



City of Bloomington

Utilities Department

Fats, Oils and Grease (FOG) Best Management Practices (BMPs) for Food Service Establishments

Keep FOG out of the Plumbing System		
BMP	Reason For	Benefits to Restaurant
Train kitchen staff and other employees about how they can help ensure BMPs are implemented.	People are more willing to support an effort if they understand the basis for it.	All of the subsequent benefits of BMPs will have a better chance of being implemented.
Post "No Grease" signs above sinks and on the front of dishwashers.	Signs serve as a constant reminder for staff working in kitchens.	These reminders will help minimize grease discharge to the traps and interceptors and reduce the cost of cleaning and disposal.
Scrape and "dry wipe" pots, pans, and dishware prior to dishwashing.	By scraping and "dry wiping" kitchen wares into garbage receptacles, the material will not be sent to the grease traps and interceptors.	This will reduce the amount of material going to grease traps and interceptors, which will in turn require less frequent cleaning, resulting in reduced maintenance costs.
Dispose of food waste in the trash, not down the sink.	Greasy food solids won't contribute to line blockages or create additional burden on grease interceptors and traps.	Disposing of food waste in the trash will reduce the frequency and cost of grease interceptor and trap cleaning and may help prevent line blockages.
Use a three-sink dishwashing system, which includes sinks for washing, rinsing, and sanitizing in a 50-100 ppm bleach solution. Water temperatures are less than 140° F. (See below)	The three-sink system uses water temperatures less than 140° F, whereas a mechanical dishwasher requires a minimum temperature of 160° F. (See below) Note: The Uniform Plumbing Code (UPC) prohibits the discharge of dishwasher water to grease traps.	The food service establishment will reduce its costs for the energy - gas or electric - for heating the water for the mechanical dishwasher and for operating the dishwasher.

Use water temperatures less than 140° F in all sinks, especially the pre-rinse sink before the mechanical dishwasher. The mechanical dishwasher requires a minimum temperature of 160° F, but the Uniform Plumbing Code (UPC) prohibits discharging the dishwasher to grease traps.	Temperatures in excess of 140° F will dissolve grease, but the grease can recondense or solidify in the sanitary sewer collection system as the water cools.	The food service establishment will reduce its costs for the energy – gas or electric – for heating the water.
Recycle waste cooking oil.	There are waste oil recyclers operating in Bloomington. This is a cost recovery opportunity.	The food service establishment may be paid for the waste material and will reduce the amount of garbage it must pay to have hauled away.

Properly Maintain Grease Interceptors and Traps		
BMP	Reason For	Benefits to Restaurant
Witness all grease interceptor or trap cleaning/maintenance activities to ensure the device is operating properly.	Grease interceptor/trap cleaners and facility staff may take shortcuts. If the establishment manager inspects the cleaning operation and ensures it is consistent with the procedures in CBU's "Grease Interceptor or Trap Maintenance Procedures," they are more assured of getting full value for their money.	The establishment will ensure it is getting value for the cost of cleaning the grease trap or interceptor. Otherwise the establishment may be paying for cleaning more often than necessary.
Clean under-sink grease traps weekly. If grease traps are more than 25% full when cleaned weekly, the cleaning frequency needs to be increased.	If the establishment does not have a grease interceptor, the under-sink grease trap is the only means of preventing grease from entering the sanitary sewer system. If the grease trap is not providing adequate protection, the local sewer agency may require installation of a grease interceptor.	Proper maintenance of under-sink grease traps keeps grease out of building plumbing lines preventing potential backups and reducing plumbing costs.
Clean grease interceptors when the unit is 25% full of accumulated waste, both floatable and settleable, as measured from the tank bottom to the static water level. Grease interceptors must be cleaned, at a minimum, every 90 days.	Grease interceptors must be cleaned routinely to ensure that grease accumulation does not cause the interceptor to operate poorly. The cleaning frequency is a function of the type of establishment, the size of the interceptor, and the volume of flow discharged by the establishment.	Routine cleaning will prevent plugging of the sewer line between the food service establishment and the sanitary sewer system. If the line plugs, the sewer line may back up into the establishment, and the business will need to hire someone to unplug it.
Keep a maintenance log of grease interceptor and trap cleaning events.	The maintenance log serves as a record of interceptor and trap cleaning events. It is required by the City of Bloomington Utilities Department to ensure that grease interceptor/trap maintenance is performed on a regular basis.	The maintenance log serves as a record of cleaning frequency and can help the food service establishment manager optimize cleaning frequency to reduce cost.

Prevent FOG from Reaching Creeks and Streams		
BMP	Reason For	Benefits to Restaurant
Cover outdoor grease and oil storage containers.	Uncovered grease and oil storage containers can collect rainwater. Since grease and oil float, the rainwater can cause an overflow onto the ground. Such an overflow may eventually reach the stormwater system and nearby streams.	The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams. Discharge of grease and oil to the storm drain may also result in legal penalties or fines.
Locate grease dumpsters and storage containers away from storm drain catch basins.	The farther away from the catch basin, the more time someone has to clean up spills prior to entering the storm drain system. Be aware of oil and grease dripped on the ground while carrying waste to the dumpster, as well as oil and grease that may "ooze" from the dumpster.	The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams. Discharge of grease and oil to the storm drain may also result in legal penalties or fines.
Use absorbent pads or other material in the storm drain catch basins if grease dumpsters and containers must be located nearby. Do not use free flowing absorbent materials such as "kitty litter" or sawdust.	Absorbent pads and other materials can serve as an effective barrier to grease and oil entering the storm drain system.	The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams. Discharge of grease and oil to the storm drain may also result in legal penalties or fines.
Use absorbent pads or other material to clean up spilled material around outdoor equipment, containers or dumpsters. Do not use free flowing absorbent materials such as "kitty litter" or sawdust that can be discharged to the storm drain system.	Absorbent pads or materials can help clean up grease and oil that is spilled on the ground and prevent it from flowing to the storm drain system.	The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams. Discharge of grease and oil to the storm drain may also result in legal penalties or fines.
Routinely clean kitchen exhaust system filters.	If grease and oil escape through the kitchen exhaust system, they can accumulate on the roof of the establishment and eventually enter the storm drain system when it rains.	The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams. Discharge of grease and oil to the storm drain may also result in legal penalties or fines.

Prohibitions Relating to Discharge of FOG	
Do Not...	Basis
Do not discharge fats, oils, and grease in concentrations greater than 150 ppm (mg/l) to city sewer.	Grease can solidify and trap other solid particles to completely plug the wastewater collection system.
Do not discharge solid or viscous wastes which will or may cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the wastewater treatment system.	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. This includes water from mechanical dishwashers that have a minimum required temperature of 160° F.	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.
Do not connect food grinders to grease traps.	The food waste will greatly reduce the capacity of the grease trap for retaining grease and can increase problems with blockages.
Do not discharge caustics, acids, solvents, or other emulsifying agents.	Though emulsifying agents can dissolve solidified grease, the grease can re-congeal further downstream in the sanitary sewer collection system. 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.
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 operation and maintenance problems.
Do not utilize biological agents for grease remediation without permission from the City of Bloomington Utilities Department.	The biological agents may disrupt the biological treatment process at our wastewater treatment plants.
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.