



Fats, Oils and Grease Program

For

Food Service Establishments (FSE)



FATS, OILS and GREASE CONTROL PROGRAM Executive Summary and Implementation Strategy

In an effort to reduce or eliminate sewage spills caused by accumulations of fats, oils and grease (FOG) in its sanitary collection system and to remain compliant with the regulations imposed by the Santa Ana Regional Water Quality Control Board, Waste Discharge Requirements, the City of Placentia has developed its FOG control program. The FOG control program consists of a FOG control ordinance and control program that will be implemented on December 30, 2004.

History:

On April 26, 2002, the California Regional Water Quality Control Board, Santa Ana Region, adopted Order Number R-8-2002-0014, General Waste Discharge Requirements for all sewage collection agencies in Orange County within the Santa Ana Basin. Commonly referred to as WDRs, this order establishes the minimum standards by which collection systems are to be managed, operated and maintained within the basin. As a component of the WDR, each collection system having sewage spills attributed to FOG accumulations within their system must develop and implement an effective FOG control program.

To assist in the development of an effective FOG program, Orange County Sanitation District (OCSD), through the FOG Steering Committee and on behalf of its co-permittees, retained the services of Environmental Engineering and Contracting, Inc. (EEC), on a shared cost basis, to conduct a two-phase study. Phase one characterized the FOG problem and offered a toolbox of building blocks to develop a comprehensive FOG reduction program. The second phase is to field test additives and FOG control devices for their effectiveness.

Utilizing the elements of the FOG toolbox, OCSD developed both a model FOG control ordinance (the legal authority required under the WDR) and a model FOG control program, making them available to the co-permittees. Both of these models have been used by the City as the basis of development of the City's FOG control ordinance and FOG control program. By using this approach, the City along with the other co-permittees have established consistent FOG control programs throughout the basin while saving additional development costs. In addition to the reduction or elimination of FOG related SSOs, program consistency was one of the goals stated by the Grand Jury in their report "Sewage Spills, Beach Closures, Trouble in Paradise?"

The City also participated in the development of the FOG educational tool kit and has ordered reproductions of the FOG educational items to be disseminated to the City's food service establishments (FSEs) during the implementation of the FOG control program.

In November 2004, the City adopted Ordinance No. O-2004-07: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PLACENTIA ADDING CHAPTER 16.24 TO THE PLACENTIA MUNICIPAL CODE ESTABLISHING FATS, OILS AND GREASE CONTROL REGULATIONS APPLICABLE TO FOOD SERVICE ESTABLISHMENTS. Additionally, the City has modified the model FOG control program to reflect the requirements of the City's FOG control ordinance and will submit both the FOG control ordinance and FOG control program to the Regional Board by their deadline of December 30, 2004.

FOG Control Program:

The basis for the City's FOG control program is its FOG control ordinance. The FOG control ordinance specifies kitchen best management practices (BMPs) and best available technologies (BATs) that have a proven record of effectively and efficiently reducing the FOG load on a sanitary collection system. The FOG control ordinance is a modified version of the model ordinance utilizing the building blocks provided by phase I of the FOG study and is compliant with the requirements of the WDR. The ordinance defines what an FSE is and what is required to be compliant. All FSEs are required to apply for and maintain a current FOG wastewater discharge permit. To facilitate this process, the ordinance allows an 18 month interim permit be issued to all FSEs within the City that discharge into the City's sanitary collection system. During this interim period, City staff will evaluate, inspect and issue each qualifying FSE a full permit or a conditional waiver or variance. FSEs qualifying for a full permit must install and adequately maintain a suitable grease interceptor. New or remodeled FSEs must install a grease interceptor during construction. Existing FSEs must install a grease interceptor during a 5-year amortization period. FSEs that discharge directly into or upstream of a known hot spot or trouble spot or who cause or contribute to a FOG related SSO will be required to install a grease interceptor within 180 days of being notified by the City. FOG generating FSEs that cannot install a grease interceptor may be issued a conditional waiver with a grease disposal mitigation fee. The grease disposal mitigation fee is structured to allow the City to recoup its costs for increased sewer line maintenance resulting from a FSE's FOG discharge. FSEs that can demonstrate that they discharge no or minimal amounts of FOG, or who can demonstrate a method of grease control that is at least as effective as a grease interceptor, may be issued a conditional waiver or variance.

At a minimum, all FSEs must practice the kitchen BMPs specified in the ordinance. The kitchen BMPs include the installation of drain screens, the segregation and collection of waste cooking oil for recycling, the disposal of waste food into the trash and not into the sink and employee training in FOG reduction techniques such as dry wiping pots, pans and cookware, how to properly dispose of food wastes and how to cleanup a grease spill. The ordinance also lists activities (prohibitions) that each FSE must refrain from. These prohibitions include the use of food grinders (garbage disposals), the dumping of cooking

oils into the drain, the use of grease emulsifying chemical or biological additives, and the discharge of hot water (in excess of 140 degrees) into any grease control device.

To ensure program compliance, FSEs are subject to annual inspections to review the implementation of the kitchen BMPs, employee training records, and grease disposal records. Additionally, FSEs possessing a grease interceptor will have their interceptor inspected annually for its proper operation and records of its maintenance.

To fund this mandated program, the City has instituted a series of permit fees that will allow the City to recoup its costs to operate and maintain the program. These permit fees are levied against the FSEs that are regulated by the program and will be periodically reviewed and adjusted by the Placentia City Council.

