

Best Management Practices for Food Service Establishments

Introduction

The City of Davis Public Works Utilities and Operations Department is responsible for developing, implementing and reporting on three State-mandated regulatory programs aimed at reducing pollutants discharged into our sanitary sewer and our stormwater collection systems. The requirements of these programs are found in these regulatory permits:

- Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003-DWQ)
- Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) (General Permit No. CAS000004)
- Waste Discharge Requirements (NPDES Permit No. CA0079049) issued to the City's Wastewater Treatment Plant

These regulatory permits all contain general conditions to be implemented and identify specific targeted pollutants for reduction or control. **The City is required by law to address the targeted pollutants through established measures.** These measures may include, but are not limited to, prohibiting discharges, numeric limits, source control programs and establishing **Best Management Practices (BMPs)**.

Fats, Oils and Grease

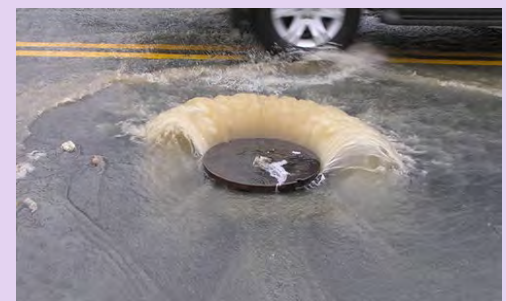
Order No. 2006-0003-DWQ requires the City to implement measures to reduce the discharges of **fats, oils and grease (FOG)** into the sanitary sewer. Reduction of FOG discharges requires a grease removal device and the periodic inspection and maintenance of the grease removal device. **A grease removal device is used to remove FOG from food service establishment discharges to the sanitary sewer.** Grease removal devices may be an in-ground gravity interceptor or a smaller grease trap, usually located above ground.

The City has established written BMPs specifically for food service establishments and other businesses that use a grease removal device (i.e., bakeries, car washes, restaurants, food production).

- BMPs for food service establishments are required to be implemented to address the slowdowns, blockages, and sanitary sewer overflows caused by FOG discharged into the City's collection system.
- BMPs include an established frequency for inspection and maintenance of grease removal devices. BMPs also provide guidance for food service establishments and other businesses in reducing discharges to the stormwater collection system.

Staff Training is the Key

Training your staff on proper BMPs is essential to avoiding clogged pipes and a large sewer back-up.



Best Management Practices for all Food Service Establishments

Best Management Practice	Background
<p>Wash all kitchen utensils in water below 140° F. Health Codes require water temperatures above 120° F for washing kitchen utensils.</p>	<p>Temperatures above 140° will dissolve grease. Grease may then cool and solidify in the building lateral or in the sewer system.</p>
<p>Dry scrape/wipe cooking utensils, plates, food containers into organics first, then pre-rinse and clean.</p>	<p>“Dry scraping/wiping” will reduce the grease loading and solids material being discharged into a grease removal device and the sewer system. This can extend the time required between cleanings if done consistently.</p>
<p>Use a fine mesh drain screen in all floor sinks that receive indirect waste from sinks, triple sinks, prep sinks, mop sinks, etc. These drain screens shall be capable of trapping particles greater than 1/16th of an inch in any direction.</p>	<p>Screens trap particles of food waste to prevent discharge to the building’s sewer laterals. Screens are available at most restaurant supply stores.</p>
<p>Keep liquids out of waste containers. Food service establishments must also provide customers a pour off location if allowing for self-disposal.</p>	<p>Liquids in waste containers leak during transportation and can cause pollution in the streets and stormdrains.</p>
<p>Only wash or rinse kitchen mats at a mop closet, utility sink (non-food preparation) or a car wash. Kitchen mats may not be washed or rinsed outside, including at the back door or at trash enclosures (unless a sewer drain is installed), surface pavement, sidewalks, stormdrains, streets, parking areas or gutters where the run off reaches the stormdrain system.</p>	<p>It is a violation of State Health Codes to wash any mat in any food preparation sink. Prevent stormwater violations by washing kitchen mats in appropriately identified areas.</p>
<p>Maintain an accessible spill kit(s) for oils/liquids at strategic locations throughout the kitchen area. Use dry cleanup methods such as cat litter or paper towels to pick up oil and grease spills before mopping.</p>	<p>Prevention methods such as using dry cleaning and absorbents, is key to successful removal of fats, oils and grease from your sanitary sewer system.</p>

