



Restaurants and other food service businesses generate literally tons of cooking oil, grease and food wastes every day. If this waste is not managed properly, it can cause major environmental problems. Much of the waste is in solid form and can be safely packaged and placed in the trash. Liquid waste containing oil and grease dumped directly into the sewer, however, can block the system and cause wastewater to back up into your restaurant. This causes a disruption in your business and a health hazard for you and your customers. If your business generates greasy wastewater, you can reduce the likelihood of a sewer back-up by adopting good housekeeping practices, reducing the amount of inappropriate wastes that go down your drains, and by installing and properly maintaining a grease trap.

What is a grease trap?

Grease traps capture the oil and grease from the flow of wastewater by slowing down the flow of hot greasy water through the grease trap (actually a tank) and allowing it to cool. As it cools, the grease and oil separate out of the water and float to the top of the trap. The cooler water continues to flow down the drain pipe to the sewer while baffles prevent the accumulated grease and oil from flowing out of the grease trap.

The size of the grease trap depends largely on how much waste your business produces and how often you perform trap maintenance. Grease traps may be located inside or outside of the building. Traps that are located inside the building tend to be smaller and require more frequent maintenance. Traps that are located outside the building tend to be larger and may be less disruptive to maintain. Outside grease traps will operate differently in winter versus summer and are more prone to clogging during cold weather. As a business owner/manager, you should know where the grease trap, drain lines, and clean-outs are located at your restaurant.

Why is grease trap maintenance important?

Proper cleaning and maintenance of the grease trap and drain line reduces the amount of solids and grease going into the public sewer system and mini-

mizes the likelihood of back-ups or blockages. Some sanitation districts and/or municipalities require grease traps and periodic maintenance and inspections for specified businesses. This is because untrapped oil and grease in the wastewater decreases pipe capacity over time and eventually will cause the pipe to clog. Piping systems without grease traps need to be cleaned more often and some piping may have to be replaced sooner than otherwise expected. Excessive grease sent to the wastewater treatment plant can also overload their system and cause the facility to exceed its allowable discharge limits.

Running extremely hot water down the drain only moves the problem down stream, and may only make it worse. Fixing a sewer line blockage can be expensive, both in terms of potentially lost customers and repair cost. If the pipe clog is within your building sewer line, you will be responsible for fixing the problem and paying all costs. If the clog is in the public sewer line, but can be traced to your restaurant, you will be liable for paying all or a portion of the repair costs. Accumulating the oil and grease close to the source in a properly maintained grease trap is the most cost-effective way.

What are your options for maintaining your grease trap?

There are several ways to maintain a grease trap and dispose of the wastes. Your decision will likely be based on cost, availability of services, and disposal/recycling opportunities in your area. Most restaurants hire a professional pumping service to remove the waste from the grease trap and dispose of it properly. Some areas have service companies that specialize in grease trap wastes, while other areas may have pumping contractors that service grease traps, sand traps, and septic tanks. Pumping service contractors can usually be found in the yellow pages of the telephone book under the listings for "Grease Traps and Service", "Septic Tanks and Systems - Cleaning", or "Rendering Companies."

Disposal options include sending the grease to a rendering/tallow plant for recycling, sending it to a solid waste landfill or, on very rare occasions, sending it to a municipal wastewater treatment facility. It is com-

mon practice for some waste pumpers to collect sand trap, grease trap, and septic pumpings in the same truck. Wastewater treatment facilities are more and more reluctant to accept pumped waste, especially if it is commingled waste. Commingled waste makes it difficult and expensive to determine what is in the waste and whether the facility is capable of processing it effectively.

Sending the grease trap waste to a rendering plant is the preferred disposal option because it is processed back into useful products rather than land disposed. This option is not available in many areas, however. Disposal in a solid waste landfill is the most widely available option. If the waste is commingled sand trap waste from an industrial site, grease trap waste, and septic waste, a hazardous waste determination must be made to assure that the waste is nonhazardous. Sand trap wastes can contain contaminants that make it hazardous waste. Non-hazardous commingled trap wastes can only be disposed of in a solid waste landfill that is specifically permitted to accept that type of waste.

Pumped wastes can also contain significant amounts of free liquid, as determined by the paint filter test. Most solid waste disposal facilities are not permitted to accept wastes containing free liquids, even if it's only water. If free liquids are present, the waste must be processed to remove the free liquid before it can be disposed. This can be done at designated drying areas at approved solid waste landfills or at separate facilities that have obtained a certificate of designation as a solid waste treatment facility. Once dry, the processed solids can be disposed of in an approved landfill.

When contracting for grease trap cleaning services, it is in your best interest to find out how the contractor will dispose of the waste. Obtain references from other businesses that use their services. This knowledge is also in the best interests of your community, since many problems can arise from poor disposal practices. These problems include odors, creation of rodent habitats, and potential threats to groundwater and surface waters. If a problem occurs from improper disposal of your wastes, you may be liable for clean-up costs.

Are there other options?

There are several brands and types of biological grease digesters that you can add to your grease trap to reduce the amount of grease that accumulates in the trap. Many of these are hybrid bacteria that are

designed to convert the grease to less problematic wastes like carbon dioxide and water, and many are advertised to reduce noxious odors. Be aware that some drain cleaners and bacterial agents may only soften the grease and transfer the problem farther downstream, even when used properly.

Although it is a nasty job that no one wants to do, you can clean out your grease trap yourself. To do this, remove the lid from your grease trap and bail out any water in the tank to facilitate cleaning. The bailed water can be returned to the grease trap after it has been cleaned. Dip the accumulated grease out of the tank, making sure to scrape the sides and lid. The grease should be placed in a watertight container such as plastic trash bags and placed in a secure trash receptacle. If you clean out the grease trap the day before your trash is picked up, the odor nuisance is reduced. If you clean out the grease trap yourself, you will want to have the drain pipe periodically cleaned professionally to remove any accumulated grease and oil that can clog the pipe.

For more information:

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Division Website <http://www.cdphe.state.co.us/hm/>
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This Compliance Bulletin is intended to provide guidance on the appropriate management of wastes based on Colorado solid and hazardous waste statutes and regulations only. The wastes described in this guidance may also be regulated under other statutes and regulations.