PETERS TOWNSHIP SANITARY AUTHORITY SEWER USE RULES AND REGULATIONS APPENDIX E

Standard Specifications and Procedures For Installation and Maintenance of Wastewater Pretreatment Systems (Grease Traps and Interceptors)

Section 1. Introduction

The purpose of these specifications and procedures is to outline the wastewater pretreatment requirements for Food Service Establishments and other commercial facilities that discharge Fats, Oils, and Grease (FOG) in their wastewater flow. All new and existing facilities that generate and discharge FOG in their wastewater flow shall install, operate, and maintain a FOG pretreatment system. The requirements of this appendix shall supplement, and be in addition to, the Peters Township Sanitary Authority Rules & Regulations and Specifications for the Construction of Sanitary Sewer Lines and Appurtenances.

Section 2. Definitions.

Act means Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et. seq.

Authority means the Peters Township Sanitary Authority.

BOD means the value of the 5-day test for Biochemical Oxygen Demand, as described in the latest edition of "Standard Methods for the Examination of Water & Wastewater." www.standardmethods.org

Building Sewer means the part of the sanitary drainage system that extends from the Building Trap and conveys sewage to the Authority's collector sewer main. The building sewer is owned by the property owner, and the property owner is solely responsible for the maintenance of the building sewer up to the point of connection with the sewer main.

Building Drain means the lowest part of the sanitary drainage system that receives discharge from soil, waste, and other sewer pipes inside the building and that extends beyond the walls of the building to the building trap and conveys sewage to the building sewer.

Building Trap is a device, fitting, or assembly of fittings installed at the end of the building drain to prevent circulation of air and/or noxious gasses form the building sewer into the building drain. The building trap shall be equipped with a fresh air vent on the inlet side of the trap which is carried above grade and is terminated in a screened, rodent proof outlet located outside the building.

CCTV means closed circuit television camera.

COD means the value of the test for Chemical Oxygen Demand, as described in the latest edition of "Standard Methods for the Examination of Water & Wastewater."

Contact Person shall mean the individual responsible for overseeing daily operation of the Food Service Establishment and/or who is responsible for overseeing the Food Service Establishment's compliance with the FOG Pretreatment Program.

EPA means the United States Environmental Protection Agency.

Fats, Oils, and Greases (FOG) is composed of organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. All are sometimes referred to herein as "grease" or "greases."

Flow Control Restrictor is a device installed upstream of the interceptor, having an orifice that controls the rate of flow through the interceptor.

Flow Control Restrictor, vented is a device installed upstream of the interceptor, having an orifice that controls the rate of flow through the interceptor, and an air intake (vent) downstream of the orifice, which allows air to be drawn into the flow stream. The vent from the flow control shall extend 6" above the flood rim of the fixture.

FOG Pretreatment System is the same as Grease Interceptor or Grease Trap.

Fixtures mean receptacles or a device that is either permanently or temporarily connected to the water distribution system of the premises and demands a supply of water there-from; discharges waste water, liquid-borne waste materials or sewage either directly or indirectly to the drainage system of the premises; or requires both a water supply connection and a discharge to the drainage system of the premises.

Food Service Establishment (FSE) means any establishment which prepares and/or packages food or beverages for sale or consumption, on or off site, with the exception of private residences. Food service establishments shall include, but are not limited to: food manufacturers, food packagers, restaurants, grocery stores, bakeries, lounges, hospitals, hotels, nursing homes, churches, schools and all other food service establishments not listed above.

Generator means any person who owns or operates a grease trap/grease interceptor, or whose act or process produces a grease waste.

Grease Trap Waste means material collected in and from a grease trap/interceptor in the sanitary sewer service line of a commercial, institutional, or industrial food service or processing establishment, including the solids resulting from de-watering processes.

Grease Interceptor: Grease Control Equipment identified as a large tank, generally larger than 750 gallons constructed from pre-cast concrete, fiberglass or polyethylene. Grease interceptors have a minimum of two compartments plus baffles and have a 30-minute retention time.

Grease Trap: Grease Control Equipment identified as an "under the sink" trap, a small container with baffles. All grease traps will have a flow control restrictor and be properly vented.

Home Occupations that prepare food shall be required to comply with the FSE requirements where the discharge is considered detrimental to the Authority.

pH is a relative measure of acidity or alkalinity. The scale runs from 0 to 14; 0 is extremely acid, 14 is a very strong base, and 7 is neutral.

POTW or Publicly Owned Treatment Works means a treatment works which is owned by a state or municipality as defined by section 502(4) of the Clean Water Act. This definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes all sewers, pipes, and other conveyances that convey wastewater to a POTW. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works, in this case the Peters Township Sanitary Authority. For purposes of this Resolution, the terms "sanitary sewer system" and "POTW" may be used interchangeably.

S.U. means "Standard Units"

TSS means the value of the test for Total Suspended Solids, as described in the latest edition of "Standard Methods for the Examination of Water & Wastewater."

Hazardous waste shall mean a hazardous waste in accordance with Title 40 of the code of Federal Regulations, Part 261.3.

Interceptor shall mean a receptacle designed and constructed to intercept, separate and prevent passage of sand, grit or other objectionable solids into the drainage system to which it is connected. An interceptor may be integrated with a separator for vehicle wash bays or repair areas.

Sampling port shall mean an access point within the grease control device to facilitate sampling of the wastewater discharge.

Section 3. Grease Trap Permit Application.

A. All new FSE's, as determined by the Authority, shall complete a Grease Trap Permit Application on the forms provided and include the design and specifications for the FOG Pretreatment System as part of the sewer connection application as described

- in the Authority's Standard Specifications and Procedures for Construction of Building Sewers, Revision No. 2.
- B. All existing FSE's which have an existing FOG Pretreatment System may keep their existing FOG Pretreatment System in operation upon approval of their Grease Trap Permit Application. If upon inspection, the pretreatment system is found to be in need of repair or replacement, a permit will be issued after the corrective action has been inspected and approved by the Authority.
- C. All existing FSE's which require a new FOG Pretreatment System, as determined by the Authority, shall submit an application for the installation of a new FOG Pretreatment System on the forms provided. The application shall be in accordance with Authority's Specifications.
- D. All costs and related expenses associated with the installation and connection of the FOG Interceptor(s) shall be borne by the FSE. The FSE shall indemnify the Authority and its Agents for any loss or damage that may directly occur due to the installation and maintenance of the FOG Pretreatment System.

Section 4. Discharge Limits

A. No facility shall discