



City of Punta Gorda Grease Program

Introduction

¹Fats, oil and grease - - also called FOG in the wastewater business - - can have negative impacts on wastewater collection and treatment systems. Most wastewater collection system blockages can be traced to FOG. Blockages in the wastewater collection system are serious, causing sewage spills, manhole overflows, or sewage backups in homes and businesses. Wastewater treatment suffers due to the increased oxygen demand at the treatment plant caused by grease and the pass-through of untreated grease to the disposal system.

Two types of FOG pollutants are common to wastewater systems. Petroleum-based oil and grease (non-polar concentrations) occur at businesses using oil and grease, and can usually be identified and regulated by utilities through the establishing of local discharge limits and associated pretreatment permit conditions. Animal and vegetable-based oil and grease (polar concentrations) are more difficult to regulate due to the large number of restaurants and fast - food outlets throughout the community.

The Need for a Grease Program

As the City of Punta Gorda grows grease and the problems associated with grease become a greater problem. An updated grease control program becomes ever important to allow for the regulation of the design, construction, and maintenance of grease interceptors. Additionally, provisions need to be in place to allow for the routine inspection of interceptors to insure that the proper cleaning and maintenance tasks are being performed. City of Punta Gorda Utility Ordinance section 17-4 (b) States:

"No person shall discharge or cause to be discharged any substances prohibited by FAC governing wastewater collection treatment or in the opinion of the Utility Director that such wastes can harm either the sewers, sewage treatment process or equipment, have an adverse effect on the natural environment, or can otherwise endanger life, limb, public property or constitute a nuisance. In forming his opinion as to the acceptability of these wastes, the Utility Director will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the

¹ Fats, Oil, and Grease Best Management Practices Manual Information, Pollution Prevention, and Compliance Information for Publicly-Owned Treatment Plants, ACWA

sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant and other pertinent factors”

To accomplish the requirements of Section 17-44 (d) the Utility Director has authorized this Grease Program to insure compliance with recognized industry standards for the control of FOG into the city's sewer system.

In all cases of construction of interceptors (both in size requirements and material), this Grease Program follows the guidelines set forth in Charlotte County's Grease Ordinance. This consistency will allow contractors who construct interceptors in Charlotte County to also meet the requirements of the City of Punta Gorda.

Program Requirements

Grease interceptors are not required for any residence. However, one or more grease interceptors are required where grease waste is produced in quantities that could otherwise cause line stoppage or hinder sewage transmission.

(1) Fat, oil and grease (F.O.G.) interceptors required. Users who operate restaurants, cafes, lunch counters, take-outs, cafeterias, bars, clubs, or hotel, hospital, factory or school kitchens or other establishments that serve or prepare food where F.O.G. may be introduced to the sewer system shall have an F.O.G. interceptor system.

Take-out food establishments or other establishments that prepare food but do not cook in oil or grease and who serve food only in disposable containers may utilize alternative interceptors as approved by the Utility Director, provided their discharges will not violate any discharge prohibitions of this Program. F.O.G. interceptors may also be required in non-cooking or cold dairy and frozen foodstuff establishments when they are deemed necessary by the Utility Director.

(2) Oil and sand interceptors required. Users who operate automatic and coin operated laundries, car washes, filling stations, commercial garages or similar businesses having any type of washing facilities or grease racks and any other users producing grit, sand, oils or other materials in levels prohibited by 62-302 Florida Administrative Code Rule, (grease and oils > 100 mg/L) which may have the potential of causing partial or complete obstruction of the building sewer or other areas in the sewer system shall install interceptors approved by the Utility Director.

