# **APPENDIX G1**

# FOG Control Program

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# Fats, Oils, and Grease Control Program

# Basis for Program Development, Program Components, and Policies

#### Abstract

Identifying the guiding principles and developing program components for effectively controlling the discharge of fats, oils, and grease (FOG) will define the implementation strategy necessary for a successful source control program. This is an attempt to establish OCSD's FOG Control Program to determine policies/guidelines and associated regulations that need to be in place to effectively enforce the program. In writing the Ordinance, the FOG Control Program should be considered to ensure that the regulations established are comprehensive and can be practically implemented to achieve the desired end results.

**JE/MT** 1/04

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## PURPOSE

The purpose of the Fats, Oils, and Grease (FOG) Control Program is to prevent blockages of the sanitary sewer lines that can cause sanitary sewer overflows (SSOs) by establishing control mechanisms that will establish regulations and policies for the disposal of FOG from Food Service Establishments (FSEs). The control mechanisms will comprise of the FOG Ordinance (Ordinance) and FOG Wastewater Discharge Permit (permit), which shall define general prohibitions and restrictions on discharges, facilities requirements, administrative requirements, procedures for recovering costs associated with FOG discharges and blockages, and enforcement tools for implementing the program.

In addition to establishing control mechanisms, the FOG Control Program will also include an enforcement management system to address the fundamental requirements necessary to regulate FSEs; obtain and evaluate information on FSE compliance; identify violations; select appropriate enforcement action; establish time frames for implementation; and resolve noncompliance in a timely, fair and consistent manner.

The discharge of FOG to the sewer system from FSEs will be effectively controlled through the FOG Control Program by:

Administering an extensive permitting program to regulate wastewater discharges from FSEs;

Tracking compliance through inspection of FSEs, reviewing Kitchen Best Management Practices (BMPs) and Grease Interceptor Maintenance Practices, and monitoring wastewater discharges;

Evaluating and screening the results of inspection and reports to identify violations;

Consistently responding to all types of violations to ensure long-term compliance; and

Requiring FSEs, when applicable, to pretreat wastewater to reduce FOG prior to discharge to the sewer system.

# BASIS FOR DEVELOPING FOG CONTROL PROGRAM

# Pursuing an Equitable FOG Control Program

A good FOG Control Program should consistently succeed in keeping FOG discharges below acceptable levels to protect wastewater collection systems from clogging and causing sanitary system overflows (SSOs). Since the problem is caused significantly by FSEs discharging FOG, FSEs share a major responsibility for the consequences of their FOG discharges.

It is OCSD's objective to develop and implement a FOG Control Program that is equitable by:

Requiring all FSEs to reduce the level of their FOG discharge through implementation of Best Management Practices (BMPs) and installation of appropriate/adequate grease interceptor/FOG control device, among other requirements necessary for an effective FOG control

Establishing specific permit requirements for reducing FOG discharges by considering the quantity of FOG generated by the FSE and its potential impact to the collection system; establishing requirements that are effective to achieve the desired environmental results while considering costs incurred by FSEs, considering requirements with sound technical basis; establishing practical requirements tailored individually to each FSE based on established criteria versus a "one size fits all" set of requirements

Establishing basic user fees and any additional user fees that may be imposed for discharges above acceptable levels to recover costs of additional maintenance required beyond normal; imposing mitigation fees for FSEs where installation of adequate grease interceptor/FOG control device is not feasible

Recovering cost of FOG Control Program, which includes inspections, sampling, program administration and maintenance, educational outreach, etc.

Implementing a FOG Control Program that addresses all FSEs that are sources of FOG and is consistent among all FSEs.

Sewer blockages are largely dependent on the quantity of FOG being discharged from FSEs, but are also dependent on other factors such as the size of the sewer line, pipe material, number of dischargers to the line, type of dischargers, topography (slope), age and condition of the sewer lines, etc. Sewer conditions contributing to blockages can be corrected by the sewer agency; however, any capital improvement will take a longer time to implement. Although more frequent sewer cleaning and maintenance is one of the solutions, a balance between the frequency of cleaning and the public cost involved must also be maintained. In the interest of protecting public health, the immediate burden is placed on significant FOG dischargers (FSEs) to control and reduce their FOG discharges in conjunction with a practical sewer cleaning and maintenance schedule by the sewer agency, while capital improvements of the collections facilities are undertaken.

