

Marshall County Fiscal Court

Fats, Oils & Grease (FOG) Management Program

Ordinance #16- 08

PURPOSE:

The Kentucky Department for Environmental Protection has required the Marshall County Fiscal Court (MCFC) to implement a Fats, Oils and Grease (FOG) Program. These guidelines are intended to facilitate and ensure compliance with MCFC's FOG Management Program. The accumulation of fats, oils and grease (FOG) within the collection system (sewer lines and pump stations) and the POTW is an increasingly frequent problem for MCFC. These accumulations can cause decreased carrying capacity due to congealed FOG inside the sewer pipes and pumps that make up the collection system. Once these lines become constricted, blockages in the collection system increase. Blockages in the collection system lead to Sanitary Sewer Overflows (SSOs) which significantly degrade the quality of local receiving waters and the environment(s) surrounding them. Aside from the environmental harm inflicted, SSOs can be potentially harmful to humans and animals as the wastewater expelled during an SSO is untreated and possibly containing dangerous contaminants. SSOs can also lead to sewer back-ups into homes and businesses connected to the MCFC Collection System. SSOs and the back-ups they cause are extremely costly to MCFC. The goal of the FOG Program is to prevent MCFC collection system blockages, obstructions and overflows caused by the contribution and accumulation of FOG from Food Service Establishments (FSEs) and other commercial establishments.

DEFINITIONS:

1. Additives: Include, but are not limited to products that contain solvents, emulsifiers, surfactants, caustics, acids, enzymes and bacteria intended to "break-down" the composition of discharged FOG causing it to more easily pass-through the Grease Control Equipment (GCE).
2. Best Management Practices (BMPs): schedules of activities, prohibitions of practices, maintenance procedures and other management practices that reduce the discharge of fats, oils and grease (FOG) to the building sewer, collection system and POTW.
3. Certified Waste Hauler/Plumber: Individuals having received certification from MCFC.
4. Fats, Oils & Grease (FOG): Organic polar compounds derived from animal and/or plant sources.
5. Food Service Establishment (FSE): Any establishment, business, facility or user engaged in preparing, serving or making food available for consumption. Single family residences are not a FSE. At the discretion of governing board, FSEs will be classified as follows:

Class 1: Day Care Facilities (NAICS 624410 & 624120), Delis (NAICS 445210), Beverage Bars engaged in the sale of cold-cut and microwaved sandwiches/subs with no frying or grilling on site (NAICS 722213), Ice Cream and Frozen Yogurt Shops (NAICS 311520), Coffee Shops (NAICS 7222135), Mobile Food Vendors (NAICS 722330) Commercial and Industrial Break Rooms. MCFC reserves the right to add or subtract categories from this class as it sees necessary.

Class 2: Limited Service Restaurants/Fast Food Restaurants (NAICS 722211), Caterers (NAICS 722320), Supermarkets/Grocery Stores (445110), Convenience Stores and Gasoline stores with Convenience Stores that engage in the on -site preparation of food (NAICS 445120 and 447110), Discount Department Stores that engage in the on-site preparation of food (NAICS 452112). MCFC reserves the right to add or subtract categories from this class as it sees necessary.

Class 3: Full Service Restaurants (NAICS 722110). MCFC reserves the right to add or subtract categories from this class as it sees necessary.

Class 4: Buffet and Cafeteria Facilities (NAICS 722212). MCFC reserves the right to add or subtract categories from this class as it sees necessary.

Class 5: Institutions: Schools (NAICS 611110), Hospitals (622110), Prisons (NAICS 922140), Nursing Care Facilities (NAICS 623110), etc. MCFC reserves the right to add or subtract categories from this class as it sees necessary.

(NOTE: Not all rules and regulations set forth in this FOG Management Program Policy Guide shall be applicable to Existing FSEs)

6. Exemption: A release from the requirement to install grease control equipment (GCE). Exemptions are granted based on on-site inspection of the facility requesting exemption.
7. Existing FSE: A FSE having already began service as an FSE prior to the effective date of the MCFC FOG Program.
8. Fryer Oil: Oil that is used and/or reused in fryers for the preparation of foods, such as fried chicken, french fries, etc. (i.e. waste oil, yellow grease).
9. Garbage Disposal: A kitchen appliance designed to grind food particles to a small enough size to dispose to a sink drain.
10. Grease (Brown): Fats, oils and grease that is discharged to the grease control equipment, or is from kitchen or food prep wastewater.
11. Grease (Yellow): Fats, oils and grease that has not been in contact or contaminated from other sources (water, wastewater, solid waste, etc.) and can be recycled.
12. Grease Control Equipment (GCE): Devices for separating and retaining FSE wastewater FOG prior to entering MCFC collection system. The GCE is constructed to separate and trap or hold fats, oils and grease substances from entering the collection system. GCE should only receive kitchen wastewater. Devices include grease interceptors, grease traps, or other devices approved by MCFC.
13. Grease Interceptor (GI): GCE identified as a large multi-compartment tank, usually 1,000 gallon to 2,000 gallon capacity with the proper inlet and outlet T's, and other necessary components, that provides FOG control for a FSE. No sanitary wastewater (black water) line shall be connected to the grease interceptor. Grease interceptors shall be located outside the FSE.
14. Grease Trap (GT): GCE identified as an "under the sink" trap, a small container with baffles or a floor trap. For a FSE approved to install a grease trap, the minimum size requirement is the equivalent of a 25-gallon per minute/50 pound capacity trap. Grease traps shall have flow control restrictor and a vent pipe.
15. Grease Recycle Container: A container used for the storage of yellow grease.
16. Multi-Unit Facility: A single building or facility with multiple separate but adjoining units, each with separate plumbing and possibly other utilities.
17. NAICS: North American Industry Classification System
18. New FSE: A FSE which begins service as a FSE after the effective date of The FOG Program. (Note: A FSE which has a change in ownership BUT not a change in use is NOT a New FSE.)

19. Series: (Grease Interceptors Installed in Series): Grease Interceptor tanks are installed one after another in a row and are connected by plumbing pipe.
20. Significant Remodeling: Modifications made to an existing FSE sufficient to require issuance of a building permit or the temporary closure of the FSE for building renovation or as deemed "significant remodeling".
21. Single Service Kitchen: A FSE that does not prepare food on-site (heat and serve only) and which uses only disposable service ware (utensils and dishes).
22. Tee or T (Influent and Effluent): A T-shaped pipe extending from the ground surface below grade into the grease interceptor to a depth allowing recovery (discharge) of the water layer located under the layer of FOG. Influent and Effluent T's are required to be made of PVC-schedule 40 or equivalent material. Influent T's should extend 2/3 of the grease interceptor water depth and effluent T's should extend to within 12" to 15" of the bottom of the interceptor tank to prevent short-circuiting.
23. User: Any person that contributes, causes or permits the contribution or introduction of wastewater or pollutants into the collection system whether intentional or unintentional and whether direct or indirect.
24. Water (Black): Wastewater containing human waste from sanitary fixtures such as toilets and urinals.
25. Water (Gray): Wastewater other than black water as defined in this section.
26. Sanitary Sewer Overflow (SSO): A condition whereby untreated sewage is released into the environment prior to reaching treatment facilities thereby escaping wastewater treatment.

RESPONSIBILITIES:

1. All potential Existing FSEs which discharge to the collection system will receive a FSE FOG Discharge Permit Application.
2. Potential New FSEs applying for sanitary sewer service will receive an FSE FOG Discharge Permit Application from MCFC.
3. FSEs which receive a FSE FOG Discharge Permit Application, shall complete and return the form to the governing district.

(NOTE: Failure to complete and submit the FSE FOG Discharge Permit Application is a violation of the FOG Management Program and shall make the FSE subject to enforcement actions and/or fines. Those FSEs receiving an application, which feel they should be exempted from all or some portion(s) of the FOG Management Program shall contact the district and request a FOG Management Exemption Form.

4. All FSE FOG Discharge Permit Applications which it receives. Each FSE will receive a classification and an appropriate FOG Discharge Permit.
5. FSE FOG Discharge Permits will be valid for one (1) year with the option to renew the Permit annually.
6. Each FSE receiving a FOG Discharge Permit will be required to pay an annual fee of \$25 which includes an annual permit fee and annual inspection fee (whether an inspection is performed or not

during that year). If there is more than one (1) FOG inspection per year at any given FSE due to that FSE's failure to comply, then that FSE will be charged an inspection fee of \$25 for each additional inspection over the annual inspection. FOG Discharge Permit and inspection fees shall be applied to the FSE's sewer service bill.

7. FSEs under the jurisdiction of MCFC shall abide by the rules, regulations and requirements set forth in its FOG Discharge Permit, this FOG Program Policy Guide and any other approved laws.
8. Waste/Wastewater removed from FSE's GCE shall be disposed of in a manner that is in accordance with all applicable federal, state and local laws.
9. FSEs shall work to ensure that measures are in place to prevent FOG discharges to the collection system in amounts that contribute to a blockage.
10. FSEs that permanently close for business shall completely evacuate and clean all GIs on the premises and shall fill the GIs with water in order to prevent odors, deterioration and shifting.

REQUIREMENTS:

1. GCE shall be installed and maintained at the expense of the FSE.
2. GCE shall be designed in accordance with the provisions of the FOG Management Policy and the following guidelines:
 - A. Final GCE sizing determination will be made by the FSE's engineer, architect or contractor (with MCFC's approval) based on criteria such as, but not limited to, flow rate, discharge rate, fixture ratings and wastewater retention time.
 - B. MINIMUM acceptable size of GCE for each FSE classification will be as follows:

Class 1: 25 gallons per minute/50 pound GT
Class 2: 1,000 gallon GI
Class 3: 1,000 gallon GI
Class 4: 1,000 gallon GI
Class 5: 2,000 gallon GI or two 1,000 gallon GI in series
 - C. There will be a review of GCE sizing information received from the FSE's engineer, architect or contractor. MCFC will make a decision to approve, or require alteration(s) to, the FSE's GCE.
 - D. If GCEs are installed in a series, they shall be installed so that the inlet invert of each successive tank shall be a minimum of 2 inches below the outlet invert of the preceding tank.
3. New FSEs (class 2-5), as well as existing FSE facilities (class 2-5) undergoing significant remodeling, shall install and maintain, at a minimum, an approved 1,000 gallon grease interceptor (GI) located outside the FSE building. Grease Interceptors shall be constructed of durable materials able to withstand abrupt and extreme changes in temperature as well any anticipated load that may be placed upon the GI. GIs shall be water and gas tight. GIs shall have access provided by at least one (1) manhole over each GI division (baffle chamber) to allow for inspection and cleaning of the GI and its internal pipes and fittings.
4. New FSEs (class 1), as well as existing facilities (class 1) undergoing significant remodeling, shall install and maintain, at a minimum, a GT whose size is rated at 25 gallons per minute/50 pounds capacity.
5. New construction of FSEs shall have separate sanitary (restroom) and kitchen process lines. Kitchen process lines shall be plumbed to appropriately sized GCE. Kitchen process lines and sanitary lines shall not combine prior to the discharge of the GCE.

