

Fats, Oils and Grease (FOG) Control Program

Background

East Palo Alto Sanitary District is committed to the protection of the environment and the public health and safety for its residents. The District operates and maintains the Regional Water Quality Control Plant (RWQCP) and a sanitary sewer collection system serving roughly 32,000 people in a 2.5 square mile area.

The prevention of Sanitary Sewer Overflows (SSO) is a priority for the Sanitary District Wastewater Operations. SSOs are primarily caused by blockages in the sewer collection systems. The majority of sewer line blockages can be attributed to roots, accumulation of FOG, illegal grease dumping, damaged sewer lines, or a combination of these factors. FOG is generated by residential homes and many types of food service establishments (FSE) during food preparation, food service, and kitchen clean-up (dishes, cookware, mop water, equipment cleaning, hood screens and floor mats).

1.0 Implementation of a FOG Control Program

East Palo Alto Sanitary District is required to implement a FOG Control Program due to the significant number of FOG generating FSEs in the City and a history of SSOs. Many of the SSOs are caused wholly or in part by grease blockages. The benefits of a FOG Control Program include a reduction of SSOs, improved public health and safety, avoidance of spill related fines, minimizing property damage claims, minimizing the risk of lawsuits, improving sewer maintenance and an improved FSE business environment.

The Maintenance Supervisor focuses on the FOG Control Program and allows for more frequent and rigorous inspections and enforcement. The position has the lead for enforcement of the FOG related sections of East Palo Alto Sanitary District (see Legal Authority).

1.1 Maintenance and Monitoring

EPASD has had an ongoing preventative maintenance program that includes regular cleaning and inspections of more than 2.5 miles of collection system piping. In addition, in 2006 the EPASD purchased a Closed Circuit Television (CCTV) and conducted a cleaning project throughout all of the sanitary sewer lines six inches and greater. This project resulted in a complete inventory and prioritization of the areas in need of root control, repairs or more frequent cleaning. During this project all instances of high FOG deposition were reported to the GM/Engineer for follow-up. The video footage and data from the CCTV project will be stored in an accessible database.

The SSO Emergency Response Plan (SSOERP) section of the Sanitary Sewer Management Plan (SSMP) describes EPASD maintenance performance responsibilities for the preventative maintenance for the collection system and response to blockages and overflows. EPASD maintenance has identified areas requiring more frequent cleaning based on past experience and upon data collected during the CCTV project. The cleaning equipment used by EPASD includes: Hydro flusher/Vacuum Truck. The cleaning schedule of the sewer systems and cleaning equipment EPASD uses are completely described in the SSOERP section of the SSMP.

1.2 Source Control

East Palo Alto Sanitary District has 18 restaurants, in addition to Sequoiah School District, has 3 facilities that cook and serve food. These areas are known hotspots of FOG discharge.

East Palo Alto Sanitary District also has other generators of grease such as single family homes, apartment buildings and cafeterias. These sources have been primarily addressed with outreach materials. There have been regular inspections and field contacts.

All FSE related building permits are routed through EPASD for review. The EPASD uses this opportunity to work in conjunction with the many types of food service establishments (FSEs) and the Building and Planning Departments to find workable solutions for new construction, remodels and new restaurants in existing buildings.

1.3 Facility Inspection

There are 21 FSEs in the City of East Palo Alto. The expanded FOG program will include more rigorous inspections and enforcement. Each facility will be visited quarterly it is important to prioritize the FSEs and conduct more frequent inspections and enforcement where necessary.

The FSEs are categorized by their potential to contribute FOG to the collection system or cause other problems such as storm water violations. Facilities located in hot spots or that have been problematic will be addressed first and receive more frequent inspections. Bringing some facilities into compliance may be a lengthier process requiring multiple follow-up inspections. Some facilities will frequently not meet all requirements and will need ongoing attention. These facilities will be re-visited as necessary. Facilities that demonstrate compliance will receive less attention.

Problematic facilities have:

- experienced back-ups or overflows
- caused FOG build up in the line (identified by CCTV or cleaning records)
- unresolved compliance issues
- failed to follow the Better Management Practices (BMPs)
- failed to keep records
- had storm water violations
- failed to comply with verbal or written directives

FSEs are prioritized in one of the following categories.

1. problem FSEs in hot spots
2. problem FSEs
3. FSEs that have only had minor issues in the past.
4. FSEs with potential to generate FOG

Facility Action Plans

Notification letters and Better Management Practices (BMPs) brochures will be sent to all businesses identified by the District as FSEs. The letters notifies the FSEs of upcoming inspections, the ordinance prohibiting food grinders and typical activities that will occur during inspection visits. The letters stated:

To keep the inspections effective and as short as possible, please gather the following documents/information for discussion at the time of inspection:

- Size and location of your facility's grease removal device (i.e. Grease Trap)
- List of equipment, sinks and/or drains connected to grease removal device
- Grease removal device maintenance (cleaning) records, e.g. receipts and log for the last three years, as required in Palo Alto Municipal Code (PAMC) Section 16.09.103(d)

Topics covered during inspections will include:

- Best Management Practices (BMPs)
- Prohibition against the use of food waste disposers (grinders)
- Proper cleaning of floor mats (discharge to storm drains is prohibited)
- Housekeeping/cleanliness of dumpster and/or tallow bin area
- Proper disposal of Fats, Oils and Grease (FOG)
- Location and condition of grease removal device(s)
- Pumper/Hauler (cleaning) records for the last 3 years
- Latest lateral cleaning receipts
- Display of BMP signage near sinks (supplied by Inspector if needed)
- Inspection of the immediate downstream manhole
- Plumbing configuration (diagram if available)

Posters on Best Management Practices (BMPs) for handling FOG will be distributed to FOG generating FSEs during the inspections. The Bay Area Pollution Prevention Group (BAPPG) funded CalFOG to create this poster that is available in English, Spanish, Korean, Chinese and Vietnamese.

EPASD staff will educate the FSE management and staff on ordinance requirements and BMPs to the extent practical during inspections. If a violation is observed the inspector will issue a Compliance Directive. Follow-up letters and information will be given or sent to the facility as required to achieve compliance. Enforcement will be escalated according to the Enforcement Response Plan.

1.4 Legal Authority

The legal authority for the FOG Control Program is described in the attached Sewer Use Ordinance (SUO) of the East Palo Alto Sanitary District. These sections provide authority for inspections, setting of Grease Removal Device (GRD) cleaning frequency, reporting, building requirements and other aspects of the program. FSE and FOG Sections include:

- SUO 39, Section 136: Grease disposal prohibited.
- SUO 39, Section 137: Grease removal devices are required
- SUO 39, Section 137.1: Garbage disposers (grinders) prohibited.
- SUO 39, Section 138: Storm drain discharges prohibited.
- 16.09.110: Concentration limits that can be discharged to sanitary sewer lines.

The attached Enforcement Response Plan (ERP) describes the possible actions and escalation of enforcement which the EPASD will take when violations of the Sewer Use Ordinance occur. The ERP was first approved in 1994. The following sections of the SUO constitute the legal authority behind the components of the ERP.

- SUO 39.140: Criminal Penalties
- SUO 39.141: Judicial Civil Penalties
- SUO 39.142: Administrative Citation
- SUO 39.142: Administrative Compliance Order
- SUO 39.142: Notice of Noncompliance

1.5 Outreach

Outreach and education are a significant component of the EPASD environmental programs. BMP brochures for food facilities were created to educate the FSEs about minimizing the impact of FOG on the collection system. BMP brochures are distributed during or sent out with follow-up letters after routine, back-up, spill or storm water inspections.

Outreach for residents has also been a component of the program. East Palo Alto residents have received inserts educating them on the problems caused by improper disposal of FOG to the sewer system. Messages include simple BMPs such as disposing of used cooking oils and grease in the trash after placing them in sealed containers or absorbing them onto paper towels.

Additionally, RWQCP staff generated the CalFOG website (www.calfog.org) in 2004 and will continue to maintain the site. This website's mission statement: *"identify actions for reducing SSOs that result from blockages caused by fats, oil and grease in wastewater collection systems, and implement those actions to the extent feasible by a stakeholder group which includes wastewater agencies, regulators, restaurant and other industry associations."*

The EPASD also participates in other regional programs such as the www.cleanbay.org "we're all in it together" campaign and Bay Area Pollution Prevention Group's (BAPPG) FOG workgroup. Regionally generated materials such as posters have been handed out to FSEs and proposed materials such as food scrapers or grease cans will be handed out at community events when available.

1.6 Goals for the FOG Control Program

The primary goal of the FOG program is to work interdepartmentally and with the community to reduce the number, severity and frequency of SSOs linked to FOG and to reduce the environmental impact, liability and exposure to the City and the costs associated with SSO clean ups. RWQCP staff will continue to contribute to regional programs such as the statewide CalFOG and BAPPG workgroups.

Inspection and Compliance Goals

The 2006 Clean Bay Pollution Prevention Plan includes a long standing goal of inspecting at least one-third of the FSEs each year. The expanded FOG program will include more rigorous inspections and enforcement but will maintain the same goal for the number of inspections.

Once all of the facilities have received an initial visit it should be possible to determine time demands and refine the prioritization. Setting reasonable goals for inspection frequency for each category and percentage of facilities in compliance will then be possible.

Any FSEs identified through SSO events or sewer cleaning data will be inspected within two days of EPASD notification.

SSO Goals

SSO data will be analyzed each year to help monitor the success of the FOG program. The EPASD would like to see a 0% reduction of SSOs from 32 grease related blockages and 2 grease and roots related SSOs by 2008. With more outreach this division would also like to see an increase in tallow collected from residents. Tracked tallow amounts removed from the EPASD recycle drop off center should show an increase of 20% between 2005-2006 and 2006-2007 data.