Is FOG a problem?

In the sewage collection and treatment business, the answer is an emphatic YES! FOG 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.

Across the country, 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.

What is a grease interceptor?

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° 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.

Can you recommend a maintenance schedule?

All grease interceptors should be cleaned at least twice each year. Some establishments will find it necessary to clean their traps more often than twice per month. If the establishment is having to clean it too often, the owner should consider installing a larger trap or interceptor.
Do I need a grease trap?

Sussex County requires any establishment that introduces grease or oil into a Sussex County owned sanitary sewage system in quantities large enough to cause line blockages or hinder sewage treatment to install a grease trap or interceptor.

Is the grease trap I have adequate?

The size will also depend largely upon the maintenance schedule. If a grease trap or interceptor 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. The State of Delaware uses PDI standard G101 for its regulation pertaining to grease traps.

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.

What are the criteria for inspecting grease traps?

All food service establishments suspected of causing problems to the collection system or treatment facilities may be inspected and records pertaining to grease trap or interceptor may be asked for. A good rule of thumb for evaluating the condition of a grease trap is the percentage of grease to water that is in the trap.

<table>
<thead>
<tr>
<th>Percent of Trap Filled</th>
<th>Trap Condition</th>
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<tbody>
<tr>
<td>25</td>
<td>Good</td>
</tr>
<tr>
<td>25 – 50</td>
<td>Fair</td>
</tr>
<tr>
<td>&gt;50</td>
<td>Poor</td>
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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 immediate cleaning is needed.