



COMPLIANCE DEPARTMENT

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Fats, Oil, and Grease Mitigation Program Policy

1. Purpose:

The purpose of the Fats, Oil, and Grease (FOG) Mitigation Program is to reduce the persistent problem of decreased capacity, pipe blockages and sanitary sewer overflows (SSOs) in our community. The program is specifically concerned with those blockages caused entirely, or in part, by the excessive discharge of FOG from food service establishments (FSEs).

The Ypsilanti Community Utilities Authority (YCUA) maintains the legal authority for this course of action through the City and Charter Township of Ypsilanti Sewer Use Ordinances (SUOs) which both prohibit “organic solvent extractable substances such as fats, wax, grease, or oils of petroleum origin, whether emulsified or not, in excess of 100 mg/l. The SUOs prohibits the discharge of substances which may solidify or become viscous at temperatures between 32 degrees Fahrenheit and 140 degrees Fahrenheit”.

To ensure compliance with this provision, the SUOs further states that “grease, oil and sand interceptors shall be provided when, in the opinion of the YCUA Director, they are necessary for the proper handling of liquid wastes containing fats, oils, grease, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for single-family or multiple-family dwelling units. All interceptors shall be of a type and capacity as specified in the Michigan Plumbing Code. Installation, or replacement of all interceptors requires a plumbing permit and inspections. The approved FOG Interceptor shall be located as to be readily accessible for cleaning and inspection. Fats, oils, and grease interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight, and equipped with easily removable covers which when bolted into place shall be gastight and watertight. When installed, all grease, fats, oil and sand interceptors shall be maintained by the FSE, at their expense, in continuously efficient operation at all times”.

2. Applicability:

The program applies to all non-domestic users of the YCUA wastewater collection system classified as a FSE. This policy defines a FSE as a non-domestic user that engages in one or more of the following food preparation activities: cooking by frying (all methods); baking (all methods); grilling; sautéing, rotisserie cooking; broiling (all methods); boiling; blanching; roasting; toasting; poaching; infrared heating; searing; barbecuing; and any other food preparation activity that produces a hot, consumable food product in or on a receptacle that requires washing.

3. Policy Definitions:

Best Management Practices (BMPs) – Practices that will help reduce the quantity of FOG discharged to grease removal devices and the sanitary sewer collection system. The YCUA has developed and approved specific BMPs that can be found in Section 4 of this policy.

FOG Protection Devices – a plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept FOG from a wastewater discharge. Specific devices include:

Hydromechanical Grease Interceptor (HGI) – a plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept FOG from a wastewater discharge and are identified by flow rate as well as separation and retention efficiency. The design incorporates air entrainment, hydromechanical separation, interior baffling, and/or barriers in combination or separately, and one of the following:

- A. External flow control, with air intake (vent): directly connected.
- B. External flow control, without air intake (vent): directly connected.
- C. Without external flow control, directly connected.
- D. Without external flow control, indirectly connected.

HGIs are generally installed inside a FSE.

Gravity Grease Interceptor (GGI) – a plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept FOG from a wastewater discharge and are identified by volume, thirty minute retention time, baffles(s), a minimum of two compartments, minimum total volume of 300 gallons, and gravity separation.

GGIs are generally installed outside of a FSE.

3. General Requirements for FSEs:

All FSEs covered under this policy shall adhere to the following requirements:

- A. FSEs are prohibited to discharge “ organic solvent extractable substances such as fats, wax, grease, or oils of petroleum origin, whether emulsified or not, in excess of 100 mg/l or containing substances which may solidify or become viscous at temperatures between 32 degrees Fahrenheit and 140 degrees Fahrenheit.
- B. Implement BMPs defined in Section 4 of this policy.
- C. FOG protection devices will be required for:
 - New Construction: all newly constructed FSEs are required to install a FOG protection device(s). The City or Charter Township of Ypsilanti Building Department must approve the proposed FOG protection device design and installation prior to commencement of the wastewater discharge.
 - Renovations: all FSEs undergoing renovations will be required to install a FOG protection devices(s) as part of their project. The City or Charter Township of Ypsilanti Building Department must approve the proposed FOG protection device design and installation.
 - Existing: all applicable FSEs will be required to install a FOG protection device(s). The existing FSE will receive written notification from the YCUA that a FOG protection device is required. The FSE will be given 1 year from the date of this notification to install the required FOG protection device(s). The YCUA will indicate which food preparation fixtures and service ware cleaning fixtures require FOG protection and the type of protection required.
- D. Requests for exemptions from installing a FOG protection device shall be made in accordance with Section 7 of this policy.

4. Best Management Practices:

As required in Section 3, item B of this policy, all FSEs located in the City and Charter Township of Ypsilanti shall adhere to the following BMPs:

- a. Train all kitchen staff on proper fats, oil, and grease management.
- b. Never pour grease, oils, oily sauces or dressing down the drain, floor drains, storm drains, or into the dumpster.
- c. Never “hot flush” oil and grease down sinks and drains.

- d. If the material cannot be reused, contain, seal, and dispose of as solid waste. If available, have material picked up by a licensed grease hauler.
- e. Inspect and clean interceptors regularly to prevent clogs/overflows. FOG shall be removed from interceptors per manufactures recommendations. GGIs shall be cleaned at minimum on a quarterly basis. HGIs shall be cleaned at minimum on a weekly basis. Additionally the interceptor shall be cleaned whenever 25% of any compartment becomes filled with fats, oil, grease, or solids. Cleaning frequencies may be reduced if approved by the YCUA
- f. Maintain a record for all oil and grease cleaning, inspection, and removal. These records shall be kept for a minimum of 3 years (**See attachment C**).
- g. Damaged or malfunctioning interceptors shall be repaired immediately.
- h. No debris or material removed from an interceptor shall be discharged into the sanitary sewer collection or storm drain system.
- i. No bacteria or enzyme products shall be used in the maintenance of the interceptors.

5. Requirements for a GGI:

- A. Interceptor sizing and installation shall conform to the current edition of the Michigan Plumbing Code.
- B. Interceptors shall be installed in accordance with the manufacture's instructions and with the Michigan Plumbing Code, based on the anticipated conditions of use.
- C. Interceptors shall be installed at a location where it shall be easily accessible for inspection, cleaning, and removal of intercepted grease. The interceptor may not be installed in any part of the building where food is handled. Location of the interceptor must meet the approval of the YCUA.
- D. Interceptors shall be serviced and emptied of accumulated waste content as required (per manufacturers recommendations or as needed) in order to maintain Minimum Design Capability or effective volume. These devices shall be inspected at least monthly. Users who are required to maintain an interceptor shall:
 - a. Provide for a minimum hydraulic retention time in accordance with the Michigan Plumbing Code.
 - b. Remove any accumulated grease cap and sludge pocket as required. Interceptors shall be kept free of inorganic solid materials such as grit, rocks, gravel, sand, eating utensils, cigarettes, shells, towels, rags, etc., which could settle into this pocket and thereby reduce the effective volume of the device.

- E. The FSE shall maintain a written record of inspection and maintenance of the device for a minimum of three (3) years. All such records will be made available to a representative of the YCUA for on-site inspections during all normal operating hours.
- F. Sanitary (human) wastes shall not be connected to sewer lines intended for grease interceptor service.
- G. Access manholes, with a minimum diameter of 24 inches, shall be provided over each grease interceptor chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, grease removal, and wastewater sampling activities.

6. Requirements for a HGI:

- A. HGIs shall be installed in the waste line leading from sinks, drains, and other fixtures or equipment in FSEs where grease may be introduced into the drainage or sewage system in quantities that can effect line stoppage or hinder sewage treatment or private sewage disposal.
- B. HGI sizing and installation shall conform to the current edition of the Michigan Plumbing Code.
- C. No HGI shall be installed which has a stated rate flow of more than fifty-five (55) gallons per minute, nor less than twenty (20) gallons per minute, except when specially approved by the City or Charter Township of Ypsilanti Building Department.
- D. HGIs shall be maintained in efficient operating conditions by periodic removal of the accumulated FOG. No such collected material shall be introduced into any drainage piping, or public or private sewer.
- E. No dishwasher shall be connected to or discharge into any HGI.
- F. YCUA strongly recommends that the discharge from garbage disposers or food grinders is not routed to any HGI. YCUA strongly recommends that food strainers be used to intercept food from entering the HGI.
- G. Wastewater in excess of 140° F (60° C) shall not be discharged into a HGI.

7. Exemption from installing a FOG protection device

A FSE may be exempt from installing a FOG protection device if they meet one of the following criteria:

- A. FSEs where food is only reheated and not prepared. Food must also be served on disposable service ware.
- B. FSEs that serve sandwiches and do not fry or grill meat or cheese.
- C. FSEs that serve only prepackaged foods on disposable service ware.
- D. FSEs that prepare but do not bake pizzas.
- E. Coffee / Espresso shops that serve food prepared off-site. Those that have on-site food preparation or baking facilities may be required to install grease protection as determined by the YCUA.

If none of the above conditions apply, a FSE may still petition the YCUA Director for exemption from installing a FOG protection device(s). The following procedure should be followed for filing an exemption:

1. Provide a written letter to the YCUA Director explaining the reasoning an exemption should be provided. Financial hardships will not be considered valid reasoning for receiving an exemption. The letter shall contain a written statement from the FSE that the FOG Ordinance limit can be met without installing additional equipment. The letter shall additionally contain documentation of all BMPs practiced at the FSE.
2. Upon receipt of a petition from a FSE for an exemption, the YCUA will evaluate the validity of the petition. The YCUA may arrange to sample and/or televise the facility's wastewater discharge in order to make a determination.

If YCUA determines that sampling is needed in order to make a determination, the building's owner or owner's designee will be required to provide YCUA access to a representative sampling point. At minimum, the YCUA will collect three (3) samples from the designated point. The samples will be collected over a time period specified by the YCUA. The samples will be analyzed for compliance with the SUO limitation of 100 milligrams per liter of Fats, Oil, and Grease.

If YCUA determines that televising the discharge is needed to make a determination, footage will be taken from the building sewer to the main access opening of the publicly owned collection system main. YCUA and the FSE's designee will review the televised footage. YCUA will determine if the footage is inclusive and of the quality to make a determination for an exemption. If the

footage is inclusive enough and of adequate quality, YCUA will determine if an exemption should be granted to the FSE. If the footage is inconclusive, the YCUA may determine that the building's drain may have to be televised periodically in the future to make a determination or that an exemption is not appropriate for the FSE.

8. Policy Implementation Procedures

The YCUA Compliance Department will implement the FOG Program Policy through the following tasks and procedures:

- A. Respond appropriately to information provided by the Service, Maintenance, and Human Resources Departments, which may include on-site inspections, surveillance, sampling, or any necessary combination thereof to ensure compliance.
- B. Perform periodic and random inspections (**See attachment B**) of FSEs in the YCUA wastewater service area of the City or Charter Township of Ypsilanti. The Compliance Department plans to perform ten (10) FSE inspections per month or 120 inspections per year. On this inspection schedule, the Compliance Department plans to visit each FSE every 2 years.
- C. Administer a survey program to collect information on FSEs as needed (**See attachment A**).
- D. Enforcement response to non-compliant FSEs will be administered in accordance with the applicable provisions of the City or Charter Township of Ypsilanti Sewer Use Ordinance.