Waste Enclosures

Best Management Practice

Keep all waste in non-absorbent, durable, cleanable, leak-proof and rodent proof containers.

Keep waste bin lids closed to minimize pests and odors.

Keep storage areas, enclosures and receptacles for waste in good repair.

Remove waste from the premises at a frequency that will minimize odors and other conditions that attract or harbor insects and rodents.



Background

The City enforces the current, established California Retail Food Codes for trash enclosure cleanliness.

Article 4. Refuse. Section 114245.1. California Retail Food Code. Excerpt from California Health and Safety Code. July 20, 2007.



Ensure that ALL wash water or runoff from pressure washing, washing or rinsing the waste enclosure or waste containers stays out of the stormdrain system.

Dry sweep and mop enclosure as necessary. Wipe down the outside of containers by hand.



When cleaning outdoor waste bins is necessary, contact a local waste bin cleaner company that recycles and collects all the wash water. They must have a valid City of Davis Business License. Enclosures with drains to sanitary sewer are exempt and may utilize the enclosure as a wash station.

Any washing that runs off and to the stormdrain system is considered an illicit discharge and is punishable with fines, penalties, and/or remediation costs.

If you are unsure if your enclosure has a drain that connects to the sanitary sewer, please contact Public Works Utilities & Operations for an on-site evaluation.



Waste Enclosures

Best Management Practice	Background
<p>Train staff to exercise care when disposing of material in waste containers to prevent spills in, on or around waste containers. Clean up spills as soon as possible.</p>	<p>It is never ok to place waste on the ground inside an enclosure. Waste must fit within a waste bin for collection. This is enforced.</p> 
<p>Ensure that outdoor waste bin lids can close completely and keep them closed at all times.</p> <p>Do not overfill containers to the point where the lids will not close.</p> 	<p>Call Recology Davis (530-756-4646) for replacement or repair if containers and/or lids are damaged. Overfilled bins shall only be serviced to the level which they are designed and any excess waste will be left. Contact Recology Davis for additional pick-ups for excess waste.</p>
<p>Outside waste containers must be watertight and leak-proof.</p> <p>Do not dispose of liquid waste into waste containers.</p> <p>Provide customers with a place to pour liquids if needed to keep liquids out of waste bins.</p>	<p>Liquids add to the weight of the containers and can make them not serviceable. Liquids can leak out of containers and into stormdrains untreated. Liquids in waste hauler trucks will leak out onto roadways and enter stormdrains polluting our local waterways.</p>
<p>Sorted waste into the appropriate waste receptacle: organic waste, comingle recyclables (plastics, metals and glass), paper, cardboard and landfill.</p> 	<p>See information enclosed in this binder related to SB 1383. The City of Davis enforces the regulations regarding the source separation of waste.</p>