The City shall provide enforcement of the program as defined within the FOG control ordinance. Violators who cause or contribute to a FOG related SSO are subject to reimburse the City for all cleanup and remediation costs. Likewise, FSEs found out of compliance with the program are subject to a noncompliance fee.

The FOG control program is designed to treat each FSE fairly based upon the FSE's discharge or ability to discharge FOG into the City's sanitary collection system. Each FSE is evaluated independently to determine the most effective and cost considerate method to minimize the discharge of FOG. The City's failure to create, implement, manage or enforce this program could result in severe fines, penalties or other sanctions imposed upon the City by the State of California or the federal government.

FOG Control Program Implementation:

The effective date for the implementation of the City's FOG control program is December 30, 2004. Prior to this date, the City developed and adopted a FOG control ordinance and FOG control program.

Data from the Orange County Health Care Agency (OCHCA) and the City's business licenses was used to compile a list of potential FSEs within the City. To characterize the FOG problem within the City, the City's known hot spots were also analyzed and prioritized to determine which ones were due to FOG accumulations. The locations of the City's FSEs were determined in relationship to known hot or trouble spots. Mapping and Excel spreadsheets have been created to track this and other FSE/FOG information that the City has obtained during its combined NPDES/FOG restaurant inspections. This data, along with data obtained during the City's accelerated CCTV inspection program will be maintained in a database and utilized by the FOG Control Program Manager to determine the effectiveness of the program.

In December 2004 or early January 2005, the City will send out FOG wastewater permit applications to all potential FSEs who discharge into the City's sanitary collection system. These applications must be returned to the City within 60 days. The application contains a series of FOG and business related questions that will further assist the City in

characterizing the FOG problem. An interim FOG wastewater discharge permit for up to the first 18 months of the program will cover all potential FSEs. During this interim permit period, all of the applicants will be reviewed to determine if they qualify as an FSE requiring a permit, a conditional waiver or variance, or if and when they must install a grease interceptor. Applications will be reviewed on a prioritized basis with those establishments that discharge upstream of a known FOG hot or trouble spot being evaluated first. As the applications are reviewed and determinations made based upon site inspections, conditional waivers, variances or full permits will be issued to qualifying FSEs.

To assist FSEs in compliance with the FOG control program, each FSE will be given a FOG control program binder. The binder will contain their permit, various educational materials (from the educational tool kit), copies (hard copies or CD-ROM) of the City's FOG control ordinance and FOG control program, and report form templates for tracking and reporting BMP training and grease device maintenance.

The City has also been involved in discussions with the Yorba Linda Water District (YLWD) and the City of Yorba Linda to create a cooperative approach to ensure consistency in the FOG program development and implementation within the region. This is necessary as the YLWD sewers portions of both cities and is required by the WDR to have its own FOG control program. Part of this cooperative effort is to send out similar letters to all the FSEs in the region and to hold joint public meetings to explain the program and answer questions from the public. These are to take place in January 2005. Additionally, the City has been in discussions with YLWD and the City of Yorba Linda to provide the annual kitchen BMP and grease interceptor inspections on a regional cost-sharing basis. This approach would offer greater control over the inspections while providing better cost containment. The City recognizes that this cooperative arrangement is the best means of ensuring a fair and effective FOG control program for all of the FSEs within the City.

Additive Letter

DRAFT

July 12, 2006

[Contact], [CTitle]
[Agency]«Org2L»
[Address]
[City], CA [Zip]

SUBJECT: Additive Usage for Fats, Oils, and Grease (FOG) Control

The Orange County Sanitation District (OCSD) has received recent inquiries about the use of additives in the local sewer system. Please be informed that OCSD is not in a position to evaluate and accept proposals for additive usage in areas under your jurisdiction since their applicability/efficacy is dependent on specific local conditions, and their usage may be regulated by your local Ordinance.

Based on the outcome of Phase II of the FOG Control Study, OCSD does not recommend the use of additives for FOG control in lieu of sewer line cleaning or installation of grease interceptors for food service establishments. As a best management practice, OCSD strongly encourages FOG control at the source as the most effective and efficient method for minimizing sanitary sewer overflows. Furthermore, OCSD is strongly encouraging the minimization of any type of additives to the sewer because of OCSD's involvement with the Groundwater Replenishment System (GWRS). In addition to the removal efficiencies currently required, the issue of emerging pollutants of concern is also being addressed through OCSD's new Nonindustrial Source Control Program as OCSD anticipates GWRS coming online in 2007.

If an agency chooses an additive in lieu of sewer line cleaning or grease interceptors, please be reminded that all discharges to the sewer must comply with OCSD's *Wastewater Discharge Regulations* (Ordinance No. OCSD-01) at all times. In particular, Article 2 of the Ordinance contains a list of prohibitions and limits on discharges. Furthermore, in accordance with Section 607, when it has been determined that a discharge, such as an additive, causes or contributes to obstruction, interference, damage, or any other impairment to OCSD or OCSD-related property, your agency may be liable for costs including, but not limited to, those associated with the repair and/or replacement of the property and any fines or penalties that may be assessed. A copy of the Ordinance is available from OCSD's website: www.ocsd.com.

When testing whether an additive is an alternative technology for FOG control, it may be beneficial to conduct additive testing with the protocols from Phase II of the FOG Control Study. Such testing should also be performed within a one year time period.

If you have any questions, please call me at (714) 593-7410 or Mark Kawamoto at (714) 593-7424.

