

Policy and Procedure Manual

Henderson Water Utility

Subject <i>Fats, Oils and Grease Management</i>	Number <i>F-500</i>
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Effective Date <i>15 February 2016</i>	Revision No. <i>0</i>	Revision Date <i>15 February 2016</i>
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1.0 POLICY STATEMENT: The City Code of Ordinances contains the following sections:

Chapter 23-27 Use of public sewers

(e) Prohibited discharges into sanitary sewer and combined sewer. No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will interfere with performance of the POTW. These general prohibitions apply to all such users of a POTW whether or not the user is subject to national categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements. A user shall not contribute the following substances to the POTW:

.....

(4) Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater facilities.

Chapter 23-98 Water and sewer charges

(a) Special rates:

(1) If the sewage, water or other liquid wastes being discharged into the sewers from any building or premises is determined by the city to contain unduly high concentrations of any substances which add to the operating cost of the sewer facilities of the city, the city may establish special rates or charges as to such class of building or premises, or the city may require the owner or other interested party to specially treat such sewage, water or other liquid wastes before it is discharged into the sewers.

(2) The city may establish rules and regulations regarding the use of the sewer facilities which may control the amount and characteristics of wastes permitted to be discharged therein where such quantities or characteristics may be injurious to the works or deleterious to their operation.

Environmental regulations and best practices require the Henderson Water Utility (HWU) to prevent sewer system blockages and obstruction in its sewer system caused by fats, oils and grease (FOG). Pollution discharge limits are specified in the City Code of Ordinances.

The management of an effective FOG program with commercial and industrial facilities, and food service establishments (FSEs), will help to prevent sewer system overflows and will reduce operational costs to HWU.

2.0 SCOPE AND IMPLEMENTATION

2.1 DEFINITIONS:

- a) *HWU*: Henderson Water Utility, a division of the City of Henderson, Kentucky.
- b) *Fats, Oils & Grease (FOG)*: Organic polar compounds derived from animal and/or plant sources. FOG may be referred to as "grease" or "greases" herein.
- c) *Food Service Establishment (FSE)*: Any establishment, business or facility engaged in preparing, serving, packaging, or making food available for sale or consumption. Single family residences are not an FSE, however, multi-residential facilities may be considered a FSE at the discretion of HWU. Food Service Establishments will be classified as follows:

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- i. Class 1: Deli - engaged in the sale of cold-cut and micro-waved sandwiches/subs with no frying or grilling on site; Coffee Shops, Ice Cream shops and beverage bars as defined by NAICS 72213; Mobile Food Vendors as defined by NAICS 722330.
 - ii. Class 2: Limited-Service Restaurants (a.k.a. Fast Food Facilities) as defined by NAICS 722211; Caterers as defined by NAICS 722320.
 - iii. Class 3: Full Service Restaurants as defined by NAICS 722110
 - iv. Class 4: Buffet and Cafeteria Facilities as defined by NAICS 72212
 - v. Class 5: Institutions (Schools, Hospitals, Prisons, etc) as defined by NAICS 722310 but not to exclude self-run operations.
- d) *Brown Grease*: Fats, oils and grease that is discharged to grease control equipment.
- e) *Yellow Grease*: Fats, oils and grease that has not been in contact or contaminated from other sources (water, wastewater, solid waste, etc.) and can be recycled.
- f) *Grease Control Equipment (GCE)*: A device for separating and retaining wastewater FOG prior to wastewater exiting the FSE and entering HWU's wastewater collection system. GCE is constructed so as to separate and trap or hold fats, oils and grease substances. These devices include grease interceptors, grease traps, or other devices approved by HWU.
- g) *Grease Interceptor*: Grease Control Equipment consisting of a large tank, usually 1,000 gallon to 2,000 gallon capacity, which provides FOG control for an FSE. Grease interceptors will be located outside the FSE, unless a variance request has been granted.
- h) *Grease Trap*: Grease Control Equipment identified as an "under the sink" trap, a small container with baffles, or a floor trap. For an FSE approved to install a grease trap, the minimum size requirement is the equivalent of a 20-gallon per minute/40 pound capacity trap. All grease traps will have flow control restrictor and shall be vented.
- i) *Grease Recycle Bin or Container*: Container used for the storage of yellow grease.
- j) *North American Industry Classification System (NAICS)*: A system developed by the U.S. Office of Management and Budget that is used to classify business establishments based on the type of industry or process at a facility. The website is found at <http://www.census.gov/epcd/www/naics.html>.
- k) *Series Interceptors*: Grease interceptor tanks installed one after another in a row and connected by a pipe.
- l) *Tee (Influent & Effluent)*: A tee-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 & Effluent tees are recommended to be made of schedule 40 PVC or equivalent material, and extend to within 12" to 15" of the bottom of the interceptor.
- m) *Black Water*: Wastewater containing human waste, from sanitary fixtures such as toilets and urinals.
- n) *Gray Water*: Refers to all other wastewater other than black water as defined in this section.

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- o) *General Manager*: The person appointed by the Water and Sewer Commission under section 23-43 of the City Code of Ordinances, to direct the employees of HWU. Where this policy refers to the General Manager, it may be understood to include a designated HWU employee to whom enforcement duties have been assigned.

2.2 GENERAL REQUIREMENTS:

- a) All existing Food Service Establishments (FSEs) are required to have grease control equipment (GCE) installed, maintained and operating properly, in accordance with this FOG Management Policy.
- b) All FSEs will be required to maintain records of cleaning and maintenance of GCE. GCE maintenance records include, at a minimum, the date of cleaning/maintenance, company or person conducting the cleaning/maintenance, volume (in gallons) of grease and wastewater removed, and final disposal location. A completed manifest from a grease waste hauler, that includes all the minimum information mentioned above, will meet this requirement.
- c) GCE maintenance records must be available at the FSE premises so they can be provided to HWU or their representative, and/or the Health Department. The FSE shall maintain GCE maintenance records for three (3) years.
- d) No FSE shall discharge oil and grease in concentrations that exceed the HWU limits for oil and grease.
- e) Owners of Commercial Property may be held responsible for wastewater discharges from a leaseholder on their property. Enforcement action, billing, etc., will be to the person or entity in whose name the water/wastewater service is held.
- f) Grease Control Equipment Certification Requirement: All establishments with grease control equipment must have their grease interceptor or grease trap inspected and certified annually by a HWU-certified grease waste hauler or plumber. If a grease interceptor or grease trap appears to be in good working order and condition and is appropriate in size, configuration, and ability to separate and retain wastewater FOG prior to wastewater exiting the FSE, then the grease control equipment will be deemed to have passed the certification requirement, and no further action is required until the next annual inspection. If a grease interceptor or grease trap is not in good working order or condition, or is not appropriate in size and configuration, or is otherwise not able to separate and retain wastewater FOG prior to wastewater exiting the FSE, then the grease control equipment will be deemed to have failed the certification requirement, and a corrective action response will be required from the FSE owner or authorized representative. Completed certification forms (Grease Interceptor Certification - Form A, or Grease Trap Certification - Form B) must be completed and signed by the grease waste hauler or plumber, as well as the FSE owner or authorized representative, and submitted to HWU. The original certification form must be submitted to:

HWU
 Attn: FOG Program
 230 North Alvasia Street
 Henderson, Kentucky 42420

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- g) Failure of a Grease Interceptor or Grease Trap Certification: The FSE owner or authorized representative is responsible for including detailed "Corrective Action Response" information on the Grease Interceptor Certification form, or the Grease Trap Certification form that is submitted to HWU. If necessary, additional pages may be attached to the certification form. At a minimum, the "Corrective Action Response" information must include the reason for the failed certification, what corrective action will be taken to correct the problem, and the date the corrective action will be completed.
- h) FSEs shall observe Best Management Practices (BMPs) for controlling the discharge of FOG from their facility. BMPs are listed in Attachment 1 to this policy.
- i) FSEs shall dispose of yellow grease in an approved container or recycle container, and the contents shall not be discharged to any sanitary sewer line, storm water inlet, drain or conveyance. Yellow grease, or oils or grease, poured or discharged into the FSE sewer lines or HWU's sewer system is a violation of the HWU Sewer Use Ordinance.
- j) It shall be a violation to push or flush the non-water portion of the contents of GCE into the public sewer.

2.3 APPROVED GREASE WASTE HAULER LIST:

To ensure proper maintenance of grease control equipment and proper disposal of the FOG waste, HWU will maintain an "Approved Grease Waste Haulers List". Criteria for the grease waste hauler to be placed on the "Approved Grease Waste Haulers List" include, but are not limited to, the following:

- Signature of the grease waste hauler company's authorized representative and submittal to HWU of a completed "HWU Approved Grease Waste Hauler Agreement Form".
- The grease waste hauler agreement will include grease waste hauler reporting requirements to HWU, and making records available to HWU personnel, or their authorized representative. Failure to comply with any provision of the grease waste hauler agreement will result in removal of the grease waste hauler from the "Approved Grease Waste Haulers List", and/or enforcement action.
- Attendance at the HWU Grease Control Equipment Certification Class.
- HWU, at the discretion of the Water & Sewer Commission, may implement a FOG Treatment, Disposal and Resource Recovery Plan, in the form of a Request for Proposals (RFP) for the treatment and disposal of FOG waste generated from area food service establishments. The successful RFP respondent would provide some form of beneficial reuse of the FOG waste that is treated. Also, the RFP may include a cost estimate for maintenance (complete pump of grease interceptors and grease traps) and certification of the grease control equipment of all food service establishment grease interceptors and grease traps in the HWU service area. The results of the RFP may provide a single source for GCE pumping, GCE certification, FOG treatment, FOG disposal, and reporting to HWU. The total cost of the food service establishment GCE pumping, and FOG treatment and disposal will be the same price or at a lower price than the average market cost of GCE Maintenance.

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2.4 GREASE CONTROL EQUIPMENT INSTALLATION REQUIREMENTS:

- a) *New Food Service Establishment or Upgrading of Existing Food Service Establishment:* Any new FSE, or upgrading of an existing FSE, shall require the installation of a grease interceptor.

For purposes of this section, "Upgrading" of an existing FSE shall include cumulative increases in seating capacity of the FSE equal to or greater than 20 percent above the original seating capacity; significant changes to internal plumbing; or changes in Class as defined in section 2.1 (c) above.

New or upgraded food service establishments shall submit a FOG plan to HWU for approval. The FOG plan shall include identification of all cooking and food preparation equipment (i.e. fryers, grills, woks, etc.); the number and size of dishwashers, sinks, floor drains, and other plumbing fixtures; type of FSE classification; type of food to be prepared, served, or packaged; and plans for the grease interceptor dimensions and location. HWU will review the FOG plan and grease interceptor sizing, recommend changes, and issue a permit in accordance with the approved plan.

An FSE's internal plumbing shall be constructed to separate sanitary wastewater flow (restroom/bath/shower) from kitchen process flow. Sanitary flow and kitchen process discharges shall be approved separately by HWU and shall discharge from the building separately. The kitchen process line(s) shall be plumbed to appropriately sized GCE. Kitchen process lines and sanitary lines may combine prior to entering the public sewer; however the lines cannot be combined until after the GCE.

- b) *Existing Food Service Establishment:* All existing FSEs shall submit plans and install at the owner's expense a grease interceptor in accordance with the HWU FOG Management Policy, within ninety (90) days after notification by HWU, if and when HWU determines that a potential fats, oils and grease problem exists which is capable of causing interference, damage, or operational problems to structures or equipment in the HWU wastewater system. HWU shall retain the right to inspect and approve installation of the grease interceptor.
- c) *Recommended Standards for New Multi-Unit Facilities:*
- 1) New multi-unit facilities (strip malls or strip centers) should consider installing two separate sewer line connections for each unit within the multi-unit facility. One sewer line would be for sanitary wastewater and one sewer line for the kitchen area, or potential kitchen area, of each unit.
 - 2) The kitchen area, or potential kitchen area, sewer line should be connected to floor drains in the specified kitchen area, and connect, or be able to connect, to other food service establishment kitchen fixtures, such as 3-compartment sinks, 2-compartment sinks, or pre-rinse, mop and hand wash sinks. New multi-unit or "strip mall" facility owners should contact HWU prior to conducting private plumbing work at the multi-unit facility site. Multi-unit facility owners, or their designated contractor, should have plans for separate private wastewater lines for kitchen and sanitary wastewater for each unit. In addition, the plans should identify

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"stub-out" locations to accommodate a minimum 1,000 gallon grease interceptor for each unit of the multi-unit facility.