Gravity Grease Interceptor

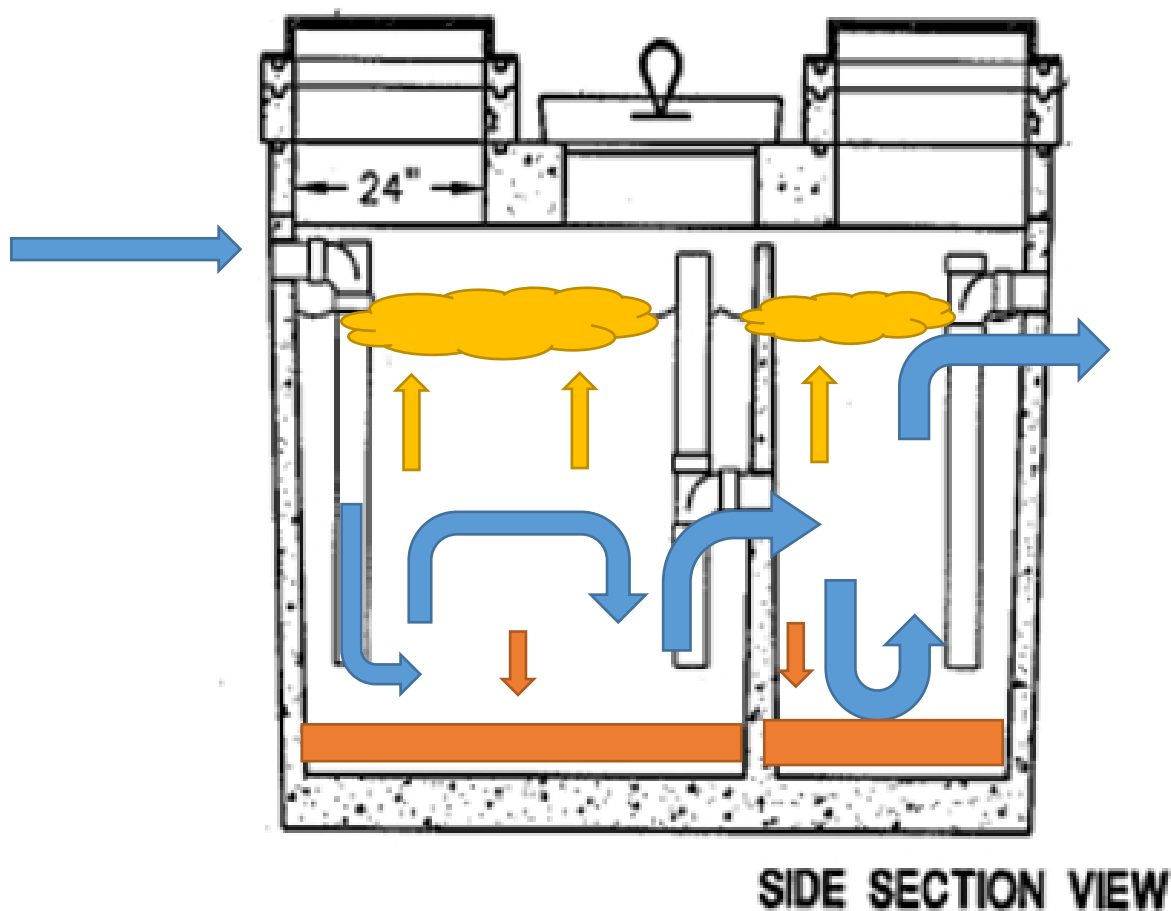
Best Management Practice	Background
<p>Check grease interceptors at least once a month. City staff can assist in determining the frequency of cleaning needed in order to minimize the cost associated with cleaning in-ground interceptors.</p> <p>Clean interceptors of accumulated grease and sludge/food debris before it reaches 25% of its hydraulic capacity in the 1st or 2nd stage.</p> <p>See figures on next page for a diagram and example of an access point to a grease interceptor.</p>	<p>Davis Municipal Code 33.03.165 (d) regarding the 25% rule shall be enforced.</p> <p>Specific requirements on how a grease interceptor is cleaned can be found in the Davis Municipal Code 33.03.165(d).</p>
<p>Ask cleaning contractor to check influent and effluent tees at each cleaning and ask contractor to note that they are intact on the cleaning invoice. In addition, the cleaning contractor must indicate on the invoice where they disposed of the material.</p>	<p>Always inspect the grease interceptor after cleaning to ensure a complete job has been done by the contractor. Checking the interceptor for functioning parts is part of the cleaning process and should be documented.</p>
<p>Do not add any chemical or bacteriological additives to a grease interceptor. This is prohibited by Davis Municipal Code 33.03.165(d).</p>	<p>Emulsifiers, degreasers, bio-additives or solvents will cause grease to be carried through the interceptor into the building laterals or sanitary sewer, where it will re-solidify and may cause blockages, slowdowns, or overflows.</p>
<p>Ensure that cleaning contractor maintain a current City of Davis business license and provide a copy with their cleaning invoice.</p>	<p>This is required by the City Municipal Code. Receipts from cleaning must be available to the City upon request.</p>