# **FOG Control Essentials**

There are two essential elements for effectively controlling the discharge of FOG:

Pretreatment through installation, operation, and maintenance of a properly designed and adequately sized grease interceptor. The use of a properly maintained grease interceptor has been shown to be the most effective conventional FOG control technology. However, because of space restrictions and/or cost-prohibitive retrofits for existing FSEs, its implementation becomes a complicated issue. While other FOG control devices may be used when the installation of a grease interceptor is not feasible, an evaluation must be conducted to ensure that its efficacy is, at least, equivalent to that of a grease interceptor.

Implementation of Best Management Practices (BMPs). BMPs are practical measures that when implemented will significantly reduce the quantities of FOG released from FSEs. When practiced consistently, BMPs help reduce FOG loading on the grease interceptor/FOG control device. As a result, the performance of the grease interceptor/FOG control device is optimized and improved, with its maintenance frequency reduced, as well. BMPs include proper grease disposal and handling and proper kitchen practices for minimizing the discharge of FOG at the source.

OCSD will implement the above as basic general requirements, among other requirements that will facilitate enforcement of these essentials. When appropriate, deviation from the pretreatment requirement will be considered, to apply practicality while maintaining consistency.

# Considerations for Developing OCSD's FOG Control Program

OCSD's long-term FOG Control Program will consist of full implementation of the essential requirements as discussed above to all new and existing FSEs. Although it is ideal to require all FSEs to install adequate grease interceptors or equivalent FOG control devices, considerations should be made for existing FSEs. Existing FSEs may have not been required to install an approved grease interceptor when they first began operations, and therefore, it is anticipated that retrofitting problems will be encountered. Because of this, it is an extremely difficult and complex issue to initially deal with all dischargers on an equitable and consistent basis and, at the same time, immediately accomplish the ideal environmental improvement required. Clearly, there is a need for an interim program that will evolve and mature towards the ideal goal. Initially, this will involve a compromise between approaching the desired environmental results and impending priorities, while being flexible and practical in implementing the immediate requirements for controlling significant FOG discharges.

OCSD will implement an interim FOG Control Program, which will occur during the first three years of its inception. During this period, existing FSEs that meet established criteria may be allowed to operate without a grease interceptor or equivalent FOG control device. This is a delay in implementation (conditional stay) to allow flexibility for existing FSEs to plan and schedule the required retrofit within a three-year period. The interim program will focus particularly on the implementation of requirements that will result in the most significant environmental improvements, gradually maturing and progressing towards the ideal (long-term) program to achieve the desired environmental results. Public costs will be incurred for high frequency cleaning of the local sewers until the FOG control devices are installed by FSEs.

# Practical Considerations for Establishing Requirements for FOG Control: Balancing Cost and Benefits

The interim FOG Control Program policies to be developed should facilitate the maximum beneficial public use of the sewer system while at the same time preventing blockages of the sewer system resulting from discharges of FOG. The primary and bottom line concern for all FSEs is the cost of installing an effective FOG control device and the cost associated with its operation and maintenance. While it is ideal for every FSE to have an adequate grease interceptor or equivalent FOG control device, it is important to weigh the costs and the benefits. This is certainly a major consideration specifically for existing FSEs that were not required to install an approved grease interceptor or FOG control device when they first began operations, but now may be subjected to cost-prohibitive retrofits.

Current FOG pretreatment technology typically takes the form of grease traps or grease interceptors. The grease trap is a smaller grease handling device found in the kitchen area of the FSE, while a grease interceptor is usually a large, in-ground, usually concrete, tankage found outside the facility. Due to their small size, grease traps need to be emptied more often than grease interceptors to be effective. Grease traps have very limited effect and should, therefore, be used to reduce FOG loading on grease interceptors. A properly designed grease interceptor is a proven and effective FOG collection device when properly maintained and is considered the Best Conventional Technology (BCT) for FOG control. For this reason, the installation of a grease interceptor is an ideal requirement for all FSEs to minimize FOG discharges to the sewer. The cost to purchase and install a medium-sized interceptor (1500 gallons) for a new FSE is approximately \$8,000; for a retrofit in an existing FSE, the cost ranges from \$10,000 to \$15,000.

