

FATS, OILS & GREASE - BMPs

The following Best Management Practices (BMPs) tables are listed below:

- Prevent blockages in the Sanitary Sewer System
- Properly Maintain Grease Traps and Interceptors to Prevent Introduction into the Sanitary Sewer System
- Prevent Fats, Oil, and Grease From Entering Creeks and Streams Through the Storm Drain System

Prevent Blockages in the Sanitary Sewer System			
BMP	Reason For	Benefits to Food Service Establishment	Pretreatment Inspection Tips
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.	Talk to the establishment manager about the training program that he/she has 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.	Check appropriate locations of "No Grease" signs.
Use water temperatures less than 140 degrees F in all sinks, especially the pre-rinse sink before the mechanical dishwasher. The mechanical dishwasher requires a minimum temperature of 160 degrees F, but the Uniform Plumbing Code (UPC) prohibits discharging the dishwasher to grease traps.	Temperatures in excess of 140degrees F will dissolve grease, but the grease can re-congeal 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.	Check boiler or hot water heater discharge temperature. Measure the temperature of the hot water being discharged from the closest sink.

<p>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 140degrees F. (See above)</p>	<p>The three-sink system uses water temperatures less than 140degrees F where a mechanical dishwasher requires a minimum temperature of 160 degrees F. (See above)</p> <p>Note: The Uniform Plumbing Code (UPC) prohibits the discharge of dishwasher water to grease traps.</p>	<p>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.</p>	<p>Measure temperature of the hot water at the three-sink system.</p>
<p>Recycle waste cooking oil.</p>	<p>There are many waste oil recyclers throughout King County. This is a cost recovery opportunity. See <i>Haulers and Recyclers</i>.</p>	<p>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.</p>	<p>Obtain name of recycler used.</p> <p>Review recycling records.</p> <p>Confirm records with recycler.</p>
<p>"Dry wipe" pots, pans, and dishware prior to dishwashing.</p>	<p>The grease and food that remains in pots, pans, and dishware will likely go to the landfill. By "dry wiping" and disposing in garbage receptacles, the material will not be sent to the grease traps and interceptors.</p>	<p>This will reduce the amount of material going to grease traps and interceptors, which will require less frequent cleaning, reducing maintenance costs.</p>	<p>Observe dishwashing practices.</p>
<p>Dispose of food waste by recycling and/or solid waste removal.</p>	<p>Some recyclers will take food waste for animal feed. In the absence of such recyclers, the food waste can be disposed as solid waste in landfills by solid waste haulers.</p>	<p>Recycling of food wastes will reduce the cost of solid waste disposal.</p> <p>Solid waste disposal of food waste will reduce the frequency and cost of grease trap and interceptor cleaning.</p>	<p>Inspect grease traps and interceptors for food waste accumulation.</p> <p>Confirm the recycler or solid waste removal company with the establishment manager.</p>

Properly Maintain Grease Traps and Interceptors to Prevent Introduction into the Sanitary Sewer System

BMP	Reason For	Benefits to Food Service Establishment	Pretreatment Inspection Tips
<p>Witness all grease trap or interceptor cleaning/maintenance activities to ensure the device is properly operating.</p>	<p>Grease trap/interceptor pumpers may take shortcuts. If the establishment manager inspects the cleaning operation and ensures it is consistent with the procedures in the section on Maintenance they are more assured of getting full value for their money.</p>	<p>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.</p>	<p>None.</p>
<p>Clean undersink grease traps weekly.</p> <p>If grease traps are more than 50% full when cleaned weekly, the cleaning frequency needs to be increased.</p>	<p>Undersink grease traps have less volume than grease interceptors.</p> <p>Weekly cleaning of undersink grease traps by the establishment's maintenance staff will reduce the cost of cleaning the grease interceptor.</p> <p>If the establishment does not have a grease interceptor, the undersink 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.</p>	<p>This will extend the length of the cleaning cycle for grease interceptors that the establishment maintains.</p>	<p>Visually inspect the contents of the undersink grease trap.</p> <p>Inspect cleaning records.</p>
<p>Clean grease interceptors routinely.</p>	<p>Grease interceptors must be cleaned</p>	<p>Routine cleaning will prevent plugging of the</p>	<p>Interceptor should have no more than 1/3 the</p>

	<p>routinely to ensure that grease accumulation does not cause the interceptor to operate poorly.</p> <p>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.</p>	<p>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.</p>	<p>depth as grease, and,</p> <p>Interceptor should have no more than 1/4 the depth as sediment, and</p> <p>No more than 25% of the depth should be a combination of grease (top) and sediment (bottom).</p>
<p>Keep a maintenance log.</p>	<p>The maintenance log serves as a record of the frequency and volume of cleaning the interceptor. It is required by the pretreatment program to ensure that grease trap/interceptor maintenance is performed on a regular basis.</p>	<p>The maintenance log serves as a record of cleaning frequency and can help the establishment manager optimize cleaning frequency to reduce cost.</p>	<p>Inspect maintenance log.</p> <p>Provide the establishment with a sample maintenance log if it does not have one.</p> <p>Confirm the maintenance log with the grease hauler identified.</p>