Gravity Grease Interceptor

Best Management Practice	Background
Ask contractors to provide a copy of their current, valid, training certificate for grease interceptor cleaning.	Only certified professionals should perform cleaning on these large gravity grease interceptors. Requesting documentation of training is your responsibility.
Establish an inspection log for the grease interceptor and maintain records of cleaning and maintenance for three (3) years.	Required by the City Municipal Code. Receipts from cleaning must be available to the City upon request.

A gravity grease interceptor works in the same manner as a hydromechanical grease interceptor. Wastewater goes in, is slowed by the baffle wall and moves to the 2nd compartment before exiting the grease interceptor.




Rendering Bin – Used Cooking Oil

Best Management Practice	Background
<p>Train staff to exercise care when disposing of material into the rendering bin to prevent spills in, on or around the bin. Clean up any spill as soon as possible.</p>	<p>Spilled grease on the outside of the bin or on the ground can cause safety and sanitary issues. The oil is slippery and staff or others can fall from stepping in the spilled oil. If left to dry it becomes very sticky and attracts pests such as rodents, roaches, ants and others.</p>
<p>Keep the lid to the bin closed at all times unless opening it to actively pour used oil in. Clean up any spills.</p> 	<p>Keeping the lid closed will prevent odors which attract pests, prevent the intrusion of rainwater and lessen the potential for illegal dumping of other substances. Rainwater intrusion can cause the used oil to float on top of the rainwater and if the bin becomes full, the oil can spill over onto other surfaces. It can then potentially flow into stormdrains where it will pollute our local waterways.</p>
<p>Clean up spilled oil on the ground and on the rendering bin. Use paper towels to wipe up spills and place them in the organics bin. For larger spills, use absorbent material like cat litter and then sweep it up and empty into landfill.</p>	<p>Used kitchen oil on the ground is a big contributor to oils which get washed down during rain events and end up in our local waterways. Prevention and proper cleaning when a spill occurs is important to keep our environment clean.</p>
<p>Scrape the solid debris off the screen and place in organics bins.</p>	<p>Keeping the screen clear of build-up will ensure that when you pour off the used oil it goes into the collection container and does not spill over onto the ground.</p>
<p>Establish an inspection log for the used cooking oil bin and maintain records of cleaning and maintenance for three years.</p>	<p>This is required by the City Municipal Code. Receipts from cleaning must be available to the City upon request.</p>



Kitchen Exhaust Hoods

Best Management Practice	Background										
<p>Clean kitchen exhaust hoods at the frequency outlined in the table below:</p> <table border="1" data-bbox="48 403 792 991"> <thead> <tr> <th>Type of Volume of Cooking</th> <th>Cleaning Frequency</th> </tr> </thead> <tbody> <tr> <td>Systems with solid fuel cooking operations</td> <td>Monthly</td> </tr> <tr> <td>Systems with high-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking</td> <td>Quarterly</td> </tr> <tr> <td>Systems with moderate-volume cooking operations</td> <td>Semi-annually</td> </tr> <tr> <td>Systems serving low-volume cooking operations such as churches, day camps, seasonal businesses or senior centers</td> <td>Annually</td> </tr> </tbody> </table>	Type of Volume of Cooking	Cleaning Frequency	Systems with solid fuel cooking operations	Monthly	Systems with high-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking	Quarterly	Systems with moderate-volume cooking operations	Semi-annually	Systems serving low-volume cooking operations such as churches, day camps, seasonal businesses or senior centers	Annually	<p>Kitchen exhaust hoods require periodic cleaning. Requirements are identified in the National Fire Protection Association, (NFPA) 96 Fire Codes Table 12.4 (see left). Cleaning is required monthly, quarterly, semiannually or annually, depending on the type or volume of cooking. Regular cleaning avoids overflows and spills, which can cause pollution and trigger fines.</p> 
Type of Volume of Cooking	Cleaning Frequency										
Systems with solid fuel cooking operations	Monthly										
Systems with high-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking	Quarterly										
Systems with moderate-volume cooking operations	Semi-annually										
Systems serving low-volume cooking operations such as churches, day camps, seasonal businesses or senior centers	Annually										
<p>Do not direct dirty water, cleaning solution, rinse water or other material from cleaning exterior exhaust hoods to the roof surface or building gutters.</p>	<p>Exhaust hood cleaning must be performed by trained personnel. A collection system for the cleaning water must be used to prevent the accidental discharge or leaking of cleaning solutions to the building roof or gutters.</p>										
<p>Ensure that cleaning contractors maintain a current City of Davis business license and provide a copy with their cleaning invoice.</p>	<p>This is required by the City Municipal Code. Receipts from cleaning must be available to the City upon request.</p>										
<p>Establish an inspection log for the kitchen exhaust hood and maintain records of cleaning and maintenance for three years.</p>	<p>City of Davis and Federal regulations require record keeping for three years for facilities under the Pretreatment program.</p>										
<p>Ensure that the following items related to the exterior kitchen exhaust hood grease collection tray are addressed:</p> <ul style="list-style-type: none"> • cleaning • securely fastening to fan housing • covering to prevent rainfall intrusion • noting presence and proper operation of downspout for routing fugitive grease into the grease collection tray. 	<p>These items should be documented in the contractor's invoice. This will ensure that a full inspection was completed with your regular cleaning process and that no steps were missed.</p>										

Kitchen Exhaust Hoods

Best Management Practice

Inspect roof grease collection trays in between the required kitchen exhaust hood cleanings to ensure they do not overflow. Grease collection trays must be securely attached to the fan housing, covered to protect from weather and have a downspout directing collected grease/oil into the covered collection tray (see figures below).

Background

Grease collection trays are used to collect fugitive grease/oil discharge from the kitchen exhaust hood. To ensure they are not overflowing and spilling onto roofs, they must be checked in between the required cleanings.

A grease collection tray on the rooftop kitchen exhaust hood, indicated by red arrow

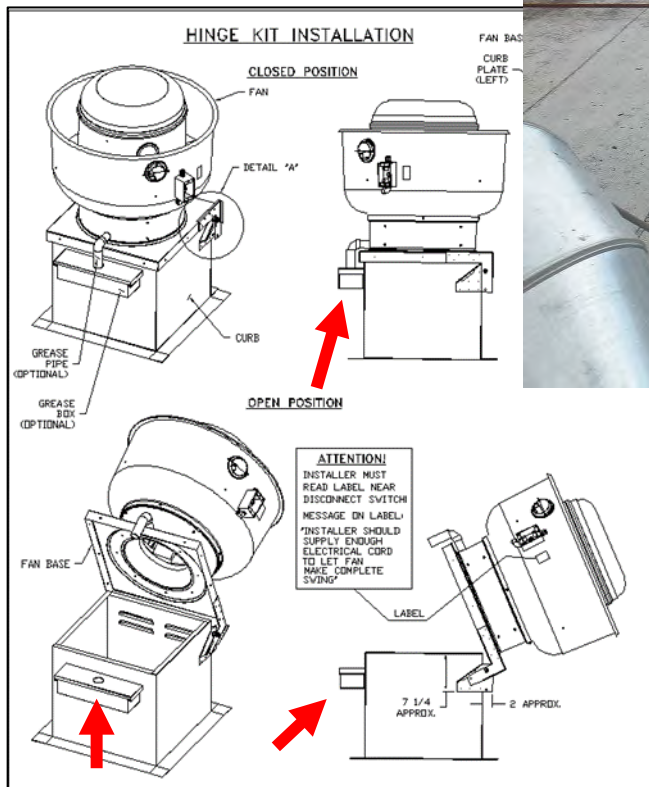


Diagram of a grease collection tray on a roof top exhaust hood systems, indicated by a red arrow

