

1st:

What is a Grease Trap?

A grease trap, sometimes called a grease interceptor, is a piece of restaurant equipment which is required in many regions to keep the sewers functional. The grease trap acts as a filter to remove fats and oils from water before it enters the waste system. Since fats and oils can clog a sewer system, the use of a grease trap ensures that the sewer system runs smoothly. In a commercial kitchen, a grease trap treats all of the water coming out of the kitchen.

A properly equipped commercial kitchen usually has multiple sinks, an industrial dishwasher, and large sinks for pre-treatment of dishes and other cooking tasks. The floors typically are sloped with central drains, allowing workers to clean the whole kitchen.

A grease trap is usually a civil work outside the kitchen, below the Ground or package Grease Traps which looks like a large box or barrel spliced into the water drainage line. When the water enters the grease trap, it cools down, allowing the lighter oil to precipitate out to the top. A series of baffles in the grease trap collect oil and chunks of material while the water sinks to the bottom. An exit pipe of the grease trap allows the treated water to flow out, while the grease remains floating on top.

In order to function properly, a grease trap and its lines must be regularly cleaned and maintained. Staff can empty the grease trap by hand, or a company may be hired to pump out the grease trap. Some grease traps use automatic systems to skim out the grease and dump it into a container, but these grease traps still need to be periodically broken down and cleaned. All of the baffles of a grease trap should be scrubbed, and the drainage lines should be scoured to remove accumulated grease.

Efficiency will be lost if a grease trap is not cleaned regularly. Ultimately, the grease trap can clog, leading to backups of water into the kitchen. A cleaning rotation and log for the grease trap is usually kept, to ensure that it is kept operating in peak condition. Health inspectors may periodically check the grease trap as well, to assure themselves that it is working properly, and that all of the water in the establishment is being treated before draining into the sewer.

2nd:

ISSUE: FAT OIL GREASE and GREASE TRAP

There seems to be a misconception about oil and grease. These can come in many different forms, oils from food processing, grease due to fats from animals that are processed or cooked.

Grease traps can be found in virtually all food service. By design, a grease trap not only traps grease, but it also traps other solid food material. The purpose of a grease trap is on-site collection of food waste that would otherwise flow directly to the waste water treatment facility.

As the waste collects, the trap becomes less efficient and finally reaches the point where it becomes clogged and fails. Trap failure results in drain back-ups and the release of obnoxious odors into the food handling establishment.

Once it has failed, untreated grease traps need to be pumped/cleaned frequently, at significant expense, and emit obnoxious odors, often in the middle of a working kitchen or other food handling facility.

Additional expense is often incurred by the fines that are imposed by a municipality due to elevated levels of BOD, FOG and suspended solids. This is inconvenience for the management of the food service facility, and offensive odors for the patrons. Specially selected bacteria will significantly reduce the need for pumping while, controlling obnoxious odors commonly associated with a grease trap.

Grease is one waste that the sewer system cannot handle and therefore needs to be kept out of the system, but most often is not, and this will disturb the normal function of the STP.

Biological additives are a safe, natural, environmental friendly way to help assist in the cleaning up of a grease trap. Bacteria can naturally degrade the fats, oils and grease, as well as any other organic materials that enter a grease trap or pipe. They actually consume these as a food source, as opposed to traditional methods of surfactants, enzymes or chemicals that may have eliminated the grease in the grease trap, but just transferred them down the pipe and eventually into the wastewater treatment plant and can cause upset conditions.

Bacteria not only clean the grease traps if properly applied, they can help clean up the lines and can lighten the load at the treatment plant and reduce solids or help with reduction of BOD and TSS loading.