City of Albany

Alameda County, California



Fats, Oils, and Grease Control Program Implementation Plan

Standards & Procedures

DRAFT FOR CITY COUNCIL REVIEW: September 2012

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Section 1 – General

Fats, Oils, and Grease (FOG) discharged to the sanitary sewer can accumulate along sewer pipe walls coating pipes until wastewater flow through the line is restricted or blocked, increasing the risk of Sanitary Sewer Overflows (SSOs). These occurrences can result in property damage, environmental problems in nearby surface waters, and public health hazards.

In 2006, the State Water Resources Control Board adopted General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-003-DWQ) to facilitate the proper funding and management of wastewater collection systems. The Waste Discharge Requirements include the development and implementation of a Sanitary Sewer Management Plan (SSMP). The SSMP must include a program to control the discharge of FOG to the sewer system.

The City of Albany (City) SSMP was developed and approved by City Council according to the timeline specified in the Waste Discharge Requirements. Element IV of the SSMP contains the plan and commitment by the City to control FOG discharge to the sanitary sewer system. The primary goal of the FOG Control Program is to reduce the risk of blockages and SSOs in an effort to protect public health and the environment by minimizing public exposure to unsanitary conditions. By controlling the amount of FOG in the wastewater collection system, FOG buildup in sewer lines can be lessened, thereby increasing the system's operating efficiency and reducing the number of sewer line blockages and potential overflows. In addition, an effective FOG Control Program can minimize revenue losses associated with enforcement actions and the impacts of restricting public activities, such as beach closures.

The purpose of this Fats, Oils, and Grease Control Program Implementation Plan (Plan) is to establish fair and consistent policies and procedures for implementing Municipal Code Section 15-5 Food Service Establishment Responsibility to Control Fats, Oils and Grease Entering the Sanitary Sewer System. The Plan will be adopted by City Council and incorporated by reference to Municipal Code Section 15-5.

At the time of Plan adoption, the East Bay Municipal Utility District (EBMUD) is designated the City's Authorized Representative for implementing specific procedures contained herein. **Appendix A** contains the current FOG Scope of Services Among EBMUD, City of Alameda, City of Albany, City of Berkeley, City of Emeryville, City of Oakland, City of Piedmont, Stege Sanitary District. The City reserves the right, at any time, to amend or terminate this service.

Section 2 – Definitions

<u>Additives</u> – includes any product used to break down grease including, bit not limited to, enzymes or surfactants acting as grease emulsifiers or degradation agents.

<u>Approved Grease Control Device</u> - A device designed to intercept fats, oils, and grease from wastewater discharge. This includes the allowable devices referenced in Appendix D of this Plan.

<u>Automatic Grease Removal Device</u> - A device designed to retain fats, oils, and grease from wastewater discharge. An automatic grease removal device actively skims and/or removes FOG from the wastewater stream and transfers it to an external FOG container that food facility staff then empties into a collection container.

<u>Building Official</u> - The Albany Municipal Code establishes the Community Development Director as the Building Official for the purposes of implementing this Plan.

<u>City Authorized Representative</u> - is an individual or organization selected by the City to implement and/or enforce one or all the provisions of the FOG Control Program.

<u>Food Service Establishment</u> - includes but is not limited to any facility preparing and/or serving food for commercial use or sale. This includes restaurants; cafes; lunch counters; cafeterias; hotels; hospitals; convalescent homes; factory or school kitchens; catering kitchens; bakeries; grocery stores with food preparation, food packaging, meat cutting, and meat preparation (excluding grocery stores with only food warming operations); meat packing facilities, and other food handling facilities not listed above where fats, oil, and grease may be introduced into the community sewer system and cause line blockages and sewer overflows.

<u>FOG - </u> Refers to all fats, oils, and grease generated during food preparation, food service, and/or kitchen cleanup.

<u>Grease Hauler</u> – Licensed company that is contracted to periodically pump out and clean grease interceptors and traps. The hauler then disposes of the grease in an appropriate and legal manner.

<u>Gravity Grease Interceptor</u> – A large, partitioned vault made of various materials, installed to remove grease and food waste by trapping floatables and settleable solids so that they can be separated and removed before discharge to the community sewer. It is usually installed underground, outside of the food handling establishment.

<u>Grease Control Device (GCD)</u> – See Approved Grease Control Device.

<u>Grease Trap</u> – A device designed to retain grease before it enters plumbing lines. It is usually installed indoors in kitchen floors or under counters.

<u>Plumbing Fixture</u> – A receptacle, device, or appliance, directly or indirectly connected to a drainage system such as the sanitary sewer, that supplies or receives water or liquid-borne wastes.