Mahin Talebi
Source Control Manager

MT:JE:MK:mb

Permit

FOOD SERVICE ESTABLISHMENT FOG WASTEWATER DISCHARGE PERMIT

Permit No: «PERMIT_NO»

This permit authorizes

«FSE Name»
«SEWER_STREET»
«SEWER_CITY», CA «SEWER_ZIP»

DRAFT

hereinafter referred to as "Permittee", to discharge wastewater into the sewerage system from the above identified location, in accordance with the conditions set forth in this permit and the provisions of Ordinance No. 0-2004-07 (Municipal Code chapter 16.24) - Fats, Oils, and Grease (FOG) Discharge Regulations (FOG Ordinance) of the City of Placentia, herein referred to as "City". The permit conditions are as specified in the following parts of this permit:

- Part I Effluent Limitations and Discharge Restrictions
- Part II Requirements for FOG Control
- Part III Notification, Record-Keeping, and Reporting Requirements
- Part IV Standard Conditions
- Part V Special Conditions

This permit shall become effective on «PERMIT_DATE» and shall expire on «EXPIRE_DATE». The City may amend this permit at anytime during the term of the permit.

If the permittee wishes to continue to discharge after the expiration date of this permit, an application must be filed for a renewal permit a minimum of 30 days prior to the expiration date. **Discharging without a valid permit is a violation of the FOG Ordinance and may be subject to administrative fines and physical termination of sewer service.**

Compliance with this permit does not relieve the Permittee of its obligation to comply with the City's FOG Ordinance, any applicable pretreatment regulations, standards or requirements under local, State, and Federal laws, including any such regulations, standards, requirements or laws that may become effective during the term of this permit. Non-compliance with any term or condition of this permit constitutes a violation of the City's FOG Ordinance.

By

Fog Control Manager

Issued on :

City of Placentia
401 East Chapman Avenue
Placentia, California 92870
(714)



PART I

EFFLUENT LIMITATION AND DISCHARGE RESTRICTIONS

By obtaining a current permit, Permittee is authorized to discharge wastewater into the City's sewerage collection system, subject to the following effluent limitations and discharge restrictions:

A. EFFLUENT LIMITATION

Permittee shall not discharge into the sewer system Fats, Oils, and Grease (FOG) that may accumulate and/or cause or contribute to blockages in the sewer system or at the lateral which connects the permittee's facility to the sewer system.

B. DISCHARGE RESTRICTIONS

The following general prohibitions apply:

- 1 Use of food grinders. *Installation of food grinders in the plumbing system of new constructions of Food Service Establishments is prohibited. Furthermore, all food grinders shall be removed from all existing Food Service Establishments within 180 days of the effective date of this permit, except when expressly allowed by the FOG Control Program Manager.*
- 2 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.
- 3 Disposal of waste cooking oil into drainage pipes. *All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling or other acceptable methods of disposal.*
- 4 Discharge of wastewater from dishwashers to any grease trap or grease interceptor.
- 5 Discharge of wastewater with temperatures in excess of 140°F to any grease control device, including grease traps and grease interceptors.
- 6 Discharge of wastes from toilets, urinals, washbasins, and other fixtures containing fecal materials to sewer lines intended for grease interceptor service, or vice versa.
- 7 Discharge of any waste including FOG and solid materials removed from the grease control device to the sewer system. *Grease removed from grease interceptors shall be wastehauled periodically as part of the operation and maintenance requirements for grease interceptors.*
- 8 Operation of grease interceptors with FOG and solids accumulation exceeding 25% of the design hydraulic depth of the grease interceptor (25% Rule).

PART II

REQUIREMENTS FOR FOG CONTROL

Permittee shall comply with the following requirements to control the discharge of FOG to the sewer system:

A. BEST MANAGEMENT PRACTICES (BMP)

Permittee shall implement BMPs in its operation to minimize the discharge of FOG to the sewer system. At a minimum, permittee shall implement the following BMPs when applicable:

- 1 **Installation of drain screens.** Drain screens shall be installed on all drainage pipes in food preparation areas.
- 2 **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. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
- 3 **Disposal of food waste.** All food waste shall be disposed of directly into the trash or garbage, and not in sinks.
- 4 **Employee training.** Employees of the food service establishment shall be trained upon commencement of employment and at least annually 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 the FOG Control Program Manager or inspector.

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

B. FOG PRETREATMENT

- 1 **Grease Interceptor Requirement.** Permittee shall install, operate, and maintain an approved type and adequately sized grease interceptor, **unless a waiver or variance from this requirement is granted.** Under special circumstances, the City may issue a variance or waiver from this requirement as described in the City's FOG Ordinance.
- 2 **Grease Interceptor Maintenance Requirement.** Grease Interceptors shall be maintained in efficient operating condition such that the combined FOG and solids accumulation does not exceed 25% of the design hydraulic depth of the grease interceptor. Any exceedance above 25% constitutes a violation of this permit. Grease interceptors shall be fully pumped and cleaned every 6-months when above frequency has not been established.

PART III

NOTIFICATION, RECORD-KEEPING, AND REPORTING REQUIREMENTS

A. NOTIFICATION REQUIREMENTS

Permittee shall comply with the notification requirements:

1. **Notification of Spill**

In case of a sewage spill, Permittee shall notify the City immediately by phone.

City of Placentia, Public Works Department (714)

Confirmation of this notification shall be made in writing to the FOG Control Program Manager at the address specified in the Permit no later than five (5) working days from the date of the incident. The written notification shall state the date of the incident, the reasons for the discharge or spill, what steps were taken to immediately correct the problem, and what steps are being taken to prevent the problem from recurring.

2. **Notification Regarding Planned Changes**

Permittee shall notify the City at least 60 days in advance prior to any facility expansion/remodeling, or process modifications that may result in new or substantially increased FOG discharges or a change in the nature of the discharge. Permittee shall notify the City in writing of the proposed expansion or remodeling and shall submit any information requested by the City for evaluation of the effect of such expansion on Permittee's FOG discharge to the sewer system.

3. **Changes in Company Information**

Permittee shall immediately inform the City of any changes in ownership or facility name, and discrepancies in the food service establishment information currently on file.

B. RECORD-KEEPING REQUIREMENTS

Permittee shall keep records for at least two years and submit or make available for review, the following documents to the City, upon request:

- A A Logbook of grease interceptor, grease trap, or grease control device cleaning and maintenance practices and activities.
- B A Record/Logbook of BMPs being implemented including employee training.
- C Copies of records and manifests of wastehauling interceptor contents.
- D Records of sampling data and/or sludge height monitoring for FOG and solids accumulation in the grease interceptors.
- E Records of any FOG and/or wastewater spills and records of the cleaning of sewer laterals.
- F Any other information deemed appropriate by the FOG Control Program Manager to ensure compliance with this program.

4. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate is a crime and may result in the imposition of criminal sanctions and or civil penalties.

PART IV

STANDARD CONDITIONS

A. NON-TRANSFERABILITY OF PERMIT

This Permit is issued specifically to the owner and facility location specified in this permit. This Permit is issued for a specific user, for a specific operation at a specific location, and creates no vested rights. Any permit that is transferred to a new owner and/or operator or to a new facility is void. Permittee shall notify the City in writing prior to the transfer of ownership and shall give a copy of the existing permit to the new owner or operator.

B. ACCESS REQUIREMENTS

Access to the permittee's facility shall be granted to the City's personnel and/or its designee to all parts of the facility for the purpose of conducting compliance inspection during all times the facility is open, operating, or any other reasonable time. The City may conduct random, unannounced inspections to verify compliance with the terms and conditions of this permit.

C. CIVIL PENALTIES

Any person who violates any provision of the FOG Ordinance; or any permit condition, prohibition or effluent limitation; or any suspension or revocation order shall be liable civilly for a penalty for each day in which such violation occurs.

D. CRIMINAL PENALTIES

Any person who violates any provision of the FOG Ordinance or any permit condition, prohibition or effluent limit, is guilty of a misdemeanor, which upon conviction is punishable by a fine not to exceed one thousand dollars (\$1,000), or imprisonment for not more than one (1) year, or both. Each day in violation constitutes a new and separate violation and shall be subject to the penalties contained herein.

E. SEVERABILITY

The provisions of this permit are severable. If any provision of those permits limitations and/or requirements, or the application thereof, to the permittee is held invalid, the remainder of the permit limits and/or requirements shall remain in full force and effect.

F. TERMINATION OF SERVICE

The City, by Order of the City Administrator, may physically terminate sewer service to any property on a term of any order of suspension or revocation of a permit or upon the failure of a person not holding a valid wastewater discharge permit to immediately cease discharge, whether direct or indirect, to the City's sewer facilities after due notification. All costs for physical termination shall be paid by the permittee as well as all costs for reinstating service.

PART V

SPECIAL CONDITIONS

Upon notification from the City, the permittee shall remove existing food grinders within 180 days of the effective date of the notification.

When Applicable:

Upon notification from the City, the permittee shall complete installation of an approved type and adequately sized grease interceptor. Installation shall be completed within 180 days in accordance with the schedule of compliance set forth within the notification.

**FOOD SERVICE ESTABLISHMENT
CONDITIONAL WAIVER FROM GREASE
INTERCEPTOR REQUIREMENT**

Waiver No.: «WAIVerno»

This Conditional Waiver from Grease Interceptor Requirement is issued to

«FSE Name»
Permit No: «PERMIT_NO»
«SEWER_STREET»
«SEWER_CITY», CA «SEWER_ZIP»

DRAFT

hereinafter referred to as "Permittee", in accordance with the provisions of Ordinance No. 0-2004-07 (Municipal Code chapter 16.24) - Fats, Oils, and Grease (FOG) Discharge Regulations (FOG Ordinance) of the City of Placentia, herein referred to as "City". Permittee is granted a temporary conditional waiver for the requirement to install, operate, and maintain a grease interceptor as required in Part IIB of the Wastewater Discharge Permit, until the expiration date shown below:

Grease Interceptor Waiver Issuance Date:

Grease Interceptor Waiver Expiration Date:

This waiver is granted based on the following conditions:

- Permittee is an existing food service establishment covered under the 5-year amortization period. During this grace period, permittee is given the opportunity to evaluate and plan to reduce its FOG discharge through installation of an adequate grease interceptor, unless a waiver renewal or variance is obtained.
- Permittee has insignificant quantity of FOG discharge as measured or as indicated by the size of the facility based on seating capacity, number of meals served, menu, water usage, amount of on-site consumption of prepared food, other conditions that indicate absence of FOG sources and/or absence of FOG deposition in the lateral and downstream sewer lines based on visual observations.
- Adequate and consistent implementation of effective BMPs that has rendered the permittee's discharge to have no impact on the sewer.
- Acceptable compliance history with all permit conditions and Ordinance requirements.
- Absence of FOG deposition in the lateral and downstream sewer lines based on visual observations.
- Adequate infrastructure sewer size/grade that does not present potential SSOs, based on the history of maintenance and sewage spills in the receiving sewer system.

The City may, at any time, revoke this waiver when any of the above applicable conditions is no longer met or for any other reason deemed appropriate by the City. Upon revocation or expiration of the waiver, the permittee shall be required to install, operate, and maintain a grease interceptor

By

Fog Control Manager

Issued on :

City of Placentia
401 East Chapman Avenue
Placentia, California 92870
(714)



Quick Reference



Fats, Oils and Grease (FOG) Program Quick Reference Chart For Food Service Establishments

This Quick Reference Chart has been developed by the City of Placentia to assist food service establishments in complying with the City's Fog Control Ordinance and Program. This program, mandated by the State of California, is designed to reduce or eliminate the discharge of fats, oils, and grease (FOG) into the City's sewer collection system by food service establishments, thus reducing the number of sewer spills caused by FOG. This is only a quick reference. A more comprehensive explanation of a food service establishment's responsibilities is found in the City's Fog Control Ordinance and Program, FOG Program Guide, or by contacting the City's FOG Control Program Manager.

- All food service establishments who discharge into the City's sewer collection system must maintain a valid City of Placentia FOG Wastewater Discharge Permit, conditional waiver, or conditional variance.
- All food service establishments must employ kitchen best management practices (BMPs) including the following:
 - ✓ Installation of drain screens on all drains in the food preparation area.
 - ✓ Collection and segregation of all waste cooking oil. Waste cooking oil must be properly stored and recycled or disposed of using a licensed waste hauler.
 - ✓ Food wastes are to be disposed of in the trash and not into the sink.
 - ✓ All employees are to be trained in FOG reduction practices including:
 - Dry wiping of dishware, pots, pans, and utensils.
 - Proper disposal of food wastes.
 - Location and use of spill cleanup kits.
 - The proper disposal of waste cooking oil, and grease.
 - Displaying the appropriate FOG reduction posters in the food preparation area.
- All new construction must install an appropriate grease interceptor.
- Remodels may require the installation of an appropriate grease interceptor.
- All existing food service establishments must install an appropriate grease interceptor unless they are granted a valid FOG Wastewater Discharge Permit Conditional Waiver or Conditional Variance.
- All grease control devices must be routinely and properly cleaned, maintained, and serviced as per manufacturer's recommendations.
- Water hotter than 140 degrees must not be discharged into any grease control device.
- Chemical or biological additives for FOG control are prohibited without the express written consent of the City's FOG Control Program Manager.
- Food grinders are prohibited in new and existing food service establishments unless express written consent is received from the City's FOG Control Program Manager.
- All food service establishments must maintain accurate records of their FOG reduction practices.
- All food service establishments are subject to periodic inspections by the City or its representative to ensure continued compliance with the Fog Control Ordinance and Program.

User's Guide



City of Placentia
Fats, Oils, and Grease (FOG) Program Guide
For
Food Service Establishments

Disclaimer: This FOG Program Guide is subservient to the City's FOG Control Ordinance and Program and is offered only as a guide to program compliance. At no time shall anything in this guide take precedence over the City's FOG Control Ordinance and Program, any other local, state, or federal law or ordinance, or decisions made by the City's FOG Control Program Manager.

Purpose: The purpose of the FOG Program Guide for Food Service Establishments is to provide a non-technical illustration of how to comply with the City's FOG Control Ordinance and Program. This guide is intended to assist with compliance of the program by explaining how the program works, what the responsibilities of food service establishments are, and provide simple English definitions to the terms used in the program.

What is FOG and why does the City need a program to control it? Fats, oils, and grease, or what is commonly being referred to as FOG, is waste that is routinely discharged into the sewer during the normal course of preparing meals. FOG comes from several sources including meat, lard, cooking oil, butter and shortening. FOG can also be found in dressings and sauces, and on pots, pans, fryers, dishes, utensils, waste, floors, and cooking and food preparation areas. Food grinder waste can also contribute FOG. FOG enters the sewer system through the floor and sink drains.

It is estimated that over 90% of all of the City's sewer system overflows can be directly attributed to FOG. When FOG enters the City's sewer collection system, it congeals and sticks to inner walls of the sewer pipes. As more and more FOG collects, it restricts the normal flow of sewage through the pipe until a blockage occurs forcing raw sewage out of the manholes and into the street. Blockages can also force raw sewage into homes and businesses upstream from where the blockage occurs. Aside from causing property damage, sewer overflows are a serious health risk to the community. Even though the City routinely has its sewer lines cleaned, with particular attention being paid to those areas where a known FOG problem exists, more must be done to prevent FOG related sewer overflows from occurring.

The City of Placentia is not alone in this problem. Studies done on the national, state and local level have determined that FOG is the major cause of sewer overflows in most areas. The Orange County Grand Jury in its report, "Sewage Spills, Beach Closures Trouble in Paradise," found that FOG related sewage overflows were a significant problem in Orange County and needed to be addressed. To address the mounting sewage overflows in the North Orange County area, the Santa Ana Regional Water Quality Control Board, who has the responsibility for the water quality in the Santa Ana Basin, issued its Order Number R-8-2002-0014 on April 26, 2002. This order established waste discharge requirements that required all the cities and sewerage agencies in the Santa Ana Basin to, amongst other things, create and implement a FOG control program that would reduce the amount of FOG being discharged into the sewer system by December 30, 2004. Failure to comply could subject the City to severe fines, penalties or court action. The City is compliant with all the provisions of the waste discharge requirements imposed by the Regional Board.