Exterior Surface Cleaning

Best Management Practice

Only use potable water for cleaning sidewalks and other surfaces if required for health and safety purposes.

If using water is necessary to clean surfaces, the water must be soap-free and chemical-free in order to be discharged to the stormdrain system. The area(s) must have been pre-swept and free from visible significant pollutants.



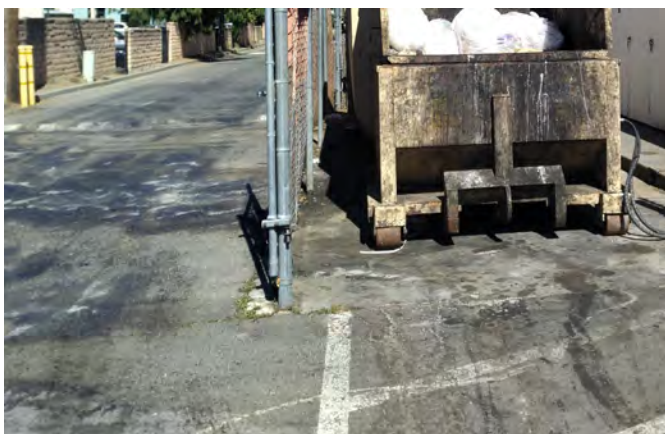
Background

These exceptions are only available when discharges would not violate water quality standards and landscape disposal is not available.



Do not allow dirty wash water from cleaning exterior surfaces to flow into stormdrains. Dirty wash water must be collected and disposed of into a sanitary sewer drain.

Water use restrictions limit the options for cleaning of surfaces with water except as required for health and safety purposes. For more information, please see the water conservation sections of this binder.



Discolored surfaces usually indicate some kind of pollutants. If you see discolored pavement, do NOT wash these areas off without ensuring that the wash water will go into a sanitary sewer instead of a stormdrain.



Assistance is Available

- Visit GreenerDavis.org and click on “Wastewater Pretreatment” for information on all City of Davis Pretreatment Programs.
- The City has free BMP Posters that can be used in your kitchen above sinks or on dishwashers.

DO NOT PUT FOOD WASTE, FATS, OILS, OR GREASE DOWN THE DRAIN

NO	YES
FOOD WASTE INCLUDING PEELS, LEFTOVER FOOD, DAIRY PRODUCTS, SOUPS, ETC.	SCRAPE OFF SCRAPE WASTE INTO THE ORGANICS BIN BEFORE WASHING.
FOOD RESIDUE INCLUDING SAUCES, GRAVY, BUTTER, AND DRESSINGS	WIPE DOWN WIPES, PUTS, PANS, AND COOKING EQUIPMENT WITH A PAPER TOWEL INTO THE ORGANICS BIN BEFORE WASHING.
USED OIL AND GREASE NEVER POUR DOWN ANY DRAIN	STORE USED OIL AND GREASE IN A CONTAINER FOR RECYCLING.

BEST PRACTICES

KITCHEN MATS SHOULD NEVER BE HOSED OFF OUTSIDE	CLEAN FLOOR MATS IN UTILITY SINKS.
GREASE TRAPS SHOULD NEVER BE MORE THAN 25% FULL.	MONITOR GREASE TRAPS WEEKLY.

