

Inspection Check List for Grease Trap Management (part 1 of 2)

This publication provides practical guidance regarding the handling, storage and disposal of restaurant debris and grease. The goal is to make operators aware of how to best collect, store and dispose of waste, fats, oils and grease generated from preparation of food.

- Implemented a training program to insure that Best Management Practices (BMP) is used.
- “No Grease” signs are posted in appropriate locations.
- Establishment recycles waste cooking oil and has records of same.
- All pots, pans and dishware are “dry wiped” prior to rinsing and washing.
- Food waste is disposed of by recycling or solid waste removal and is not discharged to the grease traps or interceptors.
- Grease trap(s) is cleaned regularly. Note and record the frequency of cleaning. If cleaning is done by an outside contractor or agency, provide receipts for this service. Grease trap cleaning frequency is documented on a maintenance log and an audit trail of waste pumped and disposed of is kept.
- Grease Trap observation visual condition.
- Outdoor grease and oil storage containers are covered and do not show signs of overflowing.
- Grease and oil storage containers are protected from discharge to sewer or storm sewer.
- Storm drains catch basins show no signs of grease or oil.
- Roof shows no signs of grease and oil from the exhaust system.
- Note: Disposal and food grinders are bad for the sewer system. They allow grease and food to leave the facility suspended in liquid. These byproducts drop out and adhere to the walls of the pipe, fill up your pretreatment devices, grease traps and create a problem for the municipal treatment plant.

Inspection Checklist (part 2 of 2)

Instructions for completing the form:

1. Completely fill out general information.
2. For items that require some measurement of field data, the inspector should obtain the necessary data or information and record it under the column titled, "Field Data."
3. For all items marked in violation, note the fact that the establishment contact was notified of the violation and the contact's response.

¹An entry should be made for each item using the following codes:

- "C" – Compliance with the item
- "V" – Violation of the item (provide explanation in the notes)
- "NA" – Not applicable (provide explanation in the notes)
- "NC" – Not checked (provide explanation in the notes)

Establishment: _____

Address: _____

Contact name: _____

Date: _____

Inspector: _____

Contact info: _____

Time Inspection Started: _____

Time Inspection Completed: _____

Signatures: _____

Notes: _____

▪ Spill Prevention and Cleanup Plan (Template)

NOTE: This form might be used to provide a guideline for developing a written spill prevention plan. A spill kit should be part of the plan. It is recommended to post and educate employees about the plan when completed.

Company Name: _____

Address: _____

Phone Number: _____

Describe primary facility activities:

List types of chemicals used at the facility:

Provide Contact Names and Phone numbers for the following in the table below:

	Contact Names	Contact Phone Numbers
Owner		
Onsite Spill Cleanup Coordinator(s)		
Agencies to contact in the event of a spill. (i.e., Local City, County, and State agencies)		

Provide a small facility map that includes the following information:

- Location of Spill Kits
- Waste Storage areas
- Chemical Storage Areas
- Locations of Catch Basins on the Facility Property

Provide a short description of emergency cleanup and disposal procedures:

- a) _____
- b) _____
- c) _____
- d) _____

Prohibitions Relating to Discharge of Fats, Oil, and Grease (part 1 of 1)

DO NOT...	Basis
Do not discharge fats, oil, and grease in concentrations that will cause an obstruction to the flow in a sewer, or pass through or interference at a wastewater treatment facility.	Grease can solidify and trap other solid particles to completely plug the wastewater collection system. Some jurisdictions have specific concentration limits.
Do not discharge grease, improperly shredded garbage, animal guts or tissues, paunch manure, bones, hide, hair, fleshings, or entrails.	These materials in combination or alone can cause blockages and other operations and maintenance problems in the wastewater collection and treatment system.
Do not discharge wastewater with temperatures in excess of 140° F to any grease traps. Mechanical dishwashers are not allowed to discharge to grease traps.	<p>Temperatures in excess of 140° F will dissolve grease, but the grease can re-congeal and cause blockages further downstream in the sanitary sewer collection system as the water cools.</p> <p>Note: High temperature water, such as from a dishwasher, should be discharged to the remotely-located grease interceptor, if there is one. The remote location and the high volume of the interceptor allows the water time to cool so that there is not a problem with dissolving grease and moving it further downstream. The high volume also provides dilution of the detergents in the dishwasher waste.</p>
Do not discharge waste from a food waste disposal unit to any grease traps. Discharging food waste disposal units to a grease interceptor may require the installation of a larger interceptor.	The food waste will greatly reduce the capacity of the grease trap for retaining grease and can cause worse problems with blockages.
Do not discharge caustics, acids, solvents, or other emulsifying agents.	<p>Though emulsifying agents can dissolve solidified grease, the grease can re-congeal further downstream in the sanitary sewer collection system.</p> <p>Caustics, acids, and solvents can have other harmful effects on the wastewater treatment system and can be a hazard to employees working in the wastewater collection system.</p>
Do not discharge fats, wax, grease or oils containing substances that will become viscous between 32° F (0° C) and 150° F (65° C).	The temperatures shown are temperatures that can occur in the wastewater collection and treatment system. If these substances congeal, solidify, or become too viscous, they can cause blockages and other operations and maintenance problems.
Do not utilize biological agents for grease remediation without permission from the sanitary agency receiving the waste.	The biological agents may disrupt the biological treatment process at the wastewater treatment plant.
Do not clean equipment outdoors in an area where water can flow to the gutter, storm drain, or street.	Grease and dirt will be washed off the equipment and enter the storm drain system and flow to nearby streams.