<u>Section 3. Conditions Requiring a Grease Control Device at Food Service</u> Establishments

A Grease Control Device is required to be installed and maintained, at the property owner's expense, to prevent FOG related overflows, blockages or increased maintenance in the sanitary sewer system. Grease Control Devices are required if a Food Service Establishment meets any of the following conditions:

- a) New construction, including new construction or conversion from a non-food service establishment to a food service establishment. (City staff is responsible for completing and submitting to EBMUD a New Restaurant Notification Form (**Appendix B**) for each new Food Service Establishment)
- b) Remodels, additions, alterations or repairs of Food Service Establishments valued at \$75,000 or greater.
- c) Multiple permits for remodels, additions, alterations or repairs by the same Food Service Establishment owner or operator within a three (3) year period and with a cumulative value over \$75,000.
- d) An existing Food Service Establishment caused or contributed to increased maintenance such that the cleaning frequency of the associated mainline sewer was 180 days or less, or a FOG-related sanitary sewer system overflow that required reporting in the California Integrated Water Quality System

The above criteria do not preclude the City from evaluating the need for a Food Service Establishment to control FOG discharge from the establishment. The stated criteria also do not preclude a property owner from controlling FOG discharged from their establishment on their own accord and at their expense.

<u>Section 4. Waiver of Grease Control Device Requirements at Food Service Establishments</u>

While the intent of this program is to set forth uniform requirements for Food Service Establishments to control the discharge of fats, oil, and grease to the sewer system, a Food Service Establishment determined to have no immediate adverse impact on the sewer system may be granted a conditional waiver from Grease Control Device installation requirements if specific conditions are met.

A. Grease Control Device Conditional Waiver:

A Grease Control Device may not be required if a facility can demonstrate that food preparation and service do not generate fats, oil, and grease in a quantity sufficient to require a Grease Control Device. A Food Service Establishment determined to have no immediate adverse impact on the collection system because of business type and grease generating capabilities may be granted a waiver from Grease Control Device installation requirements. The Building Official or his/her designee may, at any time, revoke a waiver and require the Food Service Establishment to install a Grease Control Device.

Grease Control Devices may not be required for business types listed below:

- a) Establishments serving beverages and/or ready to eat, packaged or unpackaged items (with or without food warming);
- b) Ice cream parlors without any baking or other food preparation;
- c) Snack bar with no food preparation other than food warming;
- d) Bakeries with no food preparation other than food warming;
- e) Other establishments serving only ready to eat foods with or without food warming.

For a waiver to be granted, the Building Official or his/her designee must approve a completed Grease Control Device Conditional Waiver application form (**Appendix C**). The EBMUD Environmental Services Division, the designated City Authorized Representative for implementing specific program procedures, will assist in the review of the application form and make a recommendation to the Building Official or his/her designee.

The Building Official or his/her designee may, at any time, revoke a waiver and require the Food Service Establishment to install a Grease Control Device.

Section 5. Grease Control Device Approval Process

Appendix D contains a list of approved Grease Control Devices. Note: there may be a device not listed in Appendix D that is appropriate for site-specific conditions and may be approved.

The City does not permit the installation of passive grease traps. While these devices trap grease, they do not remove the grease to a separate container, making it difficult to measure the depth or fullness of the grease trap. As the passive grease trap's separation efficiency diminishes as the trap fills, timely cleaning and maintenance is critical for proper functioning. An Automatic

Grease Removal Device removes the skimmed grease to a separate container thereby eliminating this challenge and providing clarity for a maintenance frequency determination.

Grease Control Devices must be properly sized in conformance with the current edition of the California Plumbing Code. The volume of the interceptor must be determined by using Table 10-3 in 2010 CA Plumbing Code, reproduced below as **Table 1**. If the number of drainage fixture units (DFUs) is not known, the interceptor must be sized based on the maximum DFUs allowed for the pipe size connected to the inlet of the interceptor.

Table 1. (10-3 2010 CA Plumbing Code). Gravity Grease Interceptor Sizing

DFUs ^{1,3}	Interceptor Volume ²
8	500 gallons
21	750 gallons
35	1,000 gallons
90	1,250 gallons
172	1,500 gallons
216	2,000 gallons
307	2,500 gallons
342	3,000 gallons
428	4,000 gallons
576	5,000 gallons
720	7,500 gallons
2112	10,000 gallons
2640	15,000 gallons

- 1. The maximum allowable DFUs plumbed to the kitchen drain lines that will be connected to the grease interceptor.
- 2. This size is based on: DFUs, the pipe size from this code; Table 7-5; Useful Tabled for flow in half-full pipes (ref: *Mohinder Nayyar Piping Handbook*, 3rd Edition, 1992). Based on 30-minute retention time (ref: George Tchobanoglous and Metcalf & Eddy. *Wastewater Engineering Treatment, Disposal and Reuse*, 3rd Ed. 1991 & Ronald Crites and George Tchobanoglous, *Small and Decentralized Wastewater Management Systems*, 1998). Rounded up to nominal interceptor volume.
- 3. When the flow rate of directly connected fixture(s) or appliance(s) have no assigned DFU values, the additional grease interceptor volume shall be based on the known flow rate (gpm) multiplied bu the 30-minutes.