City of Davis Public Works Utilities and Operations Department
GreenerDavis.org PWWeb@CityofDavis.org (530) 757-5686

请不要把食物类的垃圾, 肥肉, 油类 或 脂肪 放入下水管里

不许	可以
食物类的垃圾 包括: 水果皮, 吃剩的食物, 牛奶品, 或汤类的东西	刮一下 请刮一下食物类的垃圾, 刮入食物的回收桶, 然后在洗碗盘
食物类的油或酱 包括: 酱, 油, 奶油, 或沙拉酱	擦一下 洗碗之前, 请用纸巾擦碗盘和锅, 把纸巾放入食物的回收桶, 然后在洗
油类 或 脂肪 不许倒入下水管里	收集起来 收集油类和 脂肪 倒入厨内回收

好的习惯

厨房的地板垫 不许在外面用水清洗	清洗 使用洗手盆洗厨房的地板垫
油收阱 不能超出四分之一满	检查 每周检查油收阱一次

市政府工程和应用事业的部門
GreenerDavis.org PWWeb@CityofDavis.org (530) 757-5686

NO COLOCAR DESECHOS DE ALIMENTOS, GRASAS O ACEITES EN EL DESAGÜE

NO	SI
DESECHOS DE ALIMENTOS INCLUYE CARCINAS, RESTOS DE COMIDA, PRODUCTOS LACTEOS, SOFAS, ETC.	DESCARTA LOS DESECHOS ALIMENTOS EN EL BOTE ORGANICOS ANTES DE LAVAR.
RESIDUOS DE COMIDA INCLUYE SAZAS, GRAVY, MANTECILLA Y ADERZOS.	LIMPIA PLATOS, CUBIERTOS, BARREROS Y UTENSILIOS DE COCINA CON UNA TOALLA DE PAPEL Y DEPOSITA EN EL BOTE ORGANICO ANTES DE LAVAR.
ACEITE USADO Y GRASA NUNCA DE VACIAR EN LOS DESAGÜES.	GUARDA ACEITE USADO Y GRASAS EN UN RECIPIENTE APTO PARA REUSAR.

LAS MEJORES PRÁCTICAS

TAPETES DE COCINA NUNCA DEBEN DE LIMPARSE, LOS TAPETES O QUILAMOS EN EL EXTERIOR.	LIMPIA TAPETES DE PISO EN LOS LAVADEROS.
TRAMPAS DE GRASA NUNCA DEBEN ESTAR MAS DEL 25% LLENAS.	MONITOREA TRAMPAS DE GRASA SEMANALMENTE.

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- Need help figuring out how to clean your small hydromechanical grease interceptor? Request a copy of the “How to Clean That Trap” training document.

City of Davis Public Works Utilities & Operations
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Environmental Program Specialist
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530-757-5625

Frequently Asked Questions

What are BMPs, and why do I need to implement them?

Best Management Practices (BMPs) are guidelines, operational procedures, and general knowledge needed to reduce fats, oils, grease and related material from entering the sewer system.

The City has prepared this BMP guide for food service establishments to reduce the amount of fats, oil and grease discharged in the City's collection system. These BMPs are in keeping with the requirements outlined in the City's Sanitary Sewer Management Plan and the State Water Resources Control Board Order No. 2006-003. BMPs provide narrative local limits for control of fats, oil and grease in the City's service area.

Can I get a waiver for a grease interceptor for my business?

In accordance with the City's Sewer Use Ordinance (33.03.165 Grease Interceptors), limited types of food service establishments may apply for a waiver from installation of grease interceptors. An application is required and is not guaranteed to be approved.

Why should I be concerned about fats, oils and grease at my business?

When fats, oil and grease enter the sewer system, they can build-up and coat the inside of pipes and pumping stations. This build-up can cause clogs in the sewer pipes and may cause back-ups into your sinks and drains in the building. This can be costly to remedy and typically requires hiring a licensed plumber. If clogs occur in the sewer collection system, the backed-up sewer waste can end up entering our stormwater drains which discharge to our local creeks and streams untreated.

If a back-up or overflow occurs due to your business not implementing best management practices and allowing fats, oils and grease to enter the sewer system, the City will implement civil penalties as well as cost recovery for any time, equipment and reporting related to the event.