Frequently Asked Questions About Grease:

Is grease a problem?
What is a grease trap and how does it work?
What is a grease interceptor and how does it work?
Do I need a grease trap or interceptor?
Do I have a grease trap or interceptor?
Is the grease trap I have adequate?
How do I clean my grease trap?
Can you recommend a maintenance schedule?
What if I don't install a grease trap?
Who determines if I need a grease trap or interceptor?
How can I get in compliance?
What are the criteria for inspecting grease traps?

Is grease a problem?

In the sewage collection and treatment business, the answer is an emphatic YES! Grease is singled out for special attention because of its poor solubility in water and its tendency to separate from the liquid solution.

Large amounts of oil and grease in the wastewater cause trouble in the collection system pipes. It decreases pipe capacity and, therefore, requires that piping systems be cleaned more often and/or some piping to be replaced sooner than otherwise expected.

Oil and grease also hamper effective treatment at the wastewater treatment plant. Grease in a warm liquid may not appear harmful. But, as the liquid cools, the grease or fat congeals and causes nauseous mats on the surface of settling tanks, digesters, and the interior of pipes and other surfaces which may cause a shutdown of wastewater treatment units.

Problems caused by wastes from restaurants and other grease-producing establishments have served as the basis for ordinances and regulations governing the discharge of grease materials to the sanitary sewer system. This type of waste has forced the requirement of the installation of preliminary treatment facilities, commonly known as grease traps or interceptors.

What is a grease trap and how does it work?

A trap is a small reservoir built into the wastewater piping a short distance from the grease producing area. Baffles in the reservoir retain the wastewater long enough for the grease to congeal and rise to the surface. The grease can then be removed and disposed properly. See the "How It Works" section for a description of how the various components of a grease trap function.

What is a grease interceptor and how does it work?

An interceptor is a vault with a minimum capacity of between 500 and 750 gallons that is located on the exterior of the building. The vault includes a minimum of two compartments, and flow between each compartment is through a 90 degree fitting designed for grease retention. The capacity of the interceptor provides adequate residence time so that the wastewater has time to cool, allowing any remaining grease not collected by the traps time to congeal and rise to the surface where it accumulates until the interceptor is cleaned. See the "How It Works" section for a description of how the various components of a grease interceptor function.

Do I need a grease trap or interceptor?

Any establishment that introduces grease or oil into the sewage system in quantities large enough to cause line blockages or hinder sewage treatment is required to install a grease trap or interceptor. Grease interceptors are usually required for high volume restaurants (full menu establishments serving more than 40 meals per peak hour) and large commercial establishments such as hotels, hospitals, factories, or school kitchens.

Grease traps are required for small volume (fast food or take-out restaurants with limited menus, minimum dishwashing, and/or minimal seating capacity) and medium volume (full menu establishments operating 8-16 hrs/day and/or serving less than 40 meals per peak hour) establishments. Medium volume establishments may be required to install an interceptor depending upon the size of the establishment.

Do I have a grease trap or interceptor?

If the establishment is uncertain whether it has a grease trap or interceptor, the owner should contact the local sewer agency for the community served.

Is the grease trap I have adequate?

The Uniform Plumbing Code requires that no grease trap have a capacity less than 20 gallons per minute (gpm) or more than 55 gpm. The size of the trap depends upon the number of fixtures connected to it. The following table provides criteria for sizing grease traps:

Total number of fixtures connected	Required rate of flow, gpm	Grease retention capacity, lbs
1	20	40
2	25	50
3	35	70
4	50	100

How do I clean my grease trap or interceptor?

Refer to the "[Grease Trap and Interceptor Maintenance](#)" section.

Can you recommend a maintenance schedule?

Some establishments will find it necessary to clean their traps more often than once each week. If the establishment has to clean it too often, the owner should evaluate the effectiveness of food and grease handling practices. The owner also should consider installing a larger trap or interceptor. All grease interceptors should be cleaned at least twice each year.