Plans to install a Grease Control Device must be reviewed and approved by the Building Official prior to installation. Grease Control Devices must be installed by a licensed plumbing contractor.

Section 6. Grease Control Device Maintenance

Responsibility

The property owner is responsible for making all maintenance and repairs of the Grease Control Device.

Grease Control Device maintenance shall be done according to the manufacturer's specifications and in a manner that does not present potential risks to human health or cause a public nuisance.

If a Grease Interceptor is installed, the Food Service Establishment is responsible for the following maintenance:

- i. Remove the entire contents of the interceptor each time the interceptor is pumped.
- ii. Ensure proper operation, maintenance and performance during the entire period of wastewater discharge.
- iii. Maintain a minimum pumping frequency of once per three-month period or more frequently to ensure that objectionable odors are not present and the discharge does not cause or contribute to FOG-related overflows, blockages, or increased maintenance in the sanitary sewer system.
- iv. Maintain maintenance records with the following information for each Grease Interceptor:
 - 1) Date of hauling service
 - 2) Name of the licensed and permitted grease hauler
 - 3) Volume pumped (gallons)
 - 4) Waste disposal location

Maintenance Records shall be kept for a minimum of three (3) years from the date of service and shall be provided to the City upon request.

Section 7. Appeal of Building Official Decision

The decision of the Building Official or his/her designee may be appealed to a hearing officer of qualified judgment within ten (10) calendar days after written notice thereof. The City of Albany Master Fee Schedule contains the fee, to be paid by the property owner, that is associated with an appeal of a Building Official decision.

The appeal must be in writing and must state the basis of the appeal. The appeal will be acted upon by within thirty (30) days after receipt of the written appeal, except for good cause shown. An appeal of the Hearing Officer's decision may be made to the City Council in accordance with Council adopted procedures.

Section 8. Failure to Comply

Should any property owner fail to install, maintain or repair their Grease Control Device as set forth in the provisions of this Plan, a written notice of the violation will be issued by the City or City Authorized Representative. The notice will specify a period of time within which the property owner must correct the deficiency. Continual violation is subject to enforcement proceedings defined for violation of the Building Code.

FOG Scope of Services Among

EBMUD, City of Alameda, City of Albany, City of Berkeley, City of Emeryville, City of Oakland, City of Piedmont, Stege Sanitary District

Background

The wastewater collection system agencies in the East Bay Municipal Utility District (EBMUD)'s wastewater service area are the cities of Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, and Stege Sanitary District (agencies). The State Water Resources Control Board Order No. 2006-0003-DWQ statewide requirements include implementation of Fats, Oils, and Grease (FOG) programs unless agencies demonstrate that they do not have FOG related sanitary sewer overflows (SSOs) in their community sewers. The agencies and EBMUD have developed a regional FOG control program, as part of the TAB programs, to reduce FOG related SSOs, and wish to continue working collaboratively on development and implementation of FOG control.

EBMUD has the experience, qualifications, staff and expertise to perform agreed-upon services effectively and efficiently. It is mutually beneficial for EBMUD to provide services to the agencies related to FOG control. Regional implementation of FOG control activities coordinated and supported by EBMUD is an efficient use of resources, including economies of scale and trained staff with a broad knowledge base of the activities that support a regional effort and that provide a systematic approach to managing wastewater discharges from food service establishments (FSEs). It is also mutually beneficial to maintain consistency in development and implementation of FOG control requirements throughout EBMUD's wastewater service area.

Scope of Services

The purpose of this Scope of Services is to continue ongoing FOG control activities to help reduce FOG related SSOs in the agencies' community sewer system. This Scope of Services clarifies the roles and responsibilities of EBMUD and the agencies in this collaborative effort and identifies the tasks to be conducted by each party.

The agencies authorize EBMUD to implement a regional FOG control program as described in this Scope of Services. To facilitate implementation of FOG control activities outlined in the scope of services, agencies will continue to provide EBMUD with the following information:

- a) Completed grease SSO and blockage reporting forms for areas in which the agency wants EBMUD to conduct hotspot investigations;
- b) Electronic and/or hard copies of community sewer maps that include manhole identification numbers and their locations, sewer pipes size, and flow direction.
- c) Residential addresses, including apartment numbers, for hotspot areas in which the agency wishes FOG information to be delivered.

Each agency is responsible for the costs of implementing the FOG control program in its service area as established in Exhibit A: FOG Control Program Budget.

Termination

Any of the Parties may terminate its obligations under this Scope of Services by giving all other parties at least ninety (90) days written notice.

EBMUD's Scope of Services

EBMUD is the technical service provider for the agencies' FOG program requirements. EBMUD also leads inter-agency coordination for the regional FOG control program to maximize consistency and efficiency. EBMUD is responsible for the following activities:

1. FOG HOTSPOT INVESTIGATIONS

- (a) EBMUD will initiate an investigation after receiving a completed grease SSO and blockage reporting form from agency. The investigation will:
 - 1) Identify the sewer drainage basin contributing to the location of the blockage, SSO, or increased sewer maintenance (FOG hotspot area).
 - 2) Determine if the FOG hotspot area is in a residential, commercial, or combined residential/commercial drainage basin.
 - 3) Identify commercial FSEs that discharge in the sewer drainage basin.
 - 4) If FSEs are identified in the sewer drainage basin, the following field activities may be performed to identify FSEs that caused or contributed to the SSO, blockage, or increased sewer maintenance:
 - Field inspection of the FSEs
 - Dye testing
 - Gravity interceptor inspection
 - Sewer lateral camera inspection
 - Mainline camera inspection
 - Sampling at FSEs
- (b) EBMUD will maintain an electronic listing and perform a follow-up inspection to confirm that the required grease control device (GCD) has been installed and is properly maintained. Grease control devices include gravity grease interceptors and additional approved devices, such as automatic grease removal devices. The Parties shall develop a communications program for identifying and updating the GCD listing with EBMUD.
- (c) EBMUD may perform follow-up sewer lateral and/or main line camera inspections, upon request by agencies.

2. GRAVITY GREASE INTERCEPTOR INSPECTIONS

(a) EBMUD will perform periodic gravity grease interceptor inspections for FSEs in hotspots as well as for FSEs that are not in hotspots.

3. RESIDENTIAL HOTSPOT RESPONSE

(a) EBMUD will provide targeted outreach in identified residential FOG hotspots, within the limits of the funding provided in this Scope of Services (Exhibit A). Residential outreach information will be distributed based on the residential addresses, including apartment numbers, in identified hot spot areas based on agency's requests.

4. ENFORCEMENT SUPPORT

- (a) EBMUD will send notifications to FSEs based on agency-specific requirements. These notifications may include requirement letters, notices of non-compliance and other follow-up documents
- (b) EBMUD will support agencies in any enforcement actions and proceedings taken by agencies (e.g. if agency initiates hearing, EBMUD will present findings of hotspot investigation).
- (c) EBMUD shall maintain a list of approved grease haulers and shall continue to provide a disposal facility for grease.

5. REPORTING

- (a) EBMUD will submit to agencies quarterly FOG hotspot investigation summary reports. These reports include:
 - i. A summary of all FOG hotspots that were investigated during the quarter describing the activities performed and the FOG hotspot status at the end of the quarter.
 - ii. The number of inspections performed, FSEs identified to cause or contribute FOG related blockages/SSOs, GCDs confirmed to have been installed, and a summary of residential outreach materials distributed during the quarter.
 - iii. A summary by satellite agency detailing the level of effort for agency during the previous quarter. This report shall also include the full listing of all FOG hot spot investigation reports submitted by all agencies, their current status and those still remaining to be investigated.

6. FOG CONTROL DATABASE

- (a) EBMUD will develop and maintain a FOG control database that includes:
 - i. FOG Hotspots identified by the agencies
 - ii. FSEs identified in each FOG hotspot and grease control device/ gravity grease interceptor information for each FSE in the FOG hotspots
 - iii. FSE, gravity grease interceptor, lateral camera and main line camera inspections performed at FSEs and FOG hotspots
 - iv. Requirement and agency enforcement information for FSEs provided to EBMUD

7. RESIDENTIAL AND COMMERCIAL OUTREACH

EBMUD will maintain commercial and residential outreach and public education program activities, which may include bill inserts, billboards, outreach events, website development, and periodic direct communication with FSEs. These activities are not included in the budget (Exhibit A).

8. COMPENSATION

The agencies will compensate EBMUD for the work conducted under Scope of Services items 1-6 of this Scope of Services. Current FOG program funding will continue for FY11. Exhibit A details the budget for FY12 and FY13.

9. SCOPE OF SERVICES EVALUATION

EBMUD and Satellites agree to reevaluate the Scope of Services contained herein annually not later than February of each year.



East Bay Municipal Utility District Environmental Services Division

P.O. Box 24055, MS 702 Oakland, CA 94623-1055 Telephone (510) 287-1651 Fax (510) 287-0621

New Food Service Establishment Notification Form

Establishment Name:			
Owner Name:			
Mailing Address:			
Service Address:			
Phone Number:			
Grease Control Device Installation	YES	NO	
Type of Grease Control Device:			
Additional Comments:			

Please fax or email to:

Nadia Borisova Fax: 510-287-0621 nborisov@ebmud.com

Grease Control Device Conditional Waiver

I,			
	(Business Representative's Nar	me Printed)	
forth in the City of Alb listed above does not rand work towards obta	(Business Name and Address F as named above does not require a sany Fats, Oils, and Grease Continuet the definition, I understand t	a grease interceptor installation becaus rol Program Implementation Plan. If that I must notify the City within ninety rease control device sized according to	at any time the business y (90) days of the change
accordance with a syst submitted. Based on r for gathering informat	tem designed to assure that qualif- my inquiry of the person or person ion, the information submitted is, that there are significant penaltie	attachments were prepared under my fied personnel properly gather and eval ns who manage the system, or those pe to the best of my knowledge and belie es for submitting false information, inc	luate the information ersons directly responsible ef, true, accurate, and
	installation conditional variance r waiver is not transferable.	is not transferable to a new owner or o	occupant.
	s variance waiver warrants that it nd to make this variance binding t	has or has obtained the necessary con upon itself.	sent and authority to execute
SIGNED		DATE	
	NUMBERorting documentation of busines	ss type must be submitted with appli	cation form
APPROVAL:		ot Write Below This Line	
DATE	PRINT CONTACT NO	SIGNATURE	_
REASON FOR APPR	OVAL:		
CITY/AGENCY REP		DATE	
REJECTED:			EBMUD REP
	PRINT	SIGNATURE	·
REASON FOR REJEC	CTION:		
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Appendix D

Manufacturer	Web Site	Product Name	Technology
ADS	http://www.ads- pipe.com/en/index.asp?ProdID=253	Grease Interceptor	Gravity device, pump out of captured grease and sediment by EBMUD approved grease hauler
API Industries, Inc.	http://www.apiindustriesinc.org/grease_trap.html	ECH20	Coalescing plates device, automatic draw-off of captured grease to external container
Goslyn Environmental Systems	http://www.goslyn.ca	Goslyn	Hydro-mechanical device, captured grease automatically drained to an external container
Green Turtle	http://www.proceptor.com/default.html	Proceptor	Gravity device, pump out of captured grease and sediment by EBMUD approved grease hauler
Highland Tank	http://www.highlandtank.com/	HT-AGI	Hydro-mechanical device, skimmer draws-off captured grease and transfers to an external container
		HT PGI	Gravity device, pump out of captured grease and sediment by EBMUD approved grease hauler
International GRD, Inc.	http://www.internationalgrd.com/	2000	Hydro-mechanical device, captured grease automatically drained to an external container
		2500 IB	Hydro-mechanical device, captured grease automatically drained to an external container
		2500 IBP	Hydro-mechanical device, captured grease automatically drained to an external container
		3500	Hydro-mechanical device, captured grease automatically drained to an external container
		5000	Hydro-mechanical device, captured grease

Appendix D

			automatically drained to an external container
Jay R Smith Mfg. Co.	http://www.jrsmith.com/	Grease+Guard	Hydro-mechanical device, skimmer draws-off captured grease and transfers to an external container
Jensen Precast	http://www.jensenprecast.com	Grease Interceptor	Gravity device, pump out of captured grease and sediment by EBMUD approved grease hauler
Josam Co	http://www.josam.com/	GI200A	Hydro-mechanical device, captured grease automatically pumped to an external container
		60100H - GRD	Hydro-mechanical device, captured grease automatically pumped to an external container
Schier Products	http://www.schierproducts.com/	Great Basin	Gravity device, pump out of captured grease and sediment by EBMUD approved grease hauler
Thermaco	http://www.big-dipper.com/index.php	Big Dipper	Hydro-mechanical device, skimmer draws-off captured grease and transfers to an external container
		Trapzilla	Gravity device, pump out of captured grease and sediment by EBMUD approved grease hauler
Zurn	http://www.zurn.com	Z1199	Hydro-mechanical device, captured grease automatically drained to an external container