- 3) HWU may allow sharing of grease interceptors by FSEs, with HWU approval of the grease interceptor sizing.
 - 4) New multi-unit facility owners should consider suitable physical property space and sewer gradient that will be conducive to the installation of an exterior, in-ground grease interceptor when determining the building location.
 - 5) FSEs located in a new multi-unit facility shall have a minimum of a 1,000 gallon grease interceptor installed, unless that FSE is identified as a Class 1 facility. Class 1 FSE facilities are exempt from the requirements to install grease interceptors. Sanitary wastewater, or black water, shall not be connected to GCE.
- d) *Variance to Grease Interceptor Installation:* At the discretion of the General Manager, some FSEs may receive a variance from the required installation of a grease interceptor.
- e) *Approval of Grease Control Equipment:* All new FSEs and FSEs that have upgraded their facilities must contact HWU for final approval of the grease control equipment. This will include onsite inspection of the grease control equipment by HWU. Failure of the FSE to contact HWU to conduct the inspection of the new GCE will result in escalation of enforcement action.
- f) *Grease Control Equipment Sizing:*

Unless otherwise stipulated by HWU, minimum acceptable size of grease control equipment for each FSE Classification will be as follows:

Class 1: Deli, Ice Cream shops, Beverage Bars, Coffee Shops, Mobile Food Vendors - 25 gpm/50 pound Grease Trap

Class 2: Limited-Service Restaurants / Caterers - 1,000 gallon Grease Interceptor

Class 3: Full Service Restaurants - 1,000 gallon Grease Interceptor

Class 4: Buffet and Cafeteria Facilities - 1,500 gallon Grease Interceptor

Class 5: Institutions (School, Hospital, Jail/Prison, etc.) - 2,000 gallon Grease Interceptor, or two 1,000 gallon units installed in series.

The grease control equipment minimum acceptable size for the above listed FSE classifications (Class 1 through 5) must be met. The FSE shall submit calculations based on code, industry standard or best practices, if different sizes are proposed. Sizing of the GCE is the sole responsibility of the FSE.

For discharges from a dishwasher, the GCE size shall be increased a minimum of thirty percent (30%) of the minimum sizing requirement, to prevent short-circuiting when the extremely hot water from a dishwasher is introduced to the GCE.

HWU will review GCE sizing information received from the completed Grease Control Inquiry Form or the FSE's engineer, architect or contractor. HWU will make a decision to approve or require additional grease interceptor volume based on the type of FSE, the number of fixture units, and additional calculations.

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Grease interceptor capacity should not exceed 2,000 gallons for each interceptor tank. In the event that the grease interceptor calculated capacity exceeds 2,000 gallons, the FSE shall install additional interceptors in series. Grease interceptors that are installed in series shall be installed in such a manner to ensure positive flow between the tanks at all times, i.e., tanks 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.

- g) *Grease Control Equipment Specifications:* Grease Control Equipment must remove fats, oils, & grease at or below the HWU pollution discharge limit of 150 mg/L (City Code section 23-30). Failure to comply will require enforcement action in accordance with the Enforcement Response Plan.
- h) *Grease Interceptor Design*
 - 1) Piping Design
 - a. The inlet and outlet piping shall have 2-way cleanout tees installed.
 - b. The inlet piping shall enter the receiving chamber 2-1/2" above the invert of the outlet piping.
 - c. On the inlet pipe, inside the receiving chamber, a sanitary tee of the same size pipe in the vertical position with the top unplugged shall be provided as a turndown. To provide air circulation and to prevent "air lock", a pipe nipple installed in the top tee shall extend to a minimum of 6" clearance from the interceptor ceiling, but not less than the inlet pipe diameter. A pipe installed in the bottom of the tee shall extend to a point 2/3 the depth of the tank. The inlet tee should be made of Schedule 40 PVC or equivalent material. See Figure 1.
 - d. The outlet piping shall be no smaller than the inlet piping, but in no case smaller than 4" ID.
 - e. The outlet piping shall extend to 12" above the floor of the interceptor and shall be made of a non-collapsible material. Minimum requirement for outlet piping is Schedule 40 PVC.
 - f. The outlet piping shall contain a tee installed vertically with a pipe nipple installed in the top of the tee to extend to a minimum of 6" clearance from the interceptor ceiling, but not less than the pipe diameter, with the top open. Minimum requirement for the outlet tee is Schedule 40 PVC. See Figure 1.
 - 2) Baffles
 - a. The grease interceptor shall have a non-flexing (i.e. concrete, steel, etc.) baffle the full width of the interceptor, sealed to the walls and the floor, and extend from the floor to within 6" of the ceiling. The baffle shall have an inverted 90 degree sweep fitting at least equal in diameter size to the inlet piping, but in no case less than 6" ID. The bottom of the sweep shall be placed in the vertical position in the inlet compartment 12" above the floor. The sweep shall rise to the horizontal portion, which shall extend through the baffle into the outlet compartment. The baffle wall shall be sealed to the sweep. See Figure 1.

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- b. The inlet compartment shall be $\frac{2}{3}$ of the total liquid capacity with the outlet compartment at $\frac{1}{3}$ liquid capacity of the interceptor.

3) Access Openings (Manholes)

- a. Access to grease interceptors shall be provided by a minimum of one access opening per baffle chamber, of 24-inch minimum diameter, terminating 1 inch above finished grade with cast iron frame and cover. An 8" thick concrete pad extending a minimum of 12" beyond the outside dimension of the manhole frame shall be provided. One manhole shall be located above the inlet tee hatch and the other manhole shall be located above the outlet tee hatch. A minimum of 24" of clear opening above each manhole access shall be maintained to facilitate maintenance, cleaning, pumping, and inspections.
- b. Access openings shall be mechanically sealed and gas tight to contain odors and bacteria and to exclude vermin and ground water.
- c. Access openings shall be accessible for inspection by HWU.

4) Additional Requirements

- a. Water Tight - Precast concrete grease interceptors shall be constructed to be watertight. A static water test shall be conducted by the installer with verification through visual inspection by HWU. The water test shall consist of plugging the outlet (and the inlet if necessary) and filling the tank(s) with water to the tank top a minimum of 24 hours before the inspection. The tank shall not lose water during this test period. Certification by the plumbing contractor shall be supplied to HWU prior to final approval of grease control equipment.
- b. Location - Grease Interceptors shall be located so as to be readily accessible for cleaning, maintenance, and inspections. They should be located close to the fixture(s) discharging the wastestream. If possible, Grease Interceptors should not be installed in "drive-thru" lanes or a parking area. Grease Interceptor access openings shall never be paved over.
- c. Construction Material - Grease Interceptors shall be constructed of sound durable materials, not subject to excessive corrosion or decay, and shall be water and gas tight. Each interceptor shall be structurally designed to withstand any anticipated load to be placed on the interceptor (i.e. vehicular traffic in parking or driving areas). Note: Concrete materials and other grease interceptor materials shall meet the standards of the American National Standards Institute, Inc. (ANSI) and the International Association of Plumbing and Mechanical Officials (IAPMO).
- d. Marking and Identification - Prefabricated gravity grease interceptors shall be permanently and legibly marked in a location clearly and permanently visible with the following:
 1. Manufacturer's name or trademark, or both
 2. Model number
 3. Capacity

4. Month and year of manufacture
5. Load limits and maximum recommended depth of earth cover in feet; and
6. Inlet and outlet

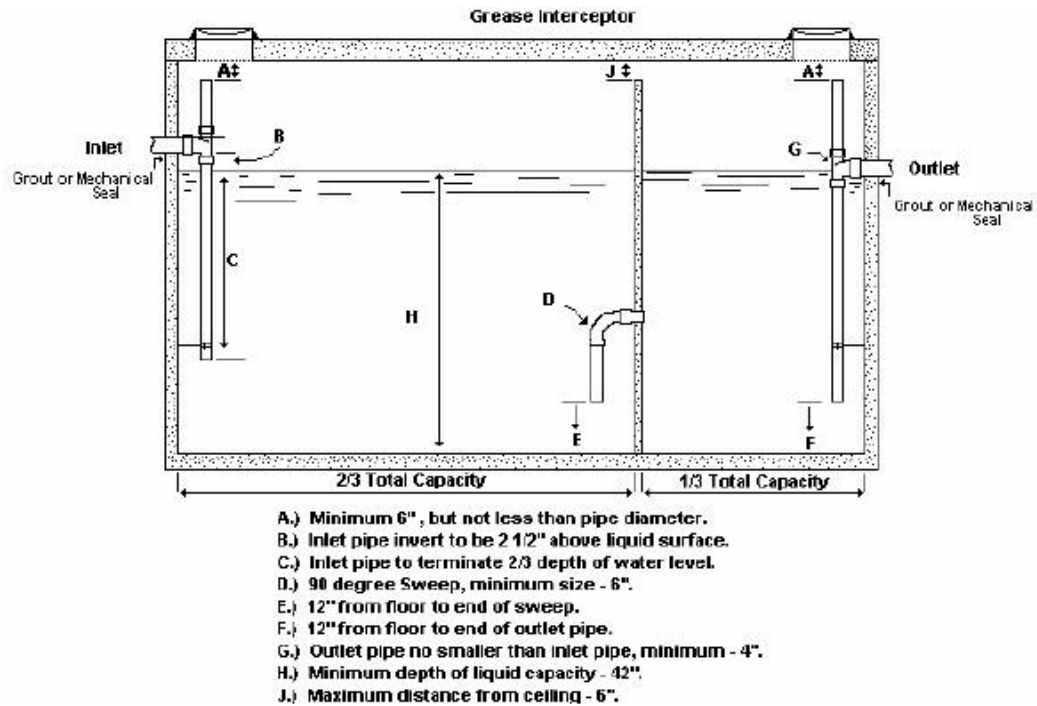


Figure 1 – Grease Interceptor

2.5 Grease Interceptor Cleaning/Maintenance Requirements

- a) Grease Interceptor minimum size will be 1,000 gallon capacity, and maximum size will be 2,000 gallon capacity. If the FSE requires additional capacity, then grease interceptors shall be installed in series.
- b) Partial pump of interceptor contents or on-site pump & treatment of interceptor contents will not be allowed due to reintroduction of fats, oils and grease to the interceptor, which is not allowed by the HWU Sewer Use Ordinance 23-30(g) and the Code of Federal Regulations (CFR) § 403.5 (b) (8).
- c) Grease interceptors shall be pumped in-full when the total accumulations of surface FOG (including floating solids) and settled solids reaches twenty-five percent (25%) of the grease interceptor's overall liquid depth. This criterion will be referred to as the "25% Rule". At no time shall the cleaning frequency exceed 90 days unless approved by HWU. Approval will be granted on a case by case basis, after submittal by the FSE documenting proof of proposed frequency. FSEs in Class 2 through 5 may require a pumping schedule of 30 days or 60 days to meet the 25% Rule.

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- d) The Grease interceptor effluent tee shall be inspected during cleaning and maintenance and the condition noted by the individual conducting the maintenance. Effluent tees that are loose, defective, or not attached shall be repaired or replaced immediately.
- e) Grease Interceptors shall have access manholes over the influent tee and effluent tee for inspection and ease of cleaning/maintenance. Access manholes shall be provided for all separate compartments of interceptors for complete cleaning, i.e., interceptor with two main baffles (three compartments) shall have access manholes at each compartment.
- f) Grease Interceptors shall be certified annually by a grease waste hauler or plumber. Grease Interceptor Certification (Form A) shall be completed and submitted to HWU annually. See General Requirements 2.2 (f) & (g) above.