In maintaining a balance between cost and benefit, the ideal requirement for all FSEs to have an adequate FOG separation and removal device in the form of a grease interceptor is a long-term goal, and will occur after the first three years from

the initial implementation of the program. Therefore, the initial thrust of the program should focus on prioritization and identification of FSEs for which the full requirements for a grease interceptor will be implemented. Immediate implementation of a "one size fits all" requirement for installation of grease interceptors is impractical; therefore, the extent of requirements to be implemented should vary for each FSE based on a practical approach that considers cost, and benefit. Immediate implementation of the grease interceptor requirement for existing FSEs that have significant impacts on sewer blockages may entail a high cost but the environmental benefits derived are significant. Delaying this requirement for existing FSEs that have considerably low impact will be a lesser priority and will allow FSEs to comply within a reasonable amount of time.

In developing the FOG Control Program, the following considerations are taken into account and serve as the basis for developing policies.

#### **Requirements for Installation of Grease Interceptors**

#### Existing FSEs

For existing FSEs, the initial approach should consist of prioritization to require full installation of adequate grease interceptors for those facilities that are discharging to sewer lines known to be the source of SSOs or sewer lines where frequent cleaning is required. This is a "site specific prioritization" based on specific locations where the sewer lines have been identified as "hot spots". Because there are potentials for developing new hot spots, a preventive approach is also necessary. The approach should not be restricted to site specific prioritization but should also be extended to prioritization based on the amount or quantity of FOG generation from any FSE, as indicated by the nature and magnitude of the operation. Based on this method of prioritization, the cost impact for those FSEs that are affected is balanced by the apparent immediate benefit of preventing blockages and sewer spills where it is a real concern.

Conditional waivers to install grease interceptors may be granted to FSEs that are able to demonstrate that their FOG discharge is insignificant and has no impact to the sewer system. This conditional waiver may also be granted to existing FSEs during the three-year period of conditional stay. A conditional variance to allow alternative pretreatment technology in lieu of a grease interceptor, but equivalent in performance and effectiveness, may also be granted to FSEs demonstrating that the installation of a grease interceptor is not feasible. When a conditional variance cannot be granted, a Waiver with a Grease Disposal Mitigation Fee may be allowed. The fee will be used to recover the additional cost of maintenance and cleaning associated with the elevated FOG discharge due to the FSE's inability to install the required grease interceptor or equivalent FOG control device. The Grease Disposal Mitigation Fee should be established such that FSEs do not get an economic advantage for opting to pay the mitigation fee rather than installing the grease interceptor. Therefore, it should, at a minimum, be equivalent to the cost of installing

a new grease interceptor and associated costs for cleaning and maintenance.

#### New FSEs

For new FSEs, it is expected that the full requirement to install a grease interceptor will be implemented, since there is a full opportunity to plan for the new installation with the cost component being part of the facility's initial capital investment. Because FSEs conducting a major remodeling have a similar opportunity, the same requirement for new FSEs should be implemented. Details of the criteria for defining remodeling should be addressed by the Ordinance.

#### **Requirements for Implementation of BMPs**

In addition to pretreatment, another basic component of the FOG control program is the application of BMPs to control generation of FOG from the source. At a minimum, **all FSEs** should be required to implement enforceable BMPs. Acceptable BMPs should be defined in the policy.

#### **Regulatory Considerations**

#### Use of Numerical Limits for Controlling FOG Discharge

Numerical effluent limits have been used traditionally as a tool for monitoring discharges for most of the pollutants. When federal limits have not been defined, local limits that are technically based are developed. In the case of FOG where no federal limit has been defined, a local limit is necessary. However, because of difficulties associated in establishing a technically based limit for FOG at this time, alternative methods for controlling FOG discharges that are also effective will be adopted until such time that a technically based FOG limit can be established. As discussed in the following sections, OCSD will implement alternative methods for monitoring FOG discharges from FSEs that will primarily focus on establishing performance standards, action levels as indicated by the depth of solids/FOG build-up through CCTV.

