

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING – APRIL 25, 2018  
AGENDA BILL 2.D

April 18, 2018

TO: Board of Directors, Borrego Water District  
FROM: Geoff Poole, GM  
SUBJECT: Fats, Oils and Grease Policy Update – G Poole

**RECOMMENDED ACTION:**

Adopt FOG Policy

**ITEM EXPLANATION**

In late 2018, the BWD Board reviewed a Draft revised FOG program for BWD sewer customers. Prior to taking action on the Policy, the Board directed staff to develop the program and meet with the Food Service Establishment (FSE) operators and explain the Program.

In an effort to prevent sewer collection system blockages due to FOG build up, the most significant change to the program is the new requirement that all fats oils and grease must be collected, stored on site in approved barrels and disposed of properly with the appropriate paperwork. In addition, the grease traps must be inspected by the FSE on a daily basis. BWD will continue to inspect/monitor the FSEs to ensure the quantities of grease found in the traps and storage barrels is reflective of the amount of FOG produced. Roy Martinez has met with all FSE and informed them of the new requirements.

**FISCAL IMPACT**

TBD: Prevention of FOG related impacts

**ATTACHMENTS**

Fats, Oils and Grease Program

## **6. FOG CONTROL PROGRAM**

**Section (6.0.1):** The BWD controls fats, oils and grease (FOG) in its collection system through the implementation of the requirements contained in Section 7.4.4.D of the Administrative Code which prohibits the discharge of FOG from entering the District's collection system. The District implements this provision through monthly inspection of all grease traps located within the District. Any violators are given orders to have their grease trap pumped if it is found to be overloaded or causing a discharge in violation of the aforementioned Code.

The legal authority for the Borrego Water District (BWD) to operate and maintain the sanitary sewer is contained generally in the California Water Code, and mandated by both the State Water Resources Control Board and Regional Water Quality Control Boards of California. The orders and mandates of these authorities stipulate several waste discharge requirements for sanitary sewer systems. These orders and mandates are documented in the BWD Sewer System Management Plan (SSMP). The following is general information regarding grease traps in food service establishments. In general, the BWD has not experienced any problems with these substances under the present method of inspection and through coordination with the San Diego Department of Environmental Health, which also regulates the restaurants that are the primary source of these contaminants.

### **Program Background**

The District's Wastewater Division will permit and inspect grease and oil generating facilities to ensure control of discharges that may cause blockages. A Fats, Oil and Grease Control Program (FOG) is to be implemented by the District. It will include discharger education on the control of fats, oil and grease, and specific guidelines food facilities must follow. The program will be implemented by a District designated Industrial Waste Inspector. The California Regional Water Quality Control Board will require annual inspections and implementation of FOG control measures as a part of this recommended program as food service establishments are the largest non-domestic contributors of fats, oil and grease to the District's wastewater collection system.

Under the FOG program, the Food Service Establishment (FSE) is to document that each grease trap/interceptor is maintained to prevent FOG from entering the District's collection system. Inspections are to be conducted using an inspection form which addresses best management practices for the prevention of FOG discharges to the sewer. FSEs must maintain records of FOG program maintenance and disposal. Restaurant protocols that eliminate FOG from entering inside drains are considered including employee training and documentation of grease trap/interceptor cleaning. Inspections of FOG program and maintenance records may be completed on-site during any hour of operation.

Additionally, less preventive maintenance and fewer sanitary sewer overflows caused by fats, oil and grease allow the District to perform other required infrastructure work.

### **(6.0.2) Guidelines for the Control of Fats, Oil & Grease**

As part of the District's FOG Program FSE's are provided the following guidelines as part of an inspection.

#### **General Measures**

- Train all restaurant/food service establishment staff on best management practices related to fat, oil and grease. Staff will be more willing to support an effort if they understand its basis. Trained staff will be more likely to implement best management practices and work to reduce grease discharges to the sewer.
- Train all staff how to properly dispose of grease or oils from cooking equipment and grease traps into a grease barrel or drum without spilling.
- Post "No Grease" signs above sinks. Signs serve as a constant reminder to staff of proper grease disposal practices. Reduction of grease entering the drain reduces the cleaning frequency of the grease removal device.
- "Dry wipe" pot, pans and kitchen equipment before cleaning. "Dry wiping" will reduce the amount of grease going into the grease removal devices and the sewer. This will reduce the cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the drain.
- Use absorbents such as paper towels to pick up oil and grease spills prior to mopping. Decreases the amount of grease that will be put down the drain. This reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
- Dispose of food waste as solid waste. Dispose of food waste to the trash. Solid waste disposal of food waste will reduce the frequency and cost of grease removal device cleaning.
- Use screens in sinks and floor drains to capture food waste and dispose of properly into the trash. Food waste can cause sewer lateral blockages. Proper disposal of food waste will protect laterals and sewer mains from blockages and overflows.
- Collect and recycle waste cooking oil. Excess oil is prevented from entering the grease removal device and the sewer. Reduction in the cleaning frequency of the grease removal device and less grease being passed to the sewer.

#### **(6.0.3) Grease Trap/Interceptor Maintenance/General**

- Complete grease trap or interceptor maintenance log to document cleaning intervals. Maintenance log can help your facility determine if cleaning frequency of the grease removal device is sufficient. A proper cleaning frequency will result in less grease accumulating in the lateral, fewer blockages and less pass through to the sewer lines.
- Inspect the Grease Trap daily and clean as needed using the appropriate equipment and place grease into barrel or drum. Contact barrel supplier when it is reaching 75% full for replacement.
- Clean grease traps at a frequency that will prevent the accumulation of grease or pass through to the sewer. Routine cleaning of the grease removal device ensures efficient

operations. Routine cleaning will prevent grease from passing through to the sewer lateral and from accumulating in the sewer mains.

- Use water temperatures less than 140° F in all sinks, especially in the pre-rinse sink. Temperatures above 140° F will dissolve grease, which will re-solidify in the sewer lines. Reduces costs for the energy to heat the water. Sewer lateral remains free of grease.
- Have a manager present during grease trap/interceptor cleaning to ensure the unit is properly serviced. The manager can ensure that the grease removal device is properly cleaned and no shortcuts are taken. Proper cleaning ensures that the grease removal device will function properly and efficiently.
- Do not store anything on or around the grease removal device that will block access. Proper maintenance is easier to complete if access to the grease removal device is not blocked. Routine maintenance is more likely to be performed if the grease removal device is easily accessible.
- Decanting or discharging of removed waste back into the grease interceptor from which the waste was removed or into any other grease interceptor, for the purpose of reducing the volume to be hauled is prohibited.

#### **(6.0.4) Outdoor Housekeeping/Storm Water Best Management Practices**

- Clean floor mats and exhaust filters and other equipment inside. Cleaning greasy equipment outside is one of the most common sources of fat, oil and grease in our storm drains. Grease and food waste will be properly disposed of and will not enter the storm drain where it will de-grade surface channel water quality.
- Sweep or mop outdoor surfaces. Sweeping and mopping outdoor surfaces will reduce non-storm water runoff and will save water. Elimination of non-storm water discharges that degrade water quality.
- Any water used to clean outside surfaces by contractors must be vacuumed up and properly disposed of to the sewer.
- Keep the area around the dumpster/trash storage clear of trash, debris, and grease. Debris, trash, and grease can be washed into the storm drain during the rainy season. Loose debris and trash will not enter the storm drain causing blockages and will not enter the waterways.

#### **(6.0.5) FOG Program Education**

Information on proper disposal of FOG and other SSO prevention measures, including house lateral maintenance, etc. is to be disseminated through brochures and flyers. The District would also utilize personal contacts with business owners by the District's appointed Industrial Waste Inspector. These methods have been proven to be very effective in relaying information on proper disposal of FOG and SSO prevention methods to FSEs. Expanded use of radio and television announcements and other aggressive means should be explored in the future, as well as a District website. A more aggressive public education and outreach program will be considered, if warranted.

**Section (6.1.0):**

**GREASE TRAPS/INTERCEPTORS IN FOOD SERVICE ESTABLISHMENTS/FACILITIES**

**Sub-Sections:**

**(6.1.1) Purpose.**

**(6.2.1) Conflict between these provisions and Uniform Plumbing Code.**

**(6.3.1) Definitions.**

**(6.4.1) Requirement for grease trap, grease interceptor, or other device.**

**(6.5.1) General regulations and procedures.**

**(6.0.1) Purpose.**

The purpose of this section is to set forth policies, procedures, and requirements for food service establishments governing the installation, maintenance, and use of grease traps, grease interceptors or other comparable devices which represent the best practicable control technology for fat, oil, and grease (FOG) removal, to control discharge of grease into the wastewater collection system and to establish procedures regarding implementation and enforcement of the regulations set forth in this chapter.

**(6.2.1) Conflict between these provisions and Uniform Plumbing Code.**

All new grease trap/interceptor installations shall be located outside the footprint of the food facility wherever possible. No garbage disposal connections are allowed. A separate grease trap interceptor is recommended for each dishwasher. All rules of the Uniform Plumbing Code must be followed. In the event of any conflict between the provisions of this chapter and the Uniform Plumbing Code, the provisions of this order shall prevail.

**(6.3.1) Definitions.**

“Fats, Oils, Grease” (FOG) means the collective fats, oils, and grease generated by an FSE. “Food service establishment” (FSE) ; means an establishment that prepares and/or sells food for consumption either on or off the premises, including, but not limited to, restaurants, sandwich shops, delicatessens, bakeries, or pizzerias. The term, as used in this chapter,

does not refer to food stores or establishments that do not prepare food on premises or process food in a manner so as to contribute grease to the sewer system.

“BWD” or “District” means the Borrego Water District.

“BWDSSMP” means Borrego Water District Sewer System Management Plan

“Gravity Grease Interceptor” (GGI) is a larger volume gravity grease removal system usually between 200-2000 gpm that is installed underground outside of a facility.

“Grease interceptor” means a device designed and installed to separate and retain deleterious, hazardous, or undesirable matter from normal wastes and to permit normal sewage or liquid wastes to discharge into the disposal terminal by gravity.

“Grease trap” means a device designed to retain grease from grease generating fixtures and piping.

“Hydro-mechanical Grease Interceptor” (HGI) previously referred to as a “grease trap” is a smaller volume grease removal system usually between 20 gpm and 100 gpm. Can be located inside or preferably outside the building and the food preparation areas.

#### **(6.4.1) Requirement for grease trap, grease interceptor, or other device.**

(a) A food service establishment, restaurant or any other business discharging grease, oil or other similar material shall have an operable Hydro-mechanical Grease Interceptor (HGI) or Gravity Grease Interceptor (GGI) as determined by the BWD and the County of San Diego (DEH for location outside of the building footprint of an FSE if logistically possible and Building Division for sizing on building permits). A properly sized interceptor or (HGI) shall be considered first, in conformity with the sizing guidelines set forth in the BWD grease trap policy. Should space limitations or other exceptional circumstances prevent their installation, BWD may grant exceptions to the requirement of grease traps or grease interceptors in this section. Generally, the BWD prohibits installation of a (GGI) unless exceptional circumstances require installation of a large volume gravity grease Interceptor (GGI). Jurisdiction for this requirement is mandated in the BWD Sewer Rules and Regulations Article VII section 7.4.5 titled Restaurant Grease Traps, which states: “Each restaurant connected to the sewer system shall properly install and maintain one or more grease traps to prevent prohibited substances, such as those described in Subsection 7.4.4 (the discharge of FOG in a concentration greater than 100 mg/l or containing substances which may solidify or become viscous at temperatures between 32 and 150 degrees Fahrenheit) from being discharged into the system. The District Engineer, (General Manager), or his authorized

representative shall determine (1.) the number, size, type and capacity of the grease traps for each restaurant (FSE), and (2) the method and frequency of cleaning of the traps to assure their proper working condition.

(b) All drains from food preparation and cleanup areas including, but not limited to, prewash sinks, floor drains, food waste disposal units, pots and pans sinks, scullery sinks, and garbage can wash areas shall be connected to such trap or interceptor. If the District determines it is not practical to install trap or interceptors on any of the aforementioned drains, disposal of any FOG is prohibited.

(c) Sizing Formula-The size of the grease trap/interceptor shall be as determined by the BWD on a case by case basis. Grease traps required by this chapter shall be no smaller than a **(75-gallon per minute flow rate and 150 lb capacity)**. The BWD uses the Plumbing and Drainage Institute (PDI) sizing method which calculates actual drainage loads, flow rates, drainage periods and maximum total capacity for all fixtures. A small volume tank (75 gpm/150 lb) installed outside of the building footprint with a barrel for professional sanitary disposal of the grease is ideal. If this cannot occur it must be placed outside of the food preparation area. The location will be determined by the District (BWD) as directed by the General Manager and the San Diego County Department of Environmental Health

(d) Existing grease traps, grease interceptors or similar devices.

(1) Any food service establishment or other business that, on or after January 1, 1999, installed grease traps, grease interceptors, or other grease pretreatment equipment to comply with the requirements of the BWDSSMP, shall not be required to upgrade such equipment until January 1, 2016, so long as such equipment remains in good working order. Should the grease trap, grease interceptor or other grease pretreatment equipment become nonoperational or fail to operate in good working order, a grease trap or interceptor meeting the standards set forth in this chapter shall be immediately installed.

(2) Notwithstanding the foregoing subsection (a)(1) of this section, any food service establishment or other business that, on or after, January 1, 1999, installed grease traps, grease interceptors, or other grease pretreatment equipment to comply with the requirements of the BWDSSMP, shall upgrade such equipment to meet the standards set forth in this chapter upon the change of ownership of the business in which the equipment is located, or upon the remodeling of the business in which the equipment is located. Remodeling of the business not requiring a building permit shall be exempted from the upgrade requirement. The remodeling shall not

be separated into phases for the purpose of avoiding the requirement of a building permit.

(e). Maintenance. The District will allow for in house maintenance however in cases where it has been determined maintenance is not adequate on more than one occasion, the District may require that the grease trap be cleaned professionally as needed.

**(6.5.1) General regulations and procedures.**

(a) When waste treatment is required pursuant to this chapter, an approved grease trap or grease interceptor complying with the provision of this chapter shall be installed in the waste line leading from sinks, drains, and other fixtures or equipment.

(b) A plumbing permit shall be obtained from the County of San Diego (Building Division) prior to the installation of a grease trap or grease interceptor. The food establishment must also obtain approval from the County of San Diego (Department of Environmental Health Food and Housing Division) to operate a food establishment in the County of San Diego.

(c) Each trap, interceptor, or comparable device required by this chapter shall have an approved volume not less than required by this chapter. Each new installation shall be required to install a sampling box. As stipulated in Section 7.4.4 D of the BWD administrative code the discharge of FOG in a concentration greater than 100 mg/l (ppm) is prohibited.

(d) Toilets, lavatories, and other sanitary fixtures shall not be connected to any grease trap, grease interceptor, or comparable device. Disposal of FOG or food waste into any toilet, lavatory and other sanitary fixture is prohibited.

(e) Location of Grease Traps, and Grease Interceptors.

(1) They shall be located outside buildings, unless a finding is made by the County of San Diego building inspector that the location of the building on the site or some other aspect of the use prevents an outside location and that placement within a building is not hazardous to public health and safety;

(2) They shall be located and maintained at all times so as to prevent electrical shock to workers/inspectors or electrical shorts in the FSE structure

(3) They shall also be located and maintained at all times so as to prevent the entrance of foreign materials, shall be easily accessible for cleaning inspection and removal of intercepted grease, and shall pose no hazard to public health or safety;



(3) If they are not designed in accordance with Uniform Plumbing Code (UPC) Section 711, they must be designed by a professional engineer, must be consistent with the standards of this chapter, and must be approved by BWD.

(f) Related Equipment.

(1) They shall be fitted with a standard service access cover or manhole. If a manhole is required, it shall be brought to grade and finished with standard manhole cover and ring;

(2) A sampling box shall be located on the discharge side.

(g) All discharging fixtures shall be individually trapped and vented in accordance with the UPC.

(h) They shall be constructed of durable materials and shall have a full-size gas-tight cover which can easily be removed.

(i) They shall not be installed until the type and/or model has been subjected to, and has fully complied with, tests acceptable to the chief building inspector. Where an existing grease trap or grease interceptor is found acceptable by the chief building inspector, such equipment will be allowed to remain in use. Whenever a grease trap or grease interceptor does not comply with the provisions of this chapter, the chief building inspector shall require corrective measures.

(j) Prohibited and/or Restricted Equipment.