2.6 Grease Trap Sizing, Installation, Cleaning, & Maintenance Requirements

- a) All grease traps shall have flow control restrictor and shall be vented. Failure to provide flow restrictor and venting will be considered a violation.
- b) All new FSEs that are allowed to install grease traps shall have HWU approval prior to starting operations.
- c) Grease Trap minimum size requirement is a 20 gallon per minute / 40 pound capacity trap.
- d) Grease Traps shall have the Plumbing Drainage Institute certification, and be installed as per manufacturer's specifications.
- e) No automatic dishwasher shall be connected to an under-the-sink grease trap or floor grease trap. Dishwashers will cause hydraulic overload of the grease trap.
- f) No automatic drip or additive feed systems are allowed prior to entering the grease trap.
- g) A single grease trap device shall be installed for each significant kitchen fixture unit (i.e. each 3 compartment sink). HWU must approve the number of grease traps and connections to the grease trap.
- h) During cleaning of the grease trap, the flow restrictor shall be checked to ensure it is attached and operational.
- i) Grease Traps shall be cleaned of all fats, oils, and grease and food solids at a minimum of once every two (2) weeks. If the FOG and food-solids content of the grease trap is greater than 25%, then the grease trap must be cleaned every week, or as frequently as needed to prevent 25% of capacity being taken up by FOG and food solids.
- j) Grease Trap waste should be sealed or placed in a container to prevent leachate from leaking, and then disposed, or hauled offsite by a grease waste hauler or plumber to an approved disposal location.
- k) Grease Trap waste should not be mixed with yellow grease in the grease recycle container.
- l) Grease Traps must be "certified" annually. See General Requirements 2.2 (f) & (g) above.

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2.7 Accidental Discharge-Safeguards:

FSEs shall provide such facilities and institute such procedures as are reasonably necessary to prevent or minimize the potential for accidental discharge of fats, oils, and grease into the sewage collection system. This includes implementation of "Best Management Practices" protocols.

2.8 'Additives' Prohibition for use as Grease Management and Control

- a) Additives include but are not limited to products that contain solvents, emulsifiers, surfactants, caustics, acids, enzymes and bacteria.
- b) This FOG management policy prohibits the use of enzymes, hot water, emulsifiers or other additives to cause oil or grease to pass through the user's grease trap or grease interceptor designed to remove oil and grease.
- c) Additive use will not be a substitute for regular, required cleaning or pumping of grease control equipment.

2.9 Right of Entry - Inspection and Monitoring

HWU, or an authorized representative, shall have the right to enter the premises of FSEs to determine whether the FSE is complying with the requirements of this policy and/or the Henderson Sewer Use Ordinance. FSEs shall allow HWU personnel or an authorized representative full access to all parts of the premises for the purpose of inspection, monitoring, and/or records examination. Unreasonable delays in allowing HWU personnel access to the FSE premises shall be a violation of this policy and the Henderson Sewer Use Ordinance.

HWU may require that the FSE install monitoring or additional pretreatment equipment deemed necessary for compliance with this policy and/or the Henderson Sewer Use Ordinance.

2.10 Fee Schedule:

HWU may charge inspection, monitoring, assessment, impact, and permit fees to the FSE to defray costs of implementation of the FOG program costs. The fee schedule is included in Attachment 2.

2.11 Enforcement Action

Enforcement action will follow procedures outlined in the "HWU Enforcement Response Plan for Sewer Use and MS4", as adopted by the Water and Sewer Commission and the City of Henderson Board of Commissioners, and/or the enforcement response outlined in Attachment 3.

- a) *Initiation of Enforcement Action:* Enforcement Action may be initiated against the FSE for, among other things, failure to clean or pump grease control equipment, failure to maintain grease control equipment including annual inspections and installation of properly functioning effluent-T and baffles, failure to install grease control equipment, failure to control FOG discharge from the FSE, and use of additives so that FOG is diluted and pushed downstream of the FSE.

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- b) *Fats, Oils and Grease blockage in downstream manhole from FSE:* If FSE inspections and field investigations determine that a fats, oils and grease interference or blockage in the POTW is caused by a particular food service establishment, then that food service establishment shall reimburse HWU for all labor, equipment, supplies and disposal costs incurred by HWU to clean the interference or blockage. The charges will be added to the FSEs water/wastewater bill. Failure to reimburse HWU may result in termination of water service.
- c) *FSE failure to maintain GCE after Notification or NOV due date:* If a FSE fails to pump, clean or maintain their GCE after a Notice of Violation due date, HWU may pump/clean the GCE to prevent additional FOG problems downstream. The FSE will be charged for the cost of pumping and maintaining the GCE, including HWU personnel costs. Mechanical failure of the GCE will be considered a violation of this FOG Management Policy and the Henderson Sewer Use Ordinance.
- d) *Significant Noncompliance of Wastewater Discharge Limits:* U.S. EPA has defined "significant noncompliance" as violations that meet one or more of the following criteria:
- 1) Chronic violations of wastewater discharge limits, defined as those in which sixty-six (66%) percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
 - 2) Technical Review criteria (TRC) violations, defined here as those in which thirty-three (33%) percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily average maximum limit, or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH). The following compatible pollutants are exempt from TRC consideration if they exceed the surcharge level but do not exceed upper ceiling: BOD, TSS, FOG;
 - 3) Any other violations of a pretreatment effluent limit (daily maximum or longer-term average) that HWU determines has caused, alone or in combination with other discharges, interference or pass-through (including endangered the health of HWU personnel or the general public);
 - 4) Any discharge of a pollutant that has caused imminent endangerment to human health welfare or to the environment or has resulted in HWU's exercise of its emergency authority to halt or prevent such a discharge;
 - 5) Failure to meet a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, and attaining final compliance;
 - 6) Failure to provide, within 30 days after the due date, required reports, such as baseline monitoring reports, 90-day compliance reports, periodic self monitoring reports, and reports on compliance schedules;
 - 7) Failure to accurately report noncompliance;