What is a food service establishment and why does the program only address food service establishments? Although the potential for generating FOG is present anytime food is being prepared, studies have shown the greatest amounts and concentrations of FOG discharges come from food service establishments or FSEs. Within the City's FOG control ordinance, a food service establishment is defined as, "*Facilities defined in California Uniform Retail Food Service Establishments Law (CURFFL), California Health and Safety Code Section 113785, and any commercial entity discharging directly or indirectly to the City's sewer system, operating in a permanently constructed structure such as a room, building, or place, or portion thereof, maintained, used, or operated for the purpose of storing, preparing, serving, manufacturing, packaging, or otherwise handling food for sale to other entities, or for consumption by the public, its members or employees, and which has any process or device that uses or produces FOG, or grease vapors, steam, fumes, smoke or odors that are required to be removed by a Type I or Type II hood.*" The classic example of a food service establishment would be a restaurant. Additional food service establishments are food manufacturing, processing or preparation establishments, school, hospital or institutional cafeterias, and churches or

other group meeting places where facilities exist to prepare meals for groups of people. Any facility, public or private, that meets the above description of a food service establishment is considered a participant in the City's FOG control program.

Studies have shown that food service establishments discharge a far greater amount of FOG into the City's sewer system than other sources of FOG, i.e. single-family residences. This is because of the large number and variety of meals being prepared at a facility with a single point of connection to the City's sewer system. This concentration of FOG being discharged is further exacerbated by the tendency of food service establishments, primarily restaurants, to be concentrated in specific geographic areas with their discharge impacting a specific number of pipe segments. This results in what is referred to as FOG "hot spots" that require four or more times greater maintenance than the regular sewer lines maintained by the City to prevent sewage overflows.

Not every establishment that sells food is a food service establishment. The City's FOG control ordinance refers to those establishments as a limited food preparation establishment which are defined as, *"An establishment engaged only in reheating, hot holding or assembly of ready-to-eat (precooked and prepackaged) food products from which establishment there is only a de minimus discharge of FOG to the sewer system. A limited food service preparation establishment is not considered a Food Service Establishment under this Ordinance. A limited food preparation establishment does not include any preparation that changes the form, flavor or consistency of food. Any person who contends that he/she/it meets the definition of a limited food preparation establishment shall have the burden to establish that he/she/it meets the criteria set forth in this definition."* A limited food preparation establishment, as long as its operation meets the above definition, is not subject to the requirements of the City's FOG control ordinance and program.

What is the City's FOG control program?

The City's FOG control program is a permit-based program that includes periodic inspections and enforcement to ensure compliance. The program includes a fee structure

to allow the City to recoup its program costs and is authorized by City Ordinance Number 0-2004-07 and is Chapter 16.24 of the City of Placentia Municipal Code.

History. As the FOG control program went into effect on December 30, 2004, the City issued a blanket permit for up to 18 months to all potential food service establishments within the City that are connected to the City's sewer collection system. This was done to ensure that all potential food service establishments connected to the City's system were in compliance with the City's new ordinance and to allow time for City staff to determine who is to be part of the program. The Orange County Health Care Agency's food service establishment's database and the City's business license database were used to generate a list of potential food service establishments affected by the new ordinance. Letters and a questionnaire were sent to all potential food service establishments and a public meeting was held to discuss the new program and answer any questions. On-site inspections were, and will continue to be, performed to disseminate information on the program, review the potential food service establishment's operation, and determine what FOG reduction measures are in place.

The program: All food service establishments connected to the City's sewer system are required to have a current FOG Wastewater Discharge Permit. An application for this permit may be obtained from the City. FOG Wastewater Discharge Permits will be renewed annually and when a business changes ownership. The FOG Control Program Manager, under the direction of the Director of Public Works/City Engineer, oversees the City's FOG control program. Questions about the program, program concerns or clarifications may be directed to the FOG Control Program Manager at the Placentia City Hall.

Basically, the City of Placentia, like the other cities in the Santa Ana Basin, requires every food service establishment to utilize a grease interceptor before discharging wastewater from sinks and floor drains in the food preparation area into the City's sewer collection system. New facilities must install a grease interceptor during construction while existing facilities must install a grease interceptor by December 30, 2009 (5 years

from the date the FOG control ordinance was implemented). Food service establishments that are upstream from a known FOG hot spot and are known to be discharging FOG into that hot spot may, at the City's discretion, be required to install a grease interceptor prior to the December 30, 2009 date. Existing facilities that change their operation resulting in an increase in FOG discharge or undergo remodeling requiring a building permit and costing more than \$50,000, change the under slab plumbing in the food preparation area, increase the size of the kitchen area or public seating area by 30% or more, or install or change the size or type of food preparation equipment must install a grease interceptor at the time this occurs. All grease interceptors must be properly maintained and serviced. This includes regular cleaning and pumping out of their entire contents by a licensed grease removal service and proper disposal at the Orange County Sanitation Districts facilities in Fountain Valley.

Each food service establishment must also invoke FOG reduction practices in its day-to-day operations. FOG reduction practices include utilizing kitchen best management practices or BMPs.

To ensure compliance with the FOG control program every food service establishment is subject to periodic inspections by the City or its representative.