#### Use of Performance Standards for Regulating FSEs

 BMP Performance Standards - The ability of FSEs to consistently implement BMPs is an important aspect of the FOG control program. The effectiveness of the efforts of FSEs to reduce their FOG discharges could have been easily determined if the actual discharge level can be compared to an established numerical limit (pretreatment standard). In the absence of a FOG numerical limit, however, establishing performance standards based on consistent implementation of enforceable BMPs can be utilized. This means that compliance evaluations will be based on the FSEs' ability to meet established performance standards for consistently implementing BMPs. As an example, specific minimum BMPs will be required for each FSE, as specified in its permit, which will be enforced. OCSD will monitor FSEs' compliance by requiring periodic submittal of BMP implementation status reports (signed by the responsible officer under penalty of perjury) and verifying submitted information through inspections. Depending on available resources, OCSD will have the flexibility to conduct thorough verification or spot checking of BMPs. Appropriate enforcement procedures will be implemented when FSEs fail to comply with the requirement.

2. Maintenance Performance Standards – Like the BMP Performance Standards, establishing Performance Standards for ensuring proper maintenance of the grease interceptor/FOG control device is also important. This ensures that FSEs adhere to the established maintenance schedule. Compliance can be monitored by implementing a notification requirement whenever maintenance is performed in accordance with a predetermined schedule (performance standard). This information may also be verified through wastehaulers. Notice of Violations may be issued when an FSE fails to comply with the required maintenance schedule and/or notification requirement.

## Use of Grease Interceptor Liquid Depth as an Action Level for Controlling FOG Pass-through

For FSEs with grease interceptors, an alternative indicator that can be used to evaluate compliance with the required pretreatment equipment maintenance is by measuring the level of solids and FOG accumulation in the grease interceptors. Excessive levels of FOG and solids accumulation in grease interceptors diminishes removal efficiency, eventually resulting in FOG passing through the equipment and discharged to the sewer. Therefore, establishing an interceptor liquid depth action level will provide another method for controlling FOG discharges. Based on a minimum allowable liquid level established as a performance standard, compliance monitoring and evaluation may be conducted by measuring the sludge height using a sludge judge or an electronic height measuring device to obtain the solid-free liquid level. It is suggested to establish the sludge height performance standard based on the 25% rule which requires that grease interceptors be pumped-in-full when the total accumulation of surface FOG (including floating solids) and settled solids reaches 25% of the grease interceptor's overall liquid depth. This provides an alternative method for controlling the amount of FOG discharge other than actual measurements of effluent concentration. With the use of an interceptor liquid depth action level, compliance can be monitored and enforcement actions, which may include escalation of interceptor maintenance frequency, may be imposed.

# Use of Visual Observations of FSEs' Lateral for Requiring Grease Interceptors

Visual observation of the FSE's lateral is the most accurate indicator of a facility's impact as a result of discharging FOG at significant levels that cause sewer blockage. This can also be used to establish action levels that would trigger the requirement for installation of grease interceptor. While this is accurate, it entails the use of CCTV at the public's expense to actually get a photograph or video of the FOG accumulation in the laterals and downstream. Depending on the availability of resources, this monitoring method can prove to be useful in controlling FOG discharge. There are occasions, however, when a clean lateral may not necessarily represent the absence of FOG discharge. The use of additives or discharge of solvents that emulsify grease can camouflage a significantly high FOG discharge.

### Issuance of Waiver for Interceptor Requirement During the Three-year Conditional Stay for Existing FSEs

As discussed above, the requirement for all FSEs to have a grease interceptor is an ideal requirement that would most likely result in the maximum removal of grease prior to discharge to the sewer. However, based on the considerations mentioned above for existing FSEs and the need to balance cost versus benefit, the interim FOG control program for requiring grease interceptor will initially focus on FSEs which have significant impact to the sewer system. This does not mean, however, that the rest of the FSEs are exempt from the requirement. Since the long-term goal is to eventually have all FSEs install an adequate grease interceptor, the requirement should remain but held in abeyance through a waiver.

From the implementation standpoint, it is more effective to impose the requirements on all permittees right at the beginning and issue/revoke conditional waivers as needed than do the opposite. As changes in FSE operations impacting FOG discharge are encountered such as business expansion, waivers may be revoked. Revocation of waivers will be driven by changes in the criteria for issuing the waiver, in response to a more stringent requirement to further control FOG due to continuing SSOs and imminent threat to public health. The criteria for issuing waivers will be set under OCSD's policy and waivers issued will be reviewed for reissuance based on a specific frequency that will be established in the FOG Control Policies. The criteria for waiver issuance to existing FSEs may include:

Average daily FOG discharge less than prevailing FOG action level Location of FSE is not considered a hot spot Satisfactory compliance with required BMPs Compliance with all permit requirements and prohibitions Absence of indicators that the FSE's FOG discharge has significant impact to the sewer

# **Technical Considerations**

#### **Interceptor Sizing Consideration**

Currently, there are different methods available for sizing grease interceptors. The sizes will vary considerably depending on the method used. It is suggested that until an acceptable sizing method is adopted, the use of the Uniform Plumbing Code (UPC) formula should be used. Although this may result in a larger interceptor, it is conservative and is universally accepted. Deriving a new formula that is technically justified will require a considerable amount of research and study, which should include obtaining data for the local condition. A minimum size interceptor should be established; 750 gallons minimum volume is recommended. Interceptor sizes from 375 to 750 gallons should require the minimum volume of 750 gallons. 375 gallons is recommended as a de minimis value for requiring interceptors; i.e., installation requiring less than 375 gal may be exempt. When the UPC sizing calculation exceeds 1000 gallons, the calculation should be compared with other formulas to ensure that the interceptor is not oversized. Engineering judgment should be used when there are large discrepancies by also considering other factors such as menu, frequency of use of drainage fixture units, etc., to determine the final size of the interceptor.

#### **Determining Interceptor Cleaning Frequency**

The cleaning frequency should depend upon the FSEs' type of operation and is, therefore, expected to vary. The frequency for cleaning interceptors is affected by a lot of factors and varies from FSE to FSE. Although frequent grease interceptor cleaning is desirable, a balance between cost and benefit should be maintained. Because this is an important issue for FSEs due to the cost involved, as well as for OCSD as it affects the success of the FOG control program, it is very important to establish a cleaning frequency requirement that is practical and effective. Therefore, this issue must be addressed appropriately. The use of a "one size fits all" cleaning frequency may seem very easy to manage from the regulatory standpoint, but can be either impractical and/or cost prohibitive for some FSEs or too lax for other FSEs. Specifying a cleaning frequency for each FSE that reflects a representative time when cleaning is actually needed is ideal but the determination for establishing frequency may be more involved. The following procedure will be used for establishing required cleaning frequency:

- Grease interceptors should be pumped out (pumped-in-full) and cleaned at a frequency such that the combined FOG and solids accumulation does not exceed 25% of the total liquid depth of the grease interceptor. This is to ensure that the minimum hydraulic retention time and required available volume is maintained to effectively intercept and retain FOG discharged to the sewer system.
- 2. Grease interceptors should be pumped out and cleaned quarterly when the

frequency described in (1) has not been established. This standard default cleaning frequency was established based on the most common or typical frequency found to be effective for most FSEs. This frequency is used only for the purpose of establishing a default cleaning frequency initially, but will be changed accordingly to reflect a more representative frequency based on actual data. 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 in the FOG Control Policies. OCSD may change the maintenance frequency at any time to reflect changes in actual operating conditions in accordance with the FOG Control Policies. Based on the actual generation of FOG from the FSE, the maintenance frequency may increase or decrease.

- 3. FSEs may submit a request to change the maintenance frequency at any time. The FSE 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 the Ordinance. Upon determination by the FOG Control Program Manager that requested revision is justified, the permit will be revised accordingly to reflect the change in maintenance frequency.
- 4. All FSEs with a grease interceptor will be required to maintain their grease interceptor at least every 6 months.

Routine inspection to monitor liquid depth to verify the FSE's ability to maintain liquid depth above the action level will serve as a check whether cleaning frequencies previously established are still applicable or need to be re-adjusted.

BASIC REQUIREMENTS OF THE FOG CONTROL PROGRAM

# **Backbone Requirements**

The following diagram depicts the flowchart for determining the basic requirements that will be specified in the permit for the interim FOG Control Program (first three years of implementation):



By the end of the three-year interim period, all existing FSEs are expected to have installed grease interceptors unless a waiver is obtained.

# **Permit Requirements**

- 1. FOG Wastewater Discharge Permit Required. All FSEs shall be required to obtain a permit and pay the associated permit processing fee. Permit duration is four years. FSEs shall apply for renewal prior to permit expiration as specified in the Permit. Permits are non-transferable.
- BMPs Required. Permittees shall implement enforceable kitchen BMPs as a standard basic requirement. BMP Implementation Status Reports shall be submitted to OCSD periodically as specified in the permit in order to monitor continuous and routine implementation of BMPs.
- 3. FOG Pretreatment Required. FSEs are required to install, operate and maintain an approved type and adequately sized grease interceptor fixtures, equipment, and drain lines located in the food preparation and clean up areas of FSEs that are sources of FOG discharges shall be connected to the grease interceptor.
  - A. New FSEs

New FSEs shall install grease interceptors prior to commencing discharge of wastewater to the sewer system.

B. Existing FSEs

For existing FSEs, the requirement to install and to properly operate and maintain a grease interceptor may be conditionally stayed, that is, delayed in its implementation by the FOG Control Manager for a maximum period of three years from the effective date of this Ordinance (3-year Amortization Period). Terms and conditions for application of a stay to an FSE shall be set forth in the permit.

Existing FSEs that have reasonable potential to adversely impact the sewer system or have sewer laterals connected to hot spots, as determined by the FOG Control Program Manager, shall install grease interceptors.

Existing FSEs undergoing remodeling or a change in operation as defined in the Ordinance, or FSEs which change ownership, shall be required to install a grease interceptor.

## **Issuance of Variance and Waivers**

1. Variance from Grease Interceptor Requirements

A variance to allow alternative pretreatment technology that is, at least, equally effective in controlling the FOG discharge in lieu of a grease interceptor may be granted to FSEs 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:

There is no adequate space for installation and/or maintenance of a grease interceptor.

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.

The FSE can justify that the alternative pretreatment technology is equivalent or better than a grease interceptor in controlling its FOG discharge. In addition, the FSE must be able to demonstrate, after installation of the proposed alternative pretreatment, its effectiveness to control FOG discharge through downstream visual monitoring (CCTV) of the sewer system, for at least three months, at its own expense. A Variance may be granted if the results show no apparent accumulation of FOG in its lateral and/or tributary downstream sewer lines.

2. Conditional Waiver from Installation of Grease Interceptor

A conditional waiver from installation of a grease interceptor may be granted for FSEs that have been determined to have negligible FOG discharge and insignificant impact to the sewer system. 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:

Quantity of FOG discharge as measured or as indicated by the size of FSE based on seating capacity, number of meals served menu, water usage, etc.

Adequacy of implementation of BMPs and compliance history

Sewer size, grade, condition based on visual information(CCTV), FOG deposition in the sewer by the FSE, and history of maintenance and blockages/sewage spills in the receiving sewer system

Changes in operation that significantly affects FOG discharge

Any other condition deemed appropriate by the FOG Control Program Manager

3. Waiver from Grease Interceptor Installation with a Grease Disposal Mitigation Fee

For FSEs 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:

There is no adequate space for installation and/or maintenance of a grease interceptor.

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.

A variance from grease interceptor installation to allow alternative pretreatment technology cannot be granted.

4. Application for Waiver or Variance of Requirement for Grease Interceptor

An FSE may submit an application for waiver or variance from the grease interceptor requirement to the FOG Control Program Manager. The FSE bears the burden of demonstrating, to the FOG Control Program Manager's satisfaction, that the installation of a grease interceptor is not feasible or applicable. Upon determination by the FOG Control Program Manager that reasons are sufficient to justify a variance or waiver, the permit will be issued or revised to include the variance or waiver and relieve the FSE from the requirement. Terms and conditions for issuance of a variance to an FSE shall be set forth in the permit. A waiver or variance may be revoked at any time when any of the terms and conditions for its issuance is no longer satisfied.