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- 8) Any other violation or group of violations that HWU determines will adversely affect the operation or implementation of the local pretreatment program. Generally, an isolated instance of noncompliance or a Category 0 violation can be met with an informal response or a Noncompliance Notification (NCN). Any Category 1 to Category 4 violations should be responded to with an enforceable order that requires a return to compliance by a specific deadline.
- e) *Noncompliance Notification (NCN)*: Generally issued by the HWU inspector/contractor field personnel, the Noncompliance Notification (NCN) is an official communication from HWU to the non-compliant user and/or owner of the premises that informs the user of a pretreatment violation. The NCN is issued for any problems identified with the grease control equipment operation, maintenance, or components. Also, an NCN will be issued when FOG is identified in the downstream sewer lines from a food service establishment. A normal response time or due date to respond to HWU is 30 days, but the NCN may have shorter response times, depending on the severity of the violation. Failure to respond by the designated due date on a NCN, will result in the issuance of a Notice of Violation, or additional escalation in enforcement action.
- f) *Notice of Violation (NOV)*: Generally issued by the Industrial Pretreatment Coordinator or FOG Program Manager, the Notice of Violation (NOV) notifies the non-compliant user and/or owner of violations of Henderson's Sewer Use Ordinance. Within five (5) days of the receipt date of the NOV, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to HWU. Submission of this plan in no way relieves the user and/or owner of liability for any violations occurring before or after receipt of the notice of violation. A NOV does not contain assessment of penalties or cost recovery. The NOV provides the user and/or owner with an opportunity to correct the noncompliance on its own initiative rather than according to a schedule of actions determined by HWU. The NOV documents the initial attempts of HWU to resolve the violation. Authenticated copies of NOVs may serve as evidence in judicial proceedings.
- g) *Compliance Order*: When the HWU General Manager finds that a user and/or owner has violated or continues to violate the HWU FOG Management Policy, a permit, or an order issued thereunder, the General Manager may issue a compliance order to the user and/or owner responsible for the discharge directing that, following a specified time period, water and wastewater services shall be discontinued unless adequate treatment facilities, devices, or other related appurtenances have been installed and are properly operated. Compliance Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the installation of pretreatment technology, additional self-monitoring, and management practices. The Compliance Order may include a requirement to provide a Schedule of Compliance.
- h) *Schedule of Compliance*: A Schedule of Compliance is a detailed list of the steps to be taken by a non-compliant user and/or owner whereby compliance with all pretreatment regulations will be achieved. This schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the User to meet

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the applicable Pretreatment Standards (e.g. hiring an engineer, completing preliminary plans, executing contracts for components, commencing construction, etc.).

- i) *Cease And Desist Order:* When the HWU General Manager finds that a user and/or owner has violated or continues to violate the HWU Sewer Use Ordinance or this FOG Policy or any permit or order issued hereunder, the General Manager may issue an order to cease and desist all such violations and direct those persons in noncompliance to:
 - 1) Comply forthwith
 - 2) Take such appropriate remedial or preventive actions as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.
- j) *Emergency Suspensions:*
 - 1) HWU or the General Manager may suspend the wastewater treatment service and/or wastewater permit of a food service establishment, commercial or industrial user whenever such suspension is necessary in order to stop an actual or threatened discharge presenting or causing an imminent or substantial endangerment to the health or welfare of persons, the WWTP, or the environment.
 - 2) Any user and/or owner notified of a suspension of the wastewater treatment service and/or the wastewater permit shall immediately stop or eliminate its contribution. In the event of a user's and/or owner's failure to immediately comply voluntarily with the suspension order, the control authority shall take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the WWTP, its receiving stream, or endangerment to any individuals. HWU or the General Manager shall allow the user and/or owner to recommence its discharge when the endangerment has passed, unless the termination proceedings set forth in Termination of Permit are initiated against the user and/or owner.

Penalty Assessment: Determining a penalty amount that reflects the violation's significance is extremely important. If the penalty is too small, its deterrent value is lost and the user and/or owner may regard the amount as a tax or nominal charge to pollute. If the penalty is too great, it could bankrupt the user and/or owner (making necessary investment in pretreatment equipment impossible or potentially forcing unnecessary closure). HWU has categorized the various types of violations, and assigned a penalty range to each category as shown in the following table. Penalty categories are determined by using the Enforcement Response Table included in Attachment 3. All penalty assessments shall be approved and signed by the General Manager or his designee. Penalty amounts are considered to be an economic deterrent to the illegal activity. Penalty ranges have been designed to recover any economic benefit gained by the violator through non-compliance, and are in addition to, and not in lieu of, other expenses and charges authorized herein. All penalties are assigned at the discretion of HWU.

Within each Category of violation, an initial citation will lead to a fine at or near the low end of the amount range. Repeated violations shall lead to increasing penalty amounts. Other

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factors to be considered are willful disregard of the regulations, failure to respond or take remedial action under a Noncompliance Notification (NC) or Notice of Violation (NOV), and repeated patterns of behavior within a reckoning period assigned in an NCN or NOV.

<i>Category</i>	<i>Amount</i>
0	NO PENALTY
1	\$ 10.00 to \$ 250.00
2	\$ 100.00 to \$ 1,000.00
3	\$ 500.00 to \$ 10,000.00
4	DIRECT LEGAL ACTION

Note: For Category 4, any penalties and/or costs to be assessed at the maximum penalty allowable by applicable law and included as part of the legal action.

Assessments for damages or destruction of the facilities of the WWTP, and any penalties, costs, and attorney's fees incurred by HWU as the result of the illegal activity, as well as the expenses involved in enforcement, are not part of this penalty assessment procedure.

3.0 RESPONSIBILITY: The HWU Environmental Compliance and Pretreatment Coordinator shall be responsible for the overall coordination for this process, under the direction of the Director of Plant Operations.

Exceptions to this policy must be approved by the General Manager.

APPROVED:

Date: 2.15.16

Tom Williams, P.E.
General Manager

Policy and Procedure Manual

Henderson Water Utility

Subject <i>Fats, Oils and Grease Management – Attachment 1 Best Management Practices</i>	Number <i>F-500</i>
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Effective Date <i>15 February 2016</i>	Revision No. <i>0</i>	Revision Date <i>15 February 2016</i>
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1.0 POLICY STATEMENT: This Attachment to the Fats, Oils and Grease Management policy was developed to catalog and document Best Management Practices (BMPs) for use by Food Service Establishments (FSE) that are required to participate in the HWU Fats, Oils and Grease Management program.

2.0 BEST MANAGEMENT PRACTICES:

TO BE ADDED LATER

3.0 RESPONSIBILITY: The HWU Environmental Compliance and Pretreatment Coordinator shall be responsible for disseminating information on BMPs to all users, under the direction of the Director of Plant Operations.

Changes to this attachment may be made from time to time with the approval of the General Manager.