The FOG Wastewater Discharge Permit: Every food service establishment that directly or indirectly discharges into the City's sewer collection system must have a FOG Wastewater Discharge Permit, a conditional waiver or conditional variance. The FOG Wastewater Discharge Permit, or full permit, is issued to those food service establishments that operate and maintain a grease interceptor.

Conditional waiver: For those food service establishments that do not have a grease interceptor, a conditional waiver may be issued. The conditional waiver waives the requirement to install a grease interceptor provided the food service establishment upholds the conditions of the waiver. Conditional waivers may be issued to food service establishments who, through their operation or changes in their operation and the

invoking of FOG reduction practices, can demonstrate to the City's FOG Control Program Manager that their FOG discharge is insignificant and poses no threat to the City's sewer collection system. Waivers are renewed annually provided the conditions of the waiver continues to be met and may be revoked any time the conditions of the waiver are violated. A food service establishment whose waiver is revoked will be required to install a grease interceptor.

Conditional Variance: Likewise, food service establishments that do not have a grease interceptor installed may be issued a conditional variance. A conditional variance may be granted by the City's FOG Control Program Manager if the food service establishment can demonstrate that the use of some other type of FOG control device has been incorporated that is proven to be at least as effective in controlling FOG discharge as a grease interceptor. Conditional variances are renewed annually as long as the conditions of the variance are met. Should the conditions of the variance be violated, the conditional variance may be revoked and the food service establishment required to install a grease interceptor.

Inspections: To ensure compliance and to obtain the maximum program effectiveness inspections by the City or its representative of all food service establishments are conducted. For those food service establishments that have a full FOG Wastewater Discharge Permit, at least 2 inspections will be conducted annually. One inspection will be of the grease interceptor to ensure that it is functioning correctly and is being properly maintained. This inspection will also include a review of the grease interceptor's maintenance records. Additionally, either the City or the Orange County Health Care Agency will conduct an annual inspection to ensure that the kitchen BMPs are being enforced and their records are kept up to date.

For those food service establishments operating under a conditional waiver or variance, the City or the Orange County Health Care Agency will conduct at least 1 annual inspection to ensure that the kitchen BMPs are being enforced and their records are kept up to date. At the discretion of the FOG Control Program Manager, additional

inspections may occur to ensure that the conditions of the waiver or variance are being met.

Should any violation be noted during any inspection, the food service establishment will be notified of the violation. The City's FOG Control Program Manager will schedule a follow-up inspection to ensure that the violation is corrected.

Recordkeeping. Each food service establishment covered under the City's FOG control ordinance must maintain records of their FOG reduction activities. These include records of the implementation of the kitchen best management practices and employee training. Maintenance cleaning of the establishment's sewer lateral and any FOG or wastewater spills must be recorded. Additionally, those food service establishments that have a grease trap or grease interceptor must maintain records of their cleaning and maintenance. Records, manifests, invoices and receipts for all grease hauling must also be maintained. Forms have been provided by the City to assist with this recordkeeping and are located in FOG Program binder provided to each food service establishment. These records, upon request, shall be made available to the City's representative or inspector.

Fees: Fees have been established by the Placentia City Council to allow the City to recoup its costs for the annual inspections and administration of the FOG Control Program. These fees are separate from the City's sewer service fee and are based upon the costs the City incurs for each food service establishment covered under the program. Every food service establishment is required to pay a FOG Wastewater Discharge Permit Application Fee at the time of the initial application for the permit, conditional waiver or conditional variance and annually at the time of renewal.

In rare cases, it may be impossible or impractical for a food service establishment to install a grease interceptor. If the food service establishment cannot control its FOG discharge sufficiently to qualify for a conditional waiver or conditional variance, the FOG Control Program Manager may grant a waiver from installing a grease interceptor

and implement a Grease Disposal Mitigation Fee. The Grease Disposal Mitigation Fee is an annual fee established by the Placentia City Council and is based upon the costs of increased maintenance of the sewer system as a result of the food service establishment's inability to adequately remove FOG from its wastewater discharge.

Enforcement: It is a violation of federal, state and city laws and ordinances for any person or persons to discharge anything into a sewer system that causes or contributes to a sewer overflow. All costs incurred for the abatement and cleanup of a sewer overflow shall be the responsibility of the responsible party. The City's Code Compliance Officer has the responsibility of enforcement of the FOG Control Ordinance and may issue citations for non-compliance. Non-compliance of the City's FOG Control Ordinance may result in permit revocation and civil or criminal penalties. Please consult the City's FOG Control Ordinance for the limits of these penalties.

What are grease control devices? Grease control devices are devices that remove grease from the wastewater before it is discharged into the sewer collection system.

Grease interceptors: Grease interceptors have proven to be the best available technology for removing grease from wastewater. Grease interceptors are generally located underground outside of a food service establishment. They typically have a capacity of at least five hundred gallons and are comprised of at least two chambers with flow between the chambers through a ninety-degree fitting. The size of the grease interceptor is based upon the anticipated amount of wastewater a food service establishment will generate. The grease interceptor must be large enough to allow the wastewater sufficient time to cool, allowing the grease to congeal and rise to the surface. Grease interceptors that are too large for the flow received, may develop hydrogen sulfide gas that is toxic and creates an unpleasant order similar to rotting eggs. Hydrogen sulfide is also extremely corrosive, especially to the concrete that most grease interceptors are constructed of.

