

Core Elements of the Proposed FOG Ordinance

- **Permit Requirement:** Require all Food Service Establishments to obtain a FOG Wastewater Discharge Permit to discharge wastewater into the sewer system.
Rationale: A Permit is an effective method to regulate FOG discharges by providing specific requirements tailored to the needs of each Food Service Establishment in meeting specific compliance objectives. The permit identifies all of the permittee's obligations and responsibilities in a single document, thereby increasing the understanding of the Food Service Establishment with regards to the requirements.
- **Exemption from FOG Discharge Permit:** A limited food preparation establishment is not considered a Food Service Establishment and is exempt from obtaining a FOG Discharge Permit. Exempted establishments shall be engaged only in reheating, hot holding or assembly of ready to eat food products and as a result, there is no wastewater discharge containing significant amount of FOG. A limited food preparation establishment does not include any operation that changes the form, flavor, or consistency of food.
Rationale: Limited food preparation establishments have insignificant FOG discharges and need not be regulated at this time.
- **Prohibitions:**
 - Installation of food grinders in the plumbing system construction of new Food Service Establishments; require all existing Food Service Establishments to remove all food grinders within 180 days of the effective date of the Ordinance, except when expressly allowed by the FOG Control Program Manager.
Rationale: Eliminating food grinders (garbage disposer) will reduce the volume of solids that enter a grease interceptor or the sewer. Food wastes that accumulate in the grease interceptor occupy space used to separate and remove grease, resulting in an increased cleaning frequency required, waste hauling costs, and potential blockages.
 - Introduction of any additives into a Food Service Establishment's wastewater system for the purpose of emulsifying or biologically/chemically treating FOG for grease remediation or as a supplement to interceptor maintenance, unless a specific written authorization from the FOG Control Program Manager is obtained.
Rationale: Emulsifiers hinder FOG separation by dispersing FOG in the wastewater, which directly conflicts with the grease interceptor's role in separating and removing grease. Additives can also cause the interceptor to discharge its contents to the sewer.
 - Disposal of waste cooking oil into drainage pipes.
Rationale: Disposal of waste cooking oil to the sewer will cause blockages. Waste cooking oil can be recycled by recyclers in Orange County. This is an opportunity for cost recovery.
 - Discharge of wastewater from dishwashers to any grease traps or grease interceptor.
Rationale: Dishwashers that utilize temperatures in excess of 140°F will dissolve grease, which then resolidifies in the sewer as the water cools. This does not necessarily apply to dishwashers that use water temperatures less than 140°F.
 - Discharge of wastewater with temperatures in excess of 140°F to any grease control device, including grease traps and grease interceptors.
Rationale: Temperatures in excess of 140°F will dissolve grease, which then resolidifies in the sanitary sewer as the water cools.
 - Discharge of wastes from toilets, urinals, wash basins, and other fixtures containing fecal materials to sewer lines intended for grease interceptor service.
Rationale: Grease interceptors are intended to separate and remove FOG and should not contain other wastes that will interfere in its operations and maintenance.

- Discharge of any waste including FOG and solid materials removed from the grease interceptor to the sewer system.

Rationale: *This defeats the purpose of the interceptor. Accumulated grease, solids and wastewater removed from interceptors must be properly disposed offsite periodically as part of the operation and maintenance requirements.*

- Operation of grease interceptors with FOG and solids accumulation exceeding 25% of the total design hydraulic depth of the grease interceptor (25% Rule).

Rationale: *This is to ensure that the minimum hydraulic retention time and required hydraulic volume is maintained to effectively intercept and retain FOG discharged to the sewer system.*

- **Requirement to Implement Best Management Practices (BMPs):** Require each Food Service Establishment to implement Best Management Practices in its operation to minimize the discharge of FOG to the sewer system.

Rationale: *The best way to manage FOG is to keep it out of the plumbing system using Best Management Practices (BMPs). BMPs are schedules of activities, prohibitions of practices, maintenance procedures and other management practices that effectively reduce the discharge of FOG from the FOOD SERVICE Establishment's wastewater discharge.*

- **General Requirement for FOG Pretreatment:** Require Food Service Establishments to pretreat its wastewater using grease interceptors to remove FOG prior to discharge to the sewer system. Allow Waivers or Variance when applicable, but require space and plumbing segregation for future interceptor installation.

Rationale: *Pretreatment through installation, operation and maintenance of a properly designed and adequately sized grease interceptor has been proven to be effective and is considered the Best Conventional Technology (BCT) for FOG control. Unless the FOG discharge is significantly low, implementation of BMPs and the use of other common grease control device, such as grease traps, are not sufficient to effectively control FOG. Food Service Establishments with insignificant FOG discharges may be granted waivers from grease interceptor installation, for practical reasons. A Waiver or Variance may be cancelled when it is shown that the Food Service Establishment has significantly increased its FOG discharge as a result of facility expansion or changes in operations. Because Food Service Establishments have the potential to change operations or grow (hence, increase future FOG discharge), it is important to require space and plumbing segregation to allow future grease interceptor installation, even when waivers are issued.*

- **Implementation of FOG Pretreatment Requirement for New Construction of Food Service Establishments:** Require all new construction of Food Service Establishments to install grease interceptors prior to commencing discharge of wastewater to the sewer system.

Rationale: *New Food Service Establishments have the ability to install grease interceptors during construction and must take this opportunity to put FOG pretreatment in place.*

- **Implementation of FOG Pretreatment Requirement for Existing Food Service Establishments:**

- For existing Food Service Establishments in general, the requirement to install and to properly operate and maintain a grease interceptor may be conditionally stayed, that is, delayed in its implementation (through a conditional waiver) by the FOG Control Manager for a maximum period of three years from the effective date of the Ordinance.

Rationale: *Existing Food Service Establishments will be given a three-year period from the effective date of the Ordinance to plan for the installation of grease interceptors and/or implement the best technical approach that would enable them to reduce their FOG discharge and meet the requirements of the waiver from installation of grease interceptor. The three-year grace period will allow sufficient preparation to bring the wastewater discharge to standard through installation of adequate grease interceptor or other acceptable alternatives.*

- Require the installation of grease interceptors within 180 days after notification for existing Food Service Establishments that have caused or contributed to grease related blockage in the sewer system, or which have sewer laterals connected to hotspots, or which have been determined to contribute significant FOG to the sewer system by the FOG Control Program Manager based on inspection or sampling.

***Rationale:** The implementation of the FOG Control Program is initially focused on high priority existing Food Service Establishments that have reasonable potential to adversely impact the sewer system or have sewer laterals connected to hot spots, in order to ensure that their FOG discharges are immediately reduced and brought to standard. This should decrease blockages and sanitary sewer overflows.*

- Require installation of grease interceptors for Existing Food Service Establishments undergoing remodeling or a change in operations as defined in the Ordinance, or Existing Food Service Establishments that change ownership and undergo remodeling or a change in operations as defined in the Ordinance.

***Rationale:** Existing Food Service Establishments undergoing remodeling or change in operations have the opportunity to bring their wastewater discharges to standard by integrating the installation of grease interceptor in their planned changes. Likewise, change in ownership that goes through remodeling or change in operations, have the same opportunity and are subject to the same requirement.*

- **Variance from Grease Interceptor Requirement:** Issue Variance to allow alternative pretreatment technology that is, at least, equally effective in controlling the FOG discharge in lieu of a grease interceptor, to Food Service Establishments demonstrating that it is impossible or impracticable to install, operate or maintain a grease interceptor. The FOG Control Program Manager's determination to grant a variance will be based upon, but not limited to, evaluation of the following conditions:

- a. There is no adequate space for installation and/or maintenance of a grease interceptor.
- b. There is no adequate slope for gravity flow between kitchen plumbing fixtures and the grease interceptor and/or between the grease interceptor and the private collection lines or the public sewer.
- c. The Food Service Establishment can justify that the alternative pretreatment technology is equivalent or better than a grease interceptor in controlling its FOG discharge. In addition, the Food Service Establishment must be able to demonstrate, after installation of the proposed alternative pretreatment, its effectiveness to control FOG discharge through downstream visual monitoring (Closed Circuit Television or CCTV) of the sewer system, for at least three months, at its own expense. A Variance may be granted if the results show no visible accumulation of FOG in its lateral and/or tributary downstream sewer lines.