If a grease trap is not maintained regularly it will not provide the necessary grease removal. The establishment should work out a specific cleaning schedule that is right for the establishment. All grease traps need to have the grease cleaned out periodically and no one likes to do the job. It is a dirty job. Running extremely hot water down the drain only moves the problem down stream. It does not go away. Catch the grease at the source! This is the most economical means to reduce all costs.

What if I don't install a grease trap?

If the establishment uses grease and oil in food preparation, 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. Someone will have to pay for removing the blockage. If the problem is in the building sewer line, then the establishment has direct responsibility for paying for the maintenance. If the blockage or restriction is in the public sewer main and it can be proven that the establishment is the cause of the blockage, then the establishment may have to pay for the public sewer to be maintained. Blocking a sanitary sewer line is also a violation of the federal Clean Water Act.

Who determines if I need a grease trap or interceptor?

When waste pretreatment is required by the local jurisdiction, an approved grease trap or interceptor must be installed according to the Uniform Plumbing Code or other standard of the local jurisdiction.

How can I get in compliance?

The establishment should contact its local jurisdiction.

What are the criteria for inspecting grease traps?

All food service establishments suspected of causing problems to the collection system or treatment facilities will be inspected. Some agencies use the following criteria to inspect grease traps:

Percent of Trap Filled	Trap Condition
25	Good
25 – 50	Fair
>50	Poor

If the trap is in "FAIR" condition, the establishment should be advised to keep an eye on the maintenance schedule. The cleaning frequency may need to be increased. If the trap is in "POOR" condition, the establishment may be issued a compliance order to have it cleaned immediately. The establishment may then be required to contact the local jurisdiction within 30 days to verify that the grease trap has been properly cleaned.

Education and Housekeeping: Periodic cleaning of the pretreatment device is imperative to insure that it is working properly. If no device exists, it is critical that kitchen staff understand how to clean dishes—that is, they must pre-scrape food waste into the solid waste, keep sink strainer baskets clean and replaced when necessary, etc.. Grease prevention procedures must be part of the standard training of new employees.

Good housekeeping is the first step in a good grease reduction program. Here are some tips to help you eliminate grease before it becomes a problem:

- **Deep Fat Fryer:** Put waste grease in a container then pour it into the rendering barrel for recycling. Wipe the fryer down with paper towels and dispose of them with solid waste. Wash out the remaining the grease (there shouldn't be much).
- **Grill and Roaster/Broiler:** Empty drip pans into the rendering container and wipe everything off with paper towels. Dispose these with the solid waste. Any remaining grease can be washed.
- **Gravy and Sauce:** Wipe greasy pans and dishes prior to washing, putting leftover material into the rendering container. Residues should go out with the solid waste.
- **Frosting Containers:** Pre-scrape containers and wipe them with paper towels. Attempt to recycle or reuse large quantities and dispose of small quantities in the solid waste.
- **Butter and Butter by-products:** Pre-scrape utensils and containers prior to washing and dispose of non-recyclable materials in the solid waste.
- **Meat Scraps and Trimmings:** Wipe meat processing equipment clean with a paper towel prior to cleaning and put meat trimmings into the rendering container. Recycle floor sweepings or put them in the solid waste.
- **Avoid using the Garbage Disposal:** Garbage disposals send unwanted food byproducts into the sanitary sewer where they will drop out of solution, build up on the walls of your side sewer, and cause a backup.
- **Keep your Sink Strainers in place:** The best way to stop backups is to eliminate the source. Small food particles should be cleaned often from sink strainers and disposed as solid waste.
- **Recycle unprepared Food Waste:** Recycling is the preferred method of disposing of significant volumes of food waste. Most recycling companies provide rendering barrels or food waste barrels. Small quantities of food can be disposed in the solid waste if it's in a plastic bag or container.(See Appendix B for Contractor List)
- **Maintain Traps and Interceptors:** Small kitchen-sized traps should be cleaned at least weekly, sometimes more often. This can be done in-house, usually after hours, by kitchen staff. Larger vault-sized interceptors should be cleaned on a regular cycle, depending on the amount of grease accumulated.

▪ **Spill Prevention and Cleanup**

NOTE: These are recommendations for businesses to follow for spill prevention and cleanup:

- Store and transport liquids in containers with tight-fitting lids.
- Regularly inspect containers for leaks.
- Develop and implement an emergency spill prevention plan (see attached template). The plan should be posted at appropriate locations in the building (near areas that have a high potential for spills).
- Put an emergency spill containment and cleanup kit near the spill prevention plan.
- Train all employees about the plan and kit.
- Clean up all spills properly and immediately.