Prevent Fats, Oil, and Grease From Entering Creeks and Streams Through the Storm Drain System

BMP	Reason For	Benefits to Food Service Establishment	Pretreatment Inspection Tips
<p>Cover outdoor grease and oil storage containers.</p> <p>Some local jurisdictions will have BMPs in place for stormwater also.</p>	<p>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 will eventually reach the stormwater system and nearby streams.</p>	<p>The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams by adding biological and chemical oxygen demand to the stream.</p> <p>Discharging grease and oil into the storm drain is prohibited by City and State regulations. Failure to prevent the discharge of grease and oil into the storm</p>	<p>Observe storage area for signs of oil and grease.</p> <p>Inspect containers for covers.</p> <p>Remove covers to ensure containers have not overflowed and do not have excess water.</p>

		drainage system may result in legal penalties, fines, and/or structural connection to the sanitary sewer.	
Locate grease dumpsters and storage containers away from storm drain catch basins.	<p>The farther away from the catch basin, the more time someone has to clean up spills or drainage prior to entering the storm drain system.</p> <p>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.</p>	<p>The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams by adding biological and chemical oxygen demand to the stream.</p> <p>Discharging grease and oil into the storm drain is prohibited by City and State regulations. Failure to prevent the discharge of grease and oil into the storm drainage system may result in legal penalties, fines, and/or structural connection to the sanitary sewer.</p>	<p>Observe storage area for signs of oil and grease.</p> <p>Inspect the closest catch basin for signs of accumulated grease and oil.</p>
Install spill controls (AKA drop 90's or "elbows") in catch basins if grease dumpsters and containers must be located nearby.	Spill controls extend below the water surface and trap floatable materials like oil and grease, preventing them from traveling further downstream.	<p>The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams by adding biological and chemical oxygen demand to the stream.</p> <p>Discharging grease and oil into the storm drain is prohibited by City and State regulations. Failure to prevent the discharge of grease and oil into the storm drainage system may result in legal penalties, fines, and/or structural connection to the sanitary sewer.</p>	Check the nearest catch basin and drainage paths for signs of oil and grease. Require spill controls if the basin is within 20 feet of grease dumpsters or containers, or if there are signs of grease in the catch basin at any distance.
<p>Use absorbent pads or other material in the storm drain catch basins if grease dumpsters and containers must be located nearby.</p> <p>Do not use free flowing absorbent materials such as</p>	Absorbent pads and other materials can serve as an effective barrier to grease and oil entering the storm drain system.	<p>The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams by adding biological and chemical oxygen demand to the stream.</p> <p>Discharging grease and oil into the storm drain is prohibited by City and State</p>	<p>Check the nearest catch basin and drainage paths for signs of grease and oil.</p> <p>Require absorbent pads if the basin is within 20 feet of grease dumpsters or containers, or if there are signs of grease in</p>

<p>"kitty litter" or sawdust.</p>		<p>regulations. Failure to prevent the discharge of grease and oil into the storm drainage system may result in legal penalties, fines, and/or structural connection to the sanitary sewer.</p>	<p>the catch basin at any distance.</p> <p>Do not permit the use of free flowing absorbent material such as "kitty litter."</p>
<p>Use absorbent pads or other material to clean up spilled material around outdoor equipment, containers or dumpsters.</p> <p>Do not use free flowing absorbent materials such as "kitty litter" or sawdust that can be discharges to the storm drain system.</p>	<p>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.</p>	<p>The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams by adding biological and chemical oxygen demand to the stream.</p> <p>Discharging grease and oil into the storm drain is prohibited by City and State regulations. Failure to prevent the discharge of grease and oil into the storm drainage system may result in legal penalties, fines, and/or structural connection to the sanitary sewer.</p>	<p>If grease and oil are observed on the ground in the storage area, recommend the use of absorbents to minimize movement of the grease and oil.</p> <p>Do not permit the use of free flowing absorbent material such as "kitty litter."</p>
<p>Routinely clean kitchen exhaust system filters.</p>	<p>If grease and oil escape through the kitchen exhaust system, it can accumulate on the roof of the establishment and eventually enter the storm drain system when it rains.</p>	<p>The discharge of grease and oil to the storm drain system will degrade the water quality of receiving streams by adding biological and chemical oxygen demand to the stream.</p> <p>Discharging grease and oil into the storm drain is prohibited by City and State regulations. Failure to prevent the discharge of grease and oil into the storm drainage system may result in legal penalties, fines, and/or structural connection to the sanitary sewer.</p>	<p>Inspect roof (if safely accessible) for signs of oil and grease.</p> <p>Require a maintenance schedule and records for cleaning exhaust filters. Cleaning is usually by washing, which will discharge the grease to the interceptor where it can be controlled.</p>