(1) The installation and use of garbage grinders (disposals) in commercial-food establishments is prohibited;

(2) The connection of high-temperature/high-flow dishwashers to a grease trap or grease interceptor is prohibited; water temperature cannot exceed 140F. High water temperatures will enable dissolved grease to pass through the interceptor and solidify in the BWD wastewater collection system causing a potential blockage and/or a decreased flow rate.

(3) The use of enzymes or bacterial cultures designed to disperse grease is prohibited unless specifically approved in writing by the BWD.

(4) The use of degreasing chemicals and solvents entering the collecting system must be environmentally sustainable approved and will be monitored by BWD staff.

(k) After the effective date of the ordinance codified in this chapter, all establishments covered by this chapter shall install an approved grease trap or grease interceptor of sufficient size to prevent discharges into the sewer system.

(l) Maintenance-

(1) Traps and interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease. No collected grease shall be introduced into any public or private drainage piping.

(2) Any grease trap or grease interceptor required by this chapter shall be readily accessible for inspection and properly maintained to assure that accumulations of grease or oil do not impair its efficiency or transport grease or oil into the sewer system.

(3) All food service establishments or businesses required under this chapter to install and maintain a grease trap or grease interceptor shall maintain a maintenance record for the grease trap or grease interceptor, which shall be transmitted to the BWD on a quarterly basis. This record shall include the date, quantity of FOG removed from the FSE, name of the person/company who performed cleaning and the disposal site of the waste. All FSE owners must sign a waste manifest form before having a waste load transported by a permitted hauler. The FSE owner shall also keep copies of the manifest form for a period of at least three years, and make all manifest records available for inspection by the District during normal business hours. Licensed haulers or an approved recycling facility must be used to dispose of waste cooking oil.

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

All waste cooking oil and grease shall be collected and stored properly in recycling barrels or drums. Such recycling barrels or drums shall be maintained appropriately to ensure they do not leak.

The District will allow for in house maintenance however in cases where it has been determined maintenance is not adequate on more than one occasion, the District may require that the grease trap be cleaned professionally as needed.

Representatives from the FSE must be present to open and close the Grease Trap(s) during District inspections.

The record shall be posted in a conspicuous location and be available for review by the BWD's inspector at each routine inspection and at such other time as necessary to determine whether a particular establishment may be performing maintenance contrary to the provisions of this chapter.

(4) The BWD or its designee shall perform grease trap and grease interceptor inspections bi-annually, or more often at the discretion of the BWD should maintenance reports not be received or should a grease trap or grease interceptor fail to operate properly.

(5) In the event the BWD determines that a food service establishment or business required to install and maintain a grease trap either fails to maintain the maintenance record required by this section, or fails to maintain the grease trap as required by this section, the BWD may require the immediate installation of a grease interceptor.

(6) In the event a sewer spill, sewer main blockage or odor problem is reported and is determined to be caused by excessive grease generation BWD inspectors will investigate facilities contributing to the incident. A determination will be made as to which facilities contributed to the blockage, spill or odor problem. Subsequently more in-depth inspections of those facilities will be conducted where appropriate and additional requirements and/or procedures will be put in place. Where requirements are made for additional grease removal equipment or maintenance the facility (FSE) is given a date to comply. A notice of violation is issued once a facility has passed the final due date for compliance. Administrative hearings, permit revocation and termination of sewer service may occur for facilities who fail to comply.

(7) The District may require a FSE to construct and maintain in proper operating condition at the Food Service Establishment's sole expense, monitoring facilities and practices. The District may require a FSE to inspect and sample wastewater discharges of any Food Service Establishment to ascertain whether the intent of this Article is being met. The District may require the Food Service Establishment to submit waste analysis plans, contingency plans, and meet other necessary requirements to ensure proper operation and maintenance of the grease control device or grease interceptor and compliance with this Article.(m) Suspension or Termination of Health Permit- The BWD shall have the discretion

to request the County of San Diego Department of Environmental Health to terminate or cause to be terminated the health permit of any user if a violation of any provision of this chapter is found to cause a condition of contamination, pollution, nuisance, or other threat to public health or safety.

(n) Request for Ruling - If an applicant for a permit or the owner of a grease trap or grease interceptor disputes the interpretation or application of this chapter, he/she may request a written ruling from the General Manager of the BWD. The decision of the BWD General Manager shall be final for all purposes.

**\*\*End FOG Control Program\*\***