APPROVED:



Date: 2.15.16

Tom Williams, P.E.
General Manager

Policy and Procedure Manual

Henderson Water Utility

Subject <i>Fats, Oils and Grease Management – Attachment 2 Fee Schedule</i>	Number <i>F-500</i>
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Effective Date <i>15 February 2016</i>	Revision No. <i>0</i>	Revision Date <i>15 February 2016</i>
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1.0 POLICY STATEMENT: This Attachment to the Fats, Oils and Grease Management policy was developed to catalog and document fees that HWU may charge for inspection, monitoring, assessment, impact, and permits, to defray costs of implementation of the FOG program costs.

2.0 FEE SCHEDULE: No fees will be charged in the initial stages of FOG program.

The Water and Sewer Commission reserves the right to initiate fees for inspection, monitoring and permits at some future date.

3.0 RESPONSIBILITY: The HWU Environmental Compliance and Pretreatment Coordinator shall be responsible for assessing fees for inspection and permits to all users, under the direction of the Director of Plant Operations.

Fees may be waived in special circumstances at the direction of the General Manager.

Fee amounts or ranges may only be set by action of the Water and Sewer Commission.

APPROVED:



Date: 2.15.16

Tom Williams, P.E.
General Manager

Policy and Procedure Manual

Henderson Water Utility

Subject <i>Fats, Oils and Grease Management – Attachment 3 Enforcement Response Plan</i>	Number <i>F-500</i>
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Effective Date <i>15 February 2016</i>	Revision No. <i>0</i>	Revision Date <i>15 February 2016</i>
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- 1.0 POLICY STATEMENT:** This Attachment to the Fats, Oils and Grease Management policy was developed to ensure a consistent approach to all Food Service Establishments (FSE) that cause, or have the potential to cause, interference, obstruction, sanitary sewer overflows, bypasses, or stormwater inflow to the HWU wastewater collection system or the wastewater treatment plant (together referred to as the publically-operated treatment works or POTW).
- 2.0 ENFORCEMENT MECHANISMS:** The HWU policy F-500, Fats, Oils and Grease Management, outlines and defines the enforcement mechanisms available to HWU, which follows a graduated response spectrum from notification of noncompliance through progressive enforcement up to suspension of service.

Also included in that policy is the schedule of penalty assessment, categorized by type of violation, and assignment of penalty ranges to each category.

NONCOMPLIANCE NOTIFICATION (NCN)

Generally issued by the HWU Environmental Compliance and Pretreatment Coordinator, the Noncompliance Notification (NCN) is an official communication from HWU to the non-compliant user that informs the user that a FOG/pretreatment violation has occurred. An NCN is issued for any problems identified with the grease control equipment operation, maintenance, or components, or when FOG is identified in the sewer lines downstream from a food service establishment. A normal response time or due date to respond to HWU is 30 days, but the NCN may require shorter response times. Failure to respond by the designated due date on a NCN, will result in the issuance of a Notice of Violation, or escalation in enforcement action.

NOTICE OF VIOLATION (NOV)

Generally issued by the HWU Environmental Compliance and Pretreatment Coordinator, the Notice of Violation (NOV) notifies the non-compliant user of violations of HWU's Sewer Use Ordinance or FOG Policy. Within five (5) days of the receipt date of the NOV, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to HWU. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violation. An NOV does not normally contain assessment of penalties or cost recovery. The NOV provides the user with an opportunity to correct the noncompliance on its own initiative rather than according to a schedule of actions determined by HWU. The NOV documents the initial attempts of HWU to resolve the violation. Copies of NOV's may serve as evidence in judicial proceedings.

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COMPLIANCE ORDER (CO)

When the HWU General Manager finds that a user has violated or continues to violate the HWU FOG Management Policy, or a permit or order issued thereunder, he may issue a Compliance Order to the user responsible for the discharge directing that, following a specified time period, sewer service shall be discontinued unless adequate treatment facilities, devices, or other related appurtenances have been installed and are properly operated. Compliance Orders may also contain such other requirements as might be reasonably necessary and appropriate to address the noncompliance, including the installation of pretreatment technology, additional self-monitoring, and management practices. The Compliance Order may include a requirement to provide a Schedule of Compliance (SOC).

SCHEDULE OF COMPLIANCE

A Schedule of Compliance is a detailed list of the steps to be taken by a non-compliant user so that compliance with all pretreatment regulations will be achieved. This schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the User to meet the applicable Pretreatment Standards (e.g. hiring an engineer, completing preliminary plans, executing contracts for components, commencing construction, etc.).

CEASE AND DESIST ORDER

When the HWU General Manager finds that a user has violated or continues to violate the HWU Sewer Use Ordinance or FOG Management Policy or any permit or order issued hereunder, HWU may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

- (a) Comply forthwith
- (b) Take such appropriate remedial or preventive actions as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

EMERGENCY SUSPENSIONS

HWU may suspend the wastewater treatment service and/or wastewater permit of a food service establishment, commercial or industrial user whenever such suspension is necessary in order to stop an actual or threatened discharge presenting or causing an imminent or substantial endangerment to the health or welfare of persons, the POTW, or the environment.

Any user notified of a suspension of the wastewater treatment service and/or the wastewater permit shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, HWU shall take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals. The General Manager may allow the user to recommence its discharge when the endangerment has passed.

2.1 DEFINITIONS FOR ENFORCEMENT RESPONSE TABLES:

- HWU: Henderson Water Utility
- CO: Compliance Order
- CDO: Cease and Desist Order
- ES: Emergency Suspension
- FOG: Fats, oils and grease
- FSE: Food Service Establishment
- GCE: Grease Control Equipment
- LW: Letter of Warning
- NCN: Noncompliance Notification
- NOV: Notice of Violation
- POTW: Publicly Owned Treatment Works
- SOC: Schedule of Compliance
- SPS: Sewerage Pumping Station
- VW: Verbal Warning

2.2 PENALTY ASSESSMENT:

All penalty assessments shall be approved and signed by the General Manager or his designee. Penalty amounts are considered to be an economic deterrent to the illegal activity. Penalty ranges have been designed to recover any economic benefit gained by the violator through non-compliance, and are in addition to, and not in lieu of, other expenses and charges authorized herein. All penalties are assigned at the discretion of HWU.