***Rationale:** Issuance of variance allows OCSD to accept other alternative FOG pretreatment technology when the installation of grease interceptor is not feasible. This allows flexibility to implement new technology that is equivalent, in efficacy, to a grease interceptor.*

- **Conditional Waiver from Installation of Grease Interceptor:** Issue conditional waivers from installation of grease interceptors to Food Service Establishments that have been determined to have negligible FOG discharge and insignificant impact to the sewer system. This waiver may also be issued to existing Food Service establishments to delay implementation of the requirement up to a maximum of three years from the effective date of the Ordinance. The FOG Control Program Manager's determination to grant or revoke a conditional waiver shall be based upon, but not limited to, evaluation of the following conditions:

- a. Quantity of FOG discharge as measured or as indicated by the size of Food Service Establishment based on seating capacity, number of meals served menu, water usage, etc.
- b. De minimis discharge, i.e., discharge volume that does not require an interceptor size larger than 350 gallons.
- c. Adequacy of implementation of Best Management Practices and compliance history.
- d. Sewer size, grade, condition based on visual information(CCTV), FOG deposition in the sewer by the Food Service Establishment, and history of maintenance and sewage spills in the receiving sewer system.
- e. Changes in operations that significantly affect FOG discharge.
- f. Any other condition deemed reasonably appropriate by the FOG Control Program Manager.

Rationale: Issuance of Conditional Waivers from Grease Interceptor Installation allows OCSD to waive the requirement when it is not necessary, i.e., when the Food Service Establishment is determined to have negligible FOG discharge and insignificant impact to the sewer system. The waiver is made conditional so that it can be revoked anytime when any of the reasons or conditions for its issuance is no longer valid or true. The issuance of waivers allow flexibility to implement the grease interceptor requirement in a practical manner such that Food Service Establishments are unnecessarily burdened by requirements that derive no benefits towards achieving the desired environmental results.

Issuance of Conditional Waivers from Grease Interceptor Installation will also be used to hold the grease interceptor requirement during the three-year delay in implementation. Three years from the effective date of the Ordinance, a conditional waiver issued for this purpose will be revoked unless the Food Service Establishment qualifies for other specific circumstances that would allow issuance of waiver.

- **Waiver from Grease Interceptor Installation with a Grease Disposal Mitigation Fee:** For Food Service Establishments where the installation of grease interceptor is not feasible and no equivalent alternative pretreatment can be installed, a waiver from the grease interceptor requirement may be granted with the imposition of a Grease Disposal Mitigation Fee as described in the Ordinance. The FOG Control Program Manager's determination to grant the waiver with a Grease Disposal Mitigation Fee will be based upon, but not limited to, evaluation of the following conditions:
 - a. There is no adequate space for installation and/or maintenance of a grease interceptor.
 - b. There is no adequate slope for gravity flow between kitchen plumbing fixtures and the grease interceptor and/or between the grease interceptor and the private collection lines or the public sewer.
 - c. A variance from grease interceptor installation to allow alternative pretreatment technology cannot be granted.

Rationale: This allows issuance of waiver when the installation of a grease interceptor is not physically feasible. However, Food Service Establishments are required to pay an annual Grease Disposal Mitigation Fee to equitably cover the costs of increased maintenance of the sewer system as a result of the Food Service Establishments' inability to adequately remove FOG from its wastewater discharge. The Grease Disposal Mitigation Fee shall be established uniformly, and shall be based on the estimated annual increased cost of maintaining the sewer system for inspection and removal of FOG and other viscous or solidifying agents attributable to the Food Service Establishment resulting from the lack of a grease interceptor or grease control device.

- **Grease Interceptor Installation Requirements:** Any Food Service Establishment required to provide FOG pretreatment shall install, operate, and maintain an approved type and adequately sized grease interceptor necessary to maintain compliance with the objectives of the Ordinance. Grease interceptor sizing and installation shall conform to the current edition of the Uniform Plumbing Code.

Rationale: Although there are different methods available for sizing grease interceptors, the Uniform Plumbing Code design method is widely used and is the current official standard...
- **Grease Interceptor Maintenance Requirements:**
 - a. Grease Interceptors shall be maintained in efficient operating condition by periodic removal of the full content of the interceptor which includes wastewater, accumulated FOG, floating materials, sludge and solids.
 - b. All existing and newly installed grease interceptors shall be maintained in a manner consistent with a maintenance frequency approved by the FOG Control Program Manager pursuant to this section.
 - c. No FOG that has accumulated in a grease interceptor shall be allowed to pass into any sewer lateral, sewer system, storm drain, or public right of way during maintenance activities.

