reaches 50% or more of the wetted height of the grease trap. This means that many traps may have to be cleaned more often than the once every three (3) months minimum.



Grease Trap Clean Out Frequency

The perfect clean-out frequency will vary for each business.

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

An updated list of Liquid Waste Haulers permitted in the City of Austin is available at:

[https://www.austintexas.gov/
department/liquid-waste-hauler-program](https://www.austintexas.gov/department/liquid-waste-hauler-program)



Documentation Requirements for Hauled Waste

All hauled liquid waste collected in the City of Austin's jurisdiction must be manifested using the City's manifest forms.

The Austin City Code ([§ 15-5-32](#)) specifies that grease trap waste manifest records must be made available for up to the past three (3) years in which the facility has been in business.



City of Austin / Travis County Austin Water Manifest / Trip Ticket for Hauled Liquid Wastes Number: <u>1055751</u>			
Generator Name: The Happy Blue Tortilla		Address: 123 Main Street	
City Austin	State: TX	Zip Code: 78701	Phone: 512-555-5555
1. Indicate the waste type (check one) and, if applicable, the tank, interceptor or trap capacity: <input checked="" type="checkbox"/> Food service grease interceptor or trap waste <input type="checkbox"/> Chemical toilet / portable toilet waste <input type="checkbox"/> Wastewater from a mobile food vendor <input type="checkbox"/> Grit / mud / oil / lint interceptor or trap waste <input type="checkbox"/> Wastewater treatment plant sludge <input type="checkbox"/> Wastewater from sanitary sewer system <input type="checkbox"/> Septic tank / sewage holding tank waste <input type="checkbox"/> Other - specify source and type of waste: _____ Tank, interceptor or trap capacity: <u>1750</u> (gallons)			
2. This section applies to any waste removed from food service grease interceptors or traps that are subject to Austin City Code specified pump-out frequency requirements. All food service grease interceptors or traps located within the City of Austin (COA) or located at any property that receives wastewater service from Austin Water must comply. If needed, contact Austin Water to obtain the requested COA Pollution Control Device ID.			
a) Was this waste removed from a grease interceptor or trap that is subject to Austin City Code pump-out requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If NO, skip b) through f) below:			
b) COA Pollution Control Device ID: 99 <input type="checkbox"/> unknown		If ID unknown, provide device's GPS coordinates (in decimal degrees) below	
c) Percent solids/grease (estimate): 30%		Latitude: <u>30</u> Longitude: <u>-97</u>	
d) Is interceptor in good operating condition? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If any interceptor problem or defect observed, please describe below	
e) Is submission of pump-out report required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
f) Pump-out reporting done by: <input type="checkbox"/> Generator <input type="checkbox"/> Hauler <input checked="" type="checkbox"/> N/A Name or initials of person reporting: _____			
Gallons Removed: 1750		Date Removed: 5/01/2020	
As the representative for the generator of this waste, I certify that the information provided is true and correct; and that this waste is to be transported to a facility authorized by the Texas Commission on Environmental Quality (TCEQ) to receive these wastes.			
Printed Name: <u>Alex Blue</u>		Signature: <u>Alex Blue</u>	
Hauler Business Name: Bob's Pumping Co.		Address: 123 Hauler Way	
City: Austin	State: TX	Zip Code: 78701	Phone: 512-444-4444
TCEQ Registration No.: 12345		Vehicle License No.: XYZ-123	
COA Permit No.: 111	Gallons Transported: 1750	Date Relinquished: 5/01/2020	
As the representative for the transporter of this waste, I certify that the information provided is true and correct; and that this waste was collected in accordance with Title 30 of the Texas Administrative Code, Chapter 312, Subchapter G and the Austin City Code.			
Printed Name: <u>Robert Haulerman</u>		Signature: <u>Robert Haulerman</u>	
Note: This section is for documenting transfers of wastes between vehicles operating under the same TCEQ Registration Number. The transfer of waste to any secondary transporter must be at a Type V facility that is either permitted by or registered with the TCEQ.			
1. Was this waste transferred to the vehicle identified above from a previous transporter vehicle? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, indicate the previous Manifest / Trip Ticket No. here: _____			
2. Is this waste being transferred from the vehicle identified above to a different (new) transporter vehicle? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If YES, complete the section below for the vehicle accepting this waste, and initiate a new Manifest / Trip Ticket including the new "Transporter Info" and the original "Generator Info" (duplication of the generator's signature would not be required).			
New Manifest / Trip Ticket No.:		New Vehicle License No.:	
Gallons Transferred:		Transfer Date:	
As the representative for the transporter receiving this transferred waste, I certify that the information provided is true and correct.			
Printed Name:		Signature:	
Facility Name: Landfill USA		Address: 10 Pasture Hwy	
City: Hometown	State: TX	Zip Code: 78777	Phone: 512-333-3333
Check One: <input checked="" type="checkbox"/> Disposal site <input type="checkbox"/> Permitted transfer station <input type="checkbox"/> Registered transfer station		TCEQ Type I or Type V Permit No.: <u>555123</u>	
		OR TCEQ Registration No.: _____	
Gallons Received: 1750	Date Received: 5/02/2020	Time Received: 13:30	
As the representative for the facility receiving this waste, I certify that:			
<ul style="list-style-type: none"> The TCEQ has authorized this facility to accept the waste specified under "Generator Info" above; The waste was received by this facility on the date and time indicated; and The waste has been transferred, recycled or disposed of as required by the TCEQ authorization for this facility. 			
Printed Name: <u>Jane Doe</u>		Signature: <u>Jane Doe</u>	
AW 03/2020 WHITE - Austin Water; YELLOW - Generator (Initial); GREEN - Generator (Final); PINK - Receiver; GOLD - Transporter			