6. When an existing building and/or building's plumbing is being renovated and the facility is an FSE, internal plumbing shall be constructed/reconstructed to separate sanitary (restroom) flow from kitchen process flow. These lines shall be approved by MCFC and discharged separately from the building, not to combine prior to a GCE discharge.
7. New multi-unit facility, or "strip mall" facility, owners shall contact the governing district prior to conducting private plumbing work at the multi-unit facility site. Each FSE within a multi-unit facility shall have separate private wastewater lines for sanitary and kitchen process wastewater. Each FSE's kitchen process wastewater line shall discharge to its own appropriately sized GCE.
8. Plans will be evaluated for any new FSE (class 1-5), or existing FSE (class 1-5) undergoing significant remodeling, proposing to discharge to collections system as part of the building permit acquisition process.
 - A. Two (2) sets of the proposed FSE facility plans shall be submitted to the governing district.
 - B. Facility plans shall include, at a minimum, the following sheets: floor plan detailing kitchen prep equipment and showing how grease waste lines discharge to GCE, plumbing sheets and GCE specifications sheet(s).
 - C. Plumbing sheets shall include identification of all cooking and food preparation equipment (i.e. fryers, grills, woks, produce sinks, etc.); the number and size(s) of dishwashers, sinks, floor drains and other plumbing fixtures; grease waste bearing plumbing lines, the location of GCE and specifications for GCE.
 - D. Plans will be approved the plan(s) or recommend changes as it deems necessary in order to most efficiently prevent the discharge of FOG from the FSE to its collections system.
 - E. If the plans are approved then the FSE will be notified of its approval.
 - F. Contact the appropriate governing district at least forty-eight (48) hours prior to installation of the GCE. (The FSE's GCE must be inspected prior to installation or it will not be approved).
 - G. If the installed GCE is approved then the FSE will be notified of its acceptance.
9. New FSEs and Existing FSEs undergoing significant remodeling, having a dishwasher, shall cause to be installed and utilize a pre-rinse sink/station for the cleaning of ware prior to loading in the dishwasher.
10. Single service kitchens with no onsite food preparation (heat and serve only) and which use only disposable service ware (utensils) wishing to be excused from installing and/or maintaining GCE, may complete and submit a FOG Management Exemption Form. However, if kitchen practices change in an exempted FSE or an exempted FSE is found to directly cause or contribute to a grease blockage or SSO in collections system then the exemption will be null and void.

11. In the event that an existing FSE's GCE is deemed to be undersized and/or substandard in design, the FSE owner will be notified of the deficiencies in writing. The FSE owner will see into the required improvements via the administration of a compliance schedule.
12. Certified Waste Hauler Program
 - A. All GCE waste haulers wishing to transport GCE waste to a Wastewater Treatment Plant (WWTP) shall:
 - i. Obtain and maintain a certified waste hauler permit.
 - ii. Agree to be forthright with information regarding FOG removed at FSEs in the format required by the governing district.
 - iii. Agree to completely evacuate all FOG from GCE when servicing such GCE at FSEs (unless prior approval is granted).
 - iv. Agree to provide additional tanker(s) so that a FSE's GCE is fully evacuated within a 24-hour period if the volume in the GCE is greater than the tanker capacity.
13. FSEs shall observe and practice Best Management Practices (BMPs) for controlling the discharge of FOG from their facility.
14. Grease Interceptor (GI) and Grease Trap (GT) Cleaning/Maintenance Requirements
 - A. Cleaning/Pumping: The user at the user's expense shall maintain all grease traps and interceptors. Maintenance of 'under the sink' grease traps shall include the removal of all fats, oils, and grease from the detention compartment of the trap. Removal is usually accomplished by hand-dipping or scooping the collected grease from the trap. Maintenance of grease interceptors shall include the complete removal of all contents, including floating materials, wastewater and bottom sludges or solids. Decanting or discharging removed wastewater back into the grease interceptor from which the waste was removed for the purpose of reducing the volume to be disposed is prohibited.
 - B. Cleaning/ Pumping Frequency: 'Under the sink' grease traps must be cleaned no less than once every two weeks. If grease traps are more than 50% full when cleaned, the frequency shall be increased. Grease interceptors shall be pumped out completely a minimum of once every 90 days or more frequently as needed to prevent carry-over of grease into the sanitary sewer collection system, unless it can be demonstrated that the pumping frequency can be extended past the 90-day period. At no time shall the total accumulations of surface FOG (including floating solids) and settled solids within the GI constitute more than 25% of the GI's total liquid depth. Measurement of solids greater than or equal to 25% shall be deemed non-compliance with the FOG Management program. Measurement of solids for compliance shall be conducted by a sludge judge or electronic measuring device.
 - C. Disposal of Grease Interceptor Waste: All waste removed from each grease interceptor must be disposed of at a facility approved to receive such waste. Under no circumstances shall pumpage be returned to any private or public portion of the sanitary sewer collection system.
 - D. Additives: Any additive(s) placed into the grease interceptor, grease trap, or building discharge line system at a constant, regular, or scheduled basis is prohibited. Such additives shall include, but not be limited to, chemicals, acids, caustics, enzymes, commercially available bacteria, emulsifiers, surfactants, or other additive designed to absorb, purge, consume, treat, or otherwise eliminate fats, oils, and grease. Written approval may be given under specific circumstances; however, approved use may be discontinued at any time if grease is found downstream of the FSE.
 - E. Chemical Treatment: Chemical treatments such as drain cleaners, acids and other chemicals designed to dissolve or remove grease shall not be allowed to enter the grease interceptor.