- d. Food Service Establishments with grease interceptors may be required to submit data and information necessary to establish the maintenance frequency grease interceptors.
- e. The maintenance frequency for all Food Service Establishments with a grease interceptor shall be determined in one of the following methods:
 1. Grease interceptors shall be fully pumped out and cleaned at a frequency such that the combined FOG and solids accumulation does not exceed 25% of the total design hydraulic depth of the grease interceptor. This is to ensure that the minimum hydraulic retention time and required available hydraulic volume is maintained to effectively intercept and retain FOG discharged to the sewer system.
 2. All Food Service Establishments with a Grease Interceptor shall maintain their grease interceptor not less than every 6 months.
 3. Grease interceptors shall be fully pumped out and cleaned quarterly when the frequency described in (1) has not been established. The maintenance frequency shall be adjusted when sufficient data have been obtained to establish an average frequency based on the requirements described in (1) and guidelines adopted pursuant to the FOG Control Program. The District may change the maintenance frequency at any time to reflect changes in actual operating conditions in accordance with the FOG Control Program. Based on the actual generation of FOG from the Food Service Establishment, the maintenance frequency may increase or decrease.
 4. The owner/operator of a Food Service Establishment may submit a request to the FOG Control Program Manager requesting a change in the maintenance frequency at any time. The Food Service Establishment has the burden of responsibility to demonstrate that the requested change in frequency reflects actual operating conditions based on the average FOG accumulation over time and meets the requirements described in (1), and that it is in full compliance with the conditions of its permit and this Ordinance. Upon determination by the FOG Control Program Manager that requested revision is justified, the permit shall be revised accordingly to reflect the change in maintenance frequency.
 5. If the grease interceptor, at any time, contains FOG and solids accumulation that does not meet the requirements described in (1), the Food Service Establishment shall be required to have the grease interceptor serviced immediately such that all fats, oils, grease, sludge, and other materials are completely removed from the grease interceptor. If deemed necessary, the FOG Control Program Manager may also increase the maintenance frequency of the grease interceptor from the current frequency.
- f. Wastewater, accumulated FOG, floating materials, sludge/solids, and other materials removed from the grease interceptor shall be disposed off site properly by wastehaulers in accordance with federal, state and/or local laws.

Rationale: *The above requirements ensure that grease interceptors are properly operated at all times, by maintaining the minimum hydraulic retention time and required available volume necessary to effectively intercept and retain FOG prior to discharge of wastewater to the sewer system.*

Requirements for Best Management Practices (BMPs)

- Installation of drain screens. Drain screens shall be installed on all drainage pipes in food preparation areas.
- Disposal of food waste. All food waste shall be disposed of directly into the trash or garbage, and not in sinks.

Rationale: *Drain screens collect food wastes that can be disposed of in the trash as solid wastes rather than being discharged into the interceptor. Disposal of food wastes to the trash or garbage helps reduce the FOG discharge and the interceptor pumping frequency required.*

- Segregation and collection of waste cooking oil. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
Rationale: *Disposal of waste cooking oil to the sewer is prohibited and will cause blockages. Waste cooking oil can be recycled at recyclers in Orange County. This is an opportunity for cost recovery.*

- Employee training. Employees of the food service establishment shall be trained by ownership within 180 days of notification, and twice each calendar year thereafter, on the following subjects:
 - a) How to “dry wipe” pots, pans, dishware and work areas before washing to remove grease.
 - b) How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors.
 - c) The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
 - d) How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed. Training records shall be available for review at any reasonable time by OCSD or other authorized inspector.
Rationale: *Employees are more willing to support an effort if they understand the basis for it. Regular training will promote awareness in controlling FOG discharges through Best Management Practices.*

- Maintenance of kitchen exhaust filters. Filters shall be cleaned as frequently as necessary to be maintained in good operating condition. The wastewater generated from cleaning the exhaust filter shall be disposed properly.
Rationale: *FOG can accumulate on the roof of an establishment and eventually enter the storm drain system when it rains. The discharge of FOG to the storm drain system is prohibited.*

- Kitchen signage. Best management and waste minimization practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.
Rationale: *Signs serve as a constant reminder for staff working in kitchens. These reminders will help minimize discharge of FOG by implementing Best Management Practices.*