How often must I check/clean my grease trap or interceptor?

Grease traps and interceptors must never be more than 25% full of congealed grease, oil, sludge or solid food material. You are responsible for all costs related to the maintenance and operation of your grease trap or interceptor.

Under-counter grease traps should be checked weekly to establish the cleaning frequency needed for your cooking type and customer load. An inspection log should be kept. Your grease trap may need to be cleaned more than once per week. All cleaning and maintenance should be documented in a bound logbook.

In-ground grease interceptor should be checked monthly to determine the cleaning frequency needed.

City staff can assist you in determining the frequency needed. Keep an inspection log and ensure that all grease interceptors are pumped-out and cleaned by a permitted grease hauler. All cleaning and maintenance should be documented and retained for City inspection.

Can I apply for a waiver for my grease trap or interceptor cleaning frequency?

No, the City does not have a waiver for grease trap or interceptor cleaning. The City allows individual food service establishments to set their cleaning scheduled based on their individual use, cooking type and customer loading, but **grease traps and interceptors can never be more than 25% full of grease, oil, sludge or food material in any stage.** If requested, City staff will provide written guidelines on how to self-clean an under-counter trap. Having your staff properly clean the grease trap would save you the cost of an outside contractor.

Frequently Asked Questions

How often will my facility be inspected?

Your facility will be inspected one or two times per year, or as often as necessary to ensure proper maintenance procedures are being followed for all grease pretreatment systems, kitchen exhaust fan grease collection tray(s), mat cleaning processes, trash enclosures and kitchen BMP practices. Structural integrity of the various devices will also be verified. You may or may not be informed ahead of time of when an inspection is scheduled. Failure to allow duly authorized inspectors access to the premises at reasonable times to conduct an inspection is a violation of the City's Sewer Use Ordinance (Municipal Code 33.03.430 through 33.03.450).

What will the inspector look for and do?

The inspector will look at all equipment and food processing and storage areas, paying special attention to the processes that produce wastewater that is discharged from the facility through the grease removal device. The inspector will also open and inspect the grease trap or interceptor and may request to see all records pertaining to the maintenance and repair of the device. The inspector may look at the kitchen exhaust fan on the roof. If applicable, the inspector will examine the external waste enclosure and/or any solid waste handling areas. The inspector will ask questions to ascertain whether procedures outlined in this document have been implemented. Any deficiencies will be noted by the inspector and you will receive a copy of the inspection report and a re-inspection date. If you have not corrected the deficiencies at the time of the re-inspection, you may be billed for the cost of the re-inspection and all future re-inspections.

What records do I need to keep?

You are required to keep the following records for three years:

- Inspection log for grease traps/interceptors and kitchen exhaust hoods
- Records of cleaning and maintenance of grease traps/interceptors and kitchen exhaust hoods
- Training log for new and existing employees, minimum annual training and more frequently if BMPs are not followed.

Why do I need to train or re-train my staff?

Trained staff are more likely to implement BMPs and work to reduce grease discharges to the sewer. People are more willing to support an effort such as keeping fats, oils and grease out of the drain if they understand its basis.

Why do I need to post signs in my kitchen?

Yes. Signs serve as a constant reminder for staff working in kitchens. Signs like "No Grease" or City of Davis developed posters above sinks and on dishwashers can remind staff to minimize grease discharge to the sewer or grease removal device.

How much will an inspection cost my business?

At this time, the City does not charge for inspection services as long as BMPs are followed and any noted deficiencies are corrected per the agreed-upon schedule.

How long do I have to make corrections?

City staff will allow sufficient time to complete corrections. Time allowed will depend on the severity of the deficiency, past deficiencies of the same type and historical compliance in general.

How do I get help?

Call the Public Works Utilities and Operations front counter at 530-757-5686, and staff will direct your call.

Employee Training Log

Employee Name	Date of Hire	Date of Training