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 the tank wall of the trap shown above. This is exposed wire rebar.

Grease Traps Do Not Last Forever



Chapter 15-10-22 (23) of 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.

Violators could be subject to penalties of up to \$2,000 per violation per day. Moreover, if such misuse of these agents contributes to a sanitary sewer overflow, the violator may also be required to pay cost recovery for expensive clean-up and repair operations.

There is no substitute for regular grease trap cleaning and pumping!



Potential Consequences of a Neglected Grease Trap



- ◆ Substantially higher utility surcharge fees
- ◆ Expensive plumbing repairs and clean-up costs
- ◆ Fines of up to \$2,000 for each violation each day
- ◆ Loss of business during service interruption
- ◆ Harmful environmental impacts
- ◆ A public relations backlash if the general public is adversely affected

Proper Grease Trap Maintenance is Critical

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
- ◆ Ensure a long healthy life for your grease trap

Make Sure You & Your Staff are Aware of the Do's & 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.

Poster GI-290 (Revised 8/13)

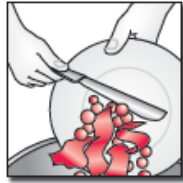
The above referenced poster is available from the
Texas Commission on Environmental Quality (TCEQ)
Small Business & Local Government Assistance Section
1-800-447-2827 • TexasEnviroHelp.org



DO!



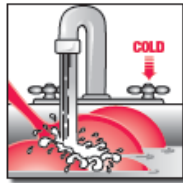
- ✓ Put oil and grease in covered collection containers.



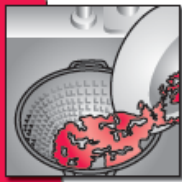
- ✓ Scrape food scraps from dishes into trash cans and garbage bags and dispose of properly. Avoid using your garbage disposal.



- ✓ 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.

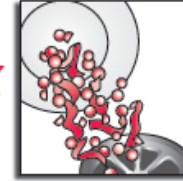


- ✓ Cover floor drain with fine screen and empty into garbage can as needed.

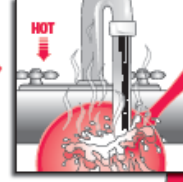
DON'T!



- ✗ 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. The TCEQ publication *Mulching and Composting: A "Take Care of Texas" Guide (GI-36)* provides basic information to get you started.

Don't Put Used Fryer Oil into Kitchen Sinks & Drains



A grease interceptor **should not** be confused with the oil rendering container shown to the left.

This container holds used fryer oil (also known as “yellow grease”) and is hauled off-site periodically.

*Ensure all staff know to **never** put old fryer oil into kitchen sinks and drains!*



Don't Treat Sinks & Drains Like a Garbage Can



Garbage grinders and disposals are **prohibited** in commercial kitchens and other industrial users of the sanitary sewer system.*

Garbage disposals tended to get abused. This led to grease traps:

- ◆ Getting overloaded with solids
- ◆ Becoming less efficient
- ◆ Needing to be pumped out more frequently

Ensure all staff know to scrape food from plates into a compost bin instead of into kitchen sinks and drains!



City of Austin Surcharge Program

The City periodically samples the discharge from each individual commercial food establishment as a part of the Surcharge Program.

Wastewater charges are determined for each specific 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.



Additional Surcharge Program information is available at:

<https://www.austintexas.gov/department/pretreatment-surcharge-program>



For more information:



Austin Water Special Services Division

- Phone: (512) 974-7293
- Email: industrialwaste@austintexas.gov
- Website: <https://www.austintexas.gov/department/industrial-waste-control-pretreatment>