Within each Category of violation, an initial citation will lead to a fine at or near the low end of the amount range. Repeated violations shall lead to increasing penalty amounts. Other factors to be considered are willful disregard of the regulations, failure to respond or take remedial action under a Noncompliance Notification (NC) or Notice of Violation (NOV), and repeated patterns of behavior within the reckoning period assigned in an NCN or NOV.

<i>Category</i>	<i>Amount</i>
0	NO PENALTY
1	\$ 10.00 to \$ 250.00
2	\$ 100.00 to \$ 1,000.00
3	\$ 500.00 to \$ 10,000.00
4	DIRECT LEGAL ACTION

Note: For Category 4, any penalties and/or costs to be assessed at the maximum penalty allowable by applicable law and included as part of the legal action.

Assessments for damages or destruction of the facilities of the WWTP, and any penalties, costs, and attorney's fees incurred by HWU as the result of the illegal activity, as well as the expenses involved in enforcement, are not part of this penalty assessment procedure.

2.3 ENFORCEMENT RESPONSE TABLES:

<i>Incident</i>	<i>Category Level</i>	<i>Enforcement Action</i>
2.3.1 FOG Discharge to Sewer: Facility contributing FOG to downstream sewer, SPS, or POTW. Classify degree of impact for appropriate response.		
Slight FOG impact (slight coating of FOG in POTW, less than ¼” coverage - ½ of pipe)	0	Issue VW - document, follow-up
Moderate FOG impact (moderate coating of FOG in POTW, ~ ½ of pipe, causing obstruction) - 1st Occurrence	1	Issue LW - 30 day deadline
Moderate FOG impact (moderate coating of FOG in POTW, ~ ½ of pipe, causing obstruction) - 2nd Occurrence	2	Issue NCN - 30 day deadline
Moderate FOG impact (moderate coating of FOG in POTW, ~ ½ of pipe, causing obstruction) - Continued Occurrences	2	Issue NOV or other escalation in enforcement
Heavy FOG impact (heavy coating of FOG in POTW, > ½ of pipe, causing obstruction and/or interference in sewer line) - 1st Occurrence	2	Issue NOV - 30 day deadline
Heavy FOG impact (heavy coating of FOG in POTW, > ½ of pipe, causing obstruction and/or interference in sewer line) - 2nd Occurrence	2	Issue CO - Reimbursement of HWU cleaning costs
Heavy FOG impact (heavy coating of FOG in POTW, causing obstruction and/or interference in sewer line) - Continued Occurrences	3	Issue SOC - Reimbursement of HWU cleaning Costs Range: SCH to LIT
Heavy FOG impact (facility’s discharge caused sanitary sewer overflow or back-up into other customer’s property or business)	3, 4	Issue CO or CDO

<i>Incident</i>	<i>Category Level</i>	<i>Enforcement Action</i>
2.3.2 Grease Control Equipment Components and Maintenance Noncompliance:		
<i>Grease Interceptor structural failure (baffle wall collapsed, walls deteriorated, tank leaking, infiltration/ inflow in tank).</i>		
Initial Notification – Notification in writing by POTW of treatment system failure.	2	Issue NOV-15 day deadline
Second Notification – Failure to comply with NOV by due date.	2	Issue CO
Third Notification – Failure to comply with CO.	3	Issue SOC
<i>Failure to Install Grease Control Equipment</i>		
Initial Notification – Notification in writing by POTW of no treatment system.	1	Issue NCN
Second Notification – Failure to comply with NCN.	2	Issue NOV- 15 day deadline
Third Notification – Failure to comply with NOV, or continued failure to respond.	3	Issue CO
<i>Failure to complete and submit a grease interceptor or grease trap certification; or failure to respond or correct failed grease interceptor or grease trap certification deficiency.</i>		
1st Occurrence or notice	1	Issue NCN
2nd Occurrence or notice	2	Issue NOV
3rd notice or repeated problems	3	Issue CO
<i>Grease Control Equipment not maintained (pumped or cleaned)</i> <i>*Interceptor has > 25% FOG and solids, or > 90 days pump frequency</i> <i>*Trap cleaned > monthly</i>		
1 Incident within 24 month period	1	Issue NCN
2 Incidents within 24 month period	2	Issue NOV
3 Incidents within 24 month period	3	Issue CO
4 Incidents within 24 month period	3	Issue SOC

Incident	Category Level	Enforcement Action
2.3.3 Recordkeeping and Reporting Violations		
<i>No records of grease control equipment maintenance or cleaning at facility, or able to locate records.</i>		
1 Incident within 24 month period	0	Verbal Warning
2 Incidents within 24 month period	1	Issue NCN
3 Incidents within 24 month period	2	Issue NOV
4 Incidents within 24 month period	3	Issue CO
<i>Falsification of Records or Manifests</i>		
	3,4	Range: CO to Litigation
<i>Failure of new facility, or an existing facility that upgrades their facility, to notify City, or submit Grease Control Equipment Inquiry information</i>		
No response to Letter of Warning (LW)	1	Issue LW & require GCE Inquiry info
No response to NOV.	2	Issue NOV
	3	Issue CO
<i>Failure to respond or report regarding any enforcement notice.</i>		
	3	Escalate Enforcement Action - Up to Litigation
2.3.4 Other Noncompliance		
<i>Failure to allow access for inspectors to adequately inspect FSE and/or assess GCE</i>	2	Issue CO up to litigation
<i>Safety hazard at grease control equipment area (i.e. missing manhole cover, manhole cover damaged or not made of material of suitable strength, danger to public)</i>	2	Notify Health Department/Codes Department - Issue NOV
<i>Improper Waste Disposal (evidence of intent, dumping to sewer)</i>	3,4	CO to ES
<i>Facility using additives or chemicals that emulsify or otherwise cause FOG to be discharged to sewer system</i>	3	NOV to CDO

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3.0 RESPONSIBILITY: The HWU Environmental Compliance and Pretreatment Coordinator shall be responsible for the overall coordination for this process, determining levels of fines, and issuing notices, orders and other enforcement actions, under the direction of the Director of Plant Operations.

Exceptions to this policy must be approved by the General Manager.

APPROVED:



Date: 2.15.16

Tom Williams, P.E.
General Manager