- F. Manifest: All pumpage from grease interceptors must be tracked by manifest. All FSEs having their grease interceptor pumped out shall properly fill out a FSE FOG Waste Manifest which will confirm pumping, hauling, and disposal of waste. The manifest shall be kept with the FSE's FOG related records for a minimum of three (3) years and made immediately available for inspection. Any additional manifest(s) required by the hauler or the disposal site shall be properly submitted in accordance with all applicable Federal, State and/or local laws.
- G. Maintenance Log: A GCE Maintenance Log indicating each pumping/cleaning of each grease trap shall be maintained by each FSE for a minimum of three (3) years. This log shall include at a minimum the date, name of person performing the maintenance, the responsible witness' name and signature, volume removed and disposal method/location. The log(s) shall be made immediately available for inspection.

15. Prohibitions

- A. New FSEs and Existing FSEs undergoing significant remodeling shall not allow to have plumbed to a Grease Trap the following kitchen appliances (unless otherwise allowed): dishwashers.
- B. New FSEs and Existing FSEs undergoing significant remodeling shall not allow garbage disposal(s) to be plumbed to their kitchen process flow nor to their black water (sanitary flow) (unless otherwise allowed).
- C. FSEs shall not introduce "additives" to their waste stream and/or GCE as a grease management and control mechanism (unless otherwise allowed).
- D. Extremely hot liquids shall not be introduced to GCE for the purpose of breaking down FOG. Unless specific permission is granted.
- E. Fryer oil shall not be discharged down any drain.
- F. Cleaning of vent hoods and range hoods shall be done in accordance with all applicable Federal, State and local laws. Wastewater from the cleaning of an FSE's vent hoods/range hoods shall not be discharged directly to a sanitary sewer line.
- G. FSEs shall remain subject to all prohibitions set forth in Applicable City Sewer Use Ordinance(s) as well.
- H. Waste/Wastewater removed from GCE shall not be discharged to a private or public sewer.

16. Inspection and Monitoring

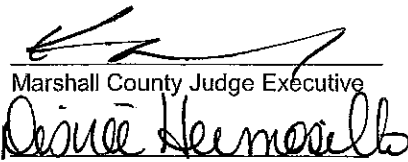
- A. District Rep. shall have the right to enter the premises of all FSEs unannounced (at reasonable times) in order to determine whether the FSE is complying with the rules, regulations and requirements set forth in its FOG Discharge Permit, this policy and all other Rules and Regulations.
- B. The district shall have the right to observe/inspect FSE's GCE and their contents.
- C. The district shall have the right to observe/inspect any and all FSE records related to, and/or deemed necessary to determine compliance with, the FOG program.
- D. FSEs shall maintain all FOG-related records on-site for a minimum of three (3) years.