To be effective, grease interceptors must be properly maintained. The City's FOG control ordinance requires that grease interceptors be fully pumped out and cleaned once

the combined FOG and solids accumulation reaches 25% of the designed hydraulic depth of the grease interceptor but not less than once every six months. FOG and other waste removed from a grease interceptor must be properly disposed of and NOT deposited into the City's sewer collection system or storm drain system. Dishwashers or water hotter than 140 degrees is prohibited from being discharged into a grease interceptor. It is also a violation to add any type of grease emulsifier or to modify a grease interceptor in any way that interferes with its effective operation. It is also a violation to connect any bathroom plumbing or discharge any human waste into a grease interceptor.

Grease Traps: Grease traps are small, typically 20 to 25 gallons, devices located in the kitchen under or around the sink area that are designed to remove grease from the wastewater. To be effective, grease traps must be properly installed, cleaned and maintained precisely in accordance with the manufacturer's recommendations. Due to their small size, grease traps are not considered as effective as grease interceptors and are very limited on the amount of flow they can handle. Grease traps should only be used in those cases where the use of a grease interceptor or other grease control device is determined to be impossible or impracticable. It is recommended that the FOG Control Program Manager be consulted before installing a grease trap.

If a grease trap is installed, regular routine maintenance is imperative for the grease trap to perform properly. FOG removed from the grease trap must be properly disposed of and NOT discharged into the City's sewer collection system or storm drain system. Dishwashers or water hotter than 140 degrees is prohibited from being discharged into a grease trap. Likewise, grease emulsifiers must not be added to the grease trap. Any broken or malfunctioning components must be immediately repaired or replaced.

Additives: Chemical or biological additives are advertised by their manufactures to have the ability to react upon FOG as to render it harmless as it passes through the sewer collection system. How this takes place varies depending upon the type of additive used. The City along with the Orange County Sanitation District and its member agencies has been involved in extensive testing of various additives in actual field environments to

determine if the additive manufacturer's claims are valid. Currently, there are no additives available that acceptably remove FOG. The use of additives is prohibited without the written authorization of the FOG Control Program Manager.

What are kitchen best management practices? Kitchen best management practices or BMPs are practices that will result in a reduction in FOG generation and must be practiced by all food service establishments. Kitchen BMPs are as follows:

1. Installation of drain screens on all floor, sink, or other drains located in the food preparation area.
2. Segregation and collection of all waste cooking oil. All waste cooking oil is to be collected and properly stored for recycling. Storage receptacles must be properly maintained to prevent leakage and licensed waste haulers or recyclers must be used to dispose of waste cooking oil.
3. All food waste is to be directly disposed of into the trash or garbage and not into the sinks or other plumbing fixtures.
4. All employees must be trained by the food service establishment's owner or management at the start of employment and at least annually on the following subjects:
 - a. How to "dry wipe" pots, pans, dishware, and the food preparation area to remove grease prior to washing.
 - b. How to properly dispose of food waste and solids in plastic bags before disposal in the trash to prevent leakage and odors.
 - c. The location and use of absorption products to clean areas where grease may be dripped or spilled.
 - d. How to properly dispose of grease or oils from cooking equipment into storage receptacles without spilling.
 - e. Kitchen BMP and waste minimization practices posters shall be conspicuously posted in the food preparation and dishwashing areas at all times.

Included in the FOG Program Binder is a multi-language training video that explains in greater detail the kitchen BMPs and how to apply them. Please refer to this video to assist in training your employees in the proper use of the kitchen BMPs.

What should I do if there is a grease or oil spill? Each food service establishment should purchase or prepare a spill kit to be used in the event of a spill in the food preparation area. The spill kit should contain such things as a dry absorbent material such as kitty litter and absorbent towels. The spill kit should be located in an easily accessible area and employees should be trained in its use. Towels or other absorbent material should be used to prevent the spilled material from entering any drains. The dry absorbent material should be spread over the spill, swept up, and deposited in the trash along with towels or other materials used to wipe up the spill. Please refer to the training video included with your FOG Program Binder for additional information and training on spill cleanup.

If the spill enters the drains or if there is a malfunction of the FOG control device that allows FOG to enter the City's sewer system, the City must be notified immediately at the phone number listed on the FOG Wastewater Discharge Permit.

What other prohibitions are there?

- Washing floor mats, vent hood screens, etc. in the dishwasher is prohibited.
- Discharging waste cooking oil directly into floor or sink drains, toilets, urinals or any other plumbing device is prohibited. Waste cooking oil is to be properly stored for recycling or disposal.
- Food grinders are prohibited for new or remodeled construction. Food grinders must be removed from existing food service establishments except when expressly allowed by the FOG Control Program Manager.
- Locating a food grinder upstream of a grease trap or grease interceptor is prohibited.

What is the FOG Program Binder? The FOG Program Binder has been prepared by the City to assist all of the food service establishments covered by the City's FOG control ordinance with compliance with the program. The FOG Program Binder contains a training video in several languages to assist in training the food service establishment's staff in the kitchen best management practices and spill cleanup. Also included are signage, brochures, FOG Program Guide, Quick Reference Chart, recordkeeping forms, and other material related to the City's FOG control program. An additional CD-ROM has been included that contains the City's FOG Control Ordinance and FOG Control Program.

Conclusion: The State of California has mandated that the City do everything possible to eliminate preventable sewer spills. Aside from being a severe health hazard, sewer spills can subject the City to severe fines and penalties. This FOG control program is designed to eliminate the number one cause of sewer spills in the City. To be successful, it requires your cooperation. Let's keep Placentia a "pleasant place to live."

Kitchen BMP Training Log

Grease Control Device Log