# **Prohibitions**

The following prohibitions shall apply to all FSEs:

- Installation of food grinders in the plumbing system of new FSEs shall be prohibited. Furthermore, all food grinders shall be removed from all existing FSEs within 180 days of the effective date of the Ordinance, except when expressly allowed by the FOG Control Program Manager.
- 2. Introduction of any additives into an FSE's wastewater system for the purpose of emulsifying FOG is prohibited, unless a specific written authorization from the FOG Control Program Manager is obtained.
- 3. Disposal of waste cooking oil into drainage pipes is prohibited. All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling by the FSE.
- 4. Discharge of wastewater from dishwashers to any grease trap or grease interceptor is prohibited.
- 5. Discharge of wastewater with temperatures in excess of 140°F to any FOG control device, including grease traps and grease interceptors, is prohibited.
- 6. The use of biological additives for grease remediation or as a supplement to interceptor maintenance, without prior authorization from the FOG Control Program Manager, is prohibited.
- 7. Discharge of wastes from toilets, urinals, wash basins, and other fixtures containing fecal materials to sewer lines intended for grease interceptor service is prohibited.
- 8. Discharge of any waste including FOG and solid materials removed from the FOG control device to the sewer system is prohibited. Materials removed from grease interceptors shall be wastehauled periodically as part of the operation and maintenance requirements.

# **Facilities Requirements**

1. Grease Interceptor Requirements

Any FSE required to pretreat 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. Grease interceptors shall be constructed in accordance with the design approved by the FOG Control Manager and shall have a minimum of two compartments with fittings designed for grease retention.

The grease interceptor shall be installed at a location where it shall be at all times easily accessible for inspection, cleaning, and removal of accumulated materials.

Access manholes, with a minimum diameter of 24 inches, shall be provided over each grease interceptor chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, grease removal, and wastewater sampling activities.

2. Grease Trap Requirements

FSEs may be required to install grease traps in the waste line leading from drains, sink, and other fixtures or equipment where grease may be introduced into the sewer system in quantities that can cause blockage.

Sizing and installation of grease traps shall conform to the current edition of the Uniform Plumbing Code.

Grease traps shall be maintained in efficient operating conditions by removing accumulated grease on a daily basis.

Grease traps shall be maintained free of all food residues and any FOG waste removed during the cleaning and scraping process.

Grease traps shall be inspected periodically to check for leaking seams and pipes, and for effective operation of the baffles and flow regulating device. Grease traps and their baffles shall be maintained free of all caked-on FOG and waste. Removable baffles shall be removed and cleaned during the maintenance process.

Dishwashers and food waste disposal unit shall not be connected to or discharge into any grease trap.

3. Monitoring Facilities Requirements

FSEs may be required to construct and maintain in proper operating condition at the FSEs' sole expense, flow monitoring, constituent monitoring and/or sampling facilities.

4. Requirements for Best Management Practices

All FSEs shall be required, at a minimum, to comply with the following BMPs, when applicable:

Installation of drain screens. Drain screens shall be installed on all drainage pipes in food preparation areas.

Segregation and collection of waste cooking oil. All waste cooking oil shall be collected and stored properly in recycling receptacles such as barrels or drums. Such recycling receptacles shall be maintained properly to ensure they do not leak. Licensed haulers or an approved recycling facility must be used to dispose of waste cooking oil.

Disposal of food waste. All food waste shall be disposed of directly into the trash or garbage, and not in sinks.

Employee training. Employees of the FSE shall be trained within 180 days of the effective date of the Ordinance, and twice each calendar year thereafter, on the following subjects:

- How to "dry wipe" pots, pans, dishware and work areas before washing to remove grease.
- 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.
- The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
- 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 OCSD or other authorized inspector.

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.

Kitchen Signage. Best management and waste minimization practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

5. Grease Interceptor Maintenance Requirements

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.

All existing and newly installed grease interceptors shall be maintained in a manner consistent with a maintenance frequency specified in the permit.

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.

FSEs with grease interceptors may be required to submit data and information necessary to establish the maintenance frequency grease interceptors.

# **Record-keeping and Reporting Requirements**

FSEs shall be required to keep records and submit or make available for review, the following documents to OCSD, upon request:

- 1. A logbook of grease interceptor or grease trap cleaning and maintenance practices and BMPs implemented.
- 2. Copies of records and manifests of hauled waste FOG or hauled interceptor wastewater.
- 3. Periodic BMP Reports and Grease Interceptor Maintenance Reports as specified in the permit.
- 4. Any required self-monitoring reports or sampling data as specified in the permit.
- 5. Any other information deemed appropriate by the FOG Control Manager.