17. Violations and Enforcement Action

- A. Violations of an FSE's FOG Discharge Permit, includes, but is not limited to; failure to clean or pump grease control equipment, failure to maintain grease control equipment including installation of properly functioning effluent-T and baffle, failure to install grease control equipment, failure to control FOG discharge from the FSE, failure to produce and maintain required FOG-related documentation, failure to certify the grease interceptor or trap, responsible for causing a sewer main obstruction, responsible for causing a sanitary sewer overflow, and use of additives so that FOG is diluted and pushed downstream of the FSE.
- B. When it is determined that a grease interceptor or trap is in need of installation, pumping, repairs, maintenance, or replacement, a non-compliance notification or notice of violation (NOV) will be issued stating the nature of the violation(s) and timeframe for corrective actions.
- C. If the FSE fails to initiate action in response to a non-compliance notification or NOV, a second notice will be issued and additional fees will be assessed. Fees may include costs associated with service calls for sewer line blockages, line cleaning, camera trucks, line and pump repairs, including all labor, materials and equipment. Further non-compliance will result in escalation of enforcement action and can include discontinuance of service.
- D. Immediate discontinuance of service of water and/or wastewater service may be issued if the facility presents an imminent endangerment to the health or welfare of persons or the environment, causes blockages, sanitary sewer overflows, or excessive maintenance to the sanitary sewer system, causes significant interference with the wastewater treatment plant, or causes a violation to any condition of its KPDES permit. Service shall be reinstated when such conditions have been eliminated and all associated fines have been paid in full.
- E. In addition to any inspection or violation fees, any user who is found to have violated this policy may be assessed an administrative penalty not to exceed one thousand dollars (\$1,000) per violation. Each day on which non-compliance shall occur or continue shall be deemed a separate and distinct violation. Such assessment and all other fees may be added to the FSE's next scheduled water/wastewater bill.
- F. If inspections and field investigations determine that any FOG interference or blockage in the sanitary sewer system or wastewater treatment plant is caused by a particular FSE, that FSE shall reimburse for all labor, equipment, materials, and disposal costs incurred to clean the interference or blockage. The charges will be added to the FSE's water/wastewater bill. Failure to reimburse may result in termination of water and/or wastewater service.

This Ordinance will take effect upon enactment by the Fiscal Court.

APPROVED this 2 day of August, 2016.



Marshall County Judge Executive
Denise Heemselb
Marshall Fiscal Court Clerk

First Reading: July 11, 2016
Second Reading 8-2-2016

Marshall County Fiscal Court

Fats, Oils & Grease (FOG) Management Program Best Management Practices (BMPs)

The most effective way to avoid Fats, Oils and Grease (FOG) related issues in the collection system and Grease Control Equipment (GCE) is to prevent FOG from ever entering the GCE.

All Food Service Establishments (FSEs) observe and implement Best Management Practices (BMPs) in its operation in order to minimize the discharge of FOG to the collection system. BMPs may include, but are not limited to, the following:

- Segregate and collect waste cooking oil, grill scrapings, pan drippings, etc.
- Dispose of yellow grease in a separate bin for recycling.
- Dispose of brown grease in trash bins or covered collection containers.
- Scrape food scraps from dishes and utensils into trash before washing.
- Dry-wipe pots, pans, cookware, work areas, etc. before washing.
- Place waste FOG into containers that will prevent the substances from leaking into the floor and possibly making its way into floor drains.
- Cover floor drains with fine screens and empty them into the trash as needed.
- Use a strainer in the sink(s) to prevent solid particles from passing into the drain(s).
- Keep absorbent materials and pads on the floor near work areas to prevent any spilled/dripped FOG from reaching the floor drains.
- Clean-up grease spills/drips ASAP with absorbent materials and discard the materials into the trash.
- Clean grease traps as often as possible using proper cleaning procedures.
- Don't pour liquid FOG or liquid foods down the drain.