- (3) *Location of interceptors.* Where a grease interceptor is required, kitchen wastewater shall first pass through the interceptor and then be discharged into the sewer system. All interceptors shall be located outside the building in such a manner that personnel from City of Punta Gorda Utility Department can inspect the interceptors at any time.
- (4) *Size of interceptors.* All interceptors shall be sized to ensure that the city's sewer system is protected from excessive F.O.G., sand and oil which may cause clogging or damage and that the user is capable of meeting all discharge requirements. F.O.G. interceptors shall be based on chapter 10 of the Florida Building Code, (copy attached) as amended. Sizing of grease interceptors shall be based on the equations as set forth below. The minimum volume of any grease interceptor shall be 750 gallons. If the volume of a single grease interceptor is greater than 1250 gallons, the installation of grease interceptors in series is required. Restaurants: $(S) \times (GS) \times (HR/12) \times (LP)$ = effective capacity of grease interceptor in gallons, where: S = number of seats in the dining area. GS = gallons of wastewater per seat (use 25 gallons for ordinary restaurant, use 10 gallons for single service restaurants) HR = number of hours establishment is open, LP = loading factor: use 1.25 for interstate highways, 1.00 for freeways, 1.00 for recreational areas, 0.80 for main highways, and 0.50 for other highways. Other food preparation restaurants not defined above, with commercial kitchens: $(M) \times (GM) \times (LF)$ = effective capacity of grease interceptor in gallons, where: M = meals prepared per day: GM = gallons of water used per meal (use 5 gallons) LF = loading factor (use 1.00 with dishwashing and 0.50 without dishwashing).
- (5) *Sampling port.* A sampling port shall be installed in an approved location to allow sampling by the utility and the user. The sample port shall be located between the interceptor and the discharge point to the sewer system.
- (6) *Access manholes.* An access manhole must have a minimum diameter of twenty-four (24) inches and shall be provided over each chamber and sanitary tee. The access manholes shall extend at least to the finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall have readily removable covers to facilitate inspection and cleaning.
- (7) *Plans required.* The following shall be submitted to City of Punta Gorda Utility Department for review and approval prior to installation of an interceptor system.

- (a) Site plans showing the location of the interceptor, lines, clean out, manhole, and sample port;
- (b) Details of the interceptor, lines, clean out, manhole, and sample port; and,
- (c) Formula and calculation used to determine the interceptor capacity.

Note: No non-grease-laden sources shall to be connected to sewer lines intended for grease, oil and sand separators.

(8) *Existing interceptors.* All interceptors currently in use or in existence at the time of this Ordinance will be considered sized sufficiently provided they meet all discharge requirements as stated in this Ordinance. All new interceptors or interceptors to replace or upgrade existing interceptors shall be required to meet all criteria stated in this division.

(9) *Inspections.* The director of the City of Punta Gorda Utilities Department or his or her designee shall have the authority to inspect at a reasonable time, those food service, food processing, or other commercial establishments which may produce grease and which are connected to a City of Punta Gorda sewer system to ensure that said establishments have installed and are properly maintaining an adequate grease interceptor on all waste lines. When upon inspection the interceptor is found to have six (6) inches or more of solids in the bottom of the interceptor (using a sludge judge) or a grease cap of three (3) inches or more, or the establishment exceeds discharge compliance levels, the Utility Director can require a grease pump out if upon completion of an on-site inspection or if analytical results of sampling indicate a violation of this Ordinance, the Utility Director may issue a "notice of violation" to the user or representative to document any discrepancies, noncompliance, special instructions or other guidance identified during the on-site inspection.

(10) *Maintenance*

(a) The user of the premises or business where such interceptor is located shall obtain from City of Punta Gorda Utilities Department a maintenance card which shall be posted in a conspicuous manner showing proof of regular maintenance. Such card shall be renewed annually and shall be presented upon request. All records pertaining to the maintenance of an interceptor shall be retained by the user for a period of not less than three (3) years

and available to City of Punta Gorda Utilities Department upon request.

(b) Every F.O.G. interceptor shall be cleaned every ninety (90) days or sooner, if needed. An exemption may be granted to the ninety-day minimum requirement if the user can establish that such maintenance schedule is not necessary.

(11) *Alternative treatments.* The use of any free-enzyme, chemical, or other products designed to emulsify, liquefy or further render grease soluble for the purpose of clearing drains or circumventing the design of the interceptor is prohibited. All products claiming biological activity must be approved by the Utility Director. Approval for this or any other treatment does not relieve the user of properly maintaining the interceptor as to prevent discharge violations to City of Punta Gorda sewer system.

(12) Sample collection

(a) Except as indicated in paragraph (b), below, the user must collect wastewater samples using flow proportional composite collection techniques. In the event flow proportional sampling is infeasible, the director may authorize the use of time proportional sampling or a minimum of four (4) grab samples where the user demonstrates that this will provide a representative sample of the effluent being discharged. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

(b) Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques. An exceedance of the levels prohibited by 62-302 Florida Administrative Code Rule, (grease and oils > 100 mg/L) for these compounds constitutes a violation of City of Punta Gorda Ordinance 17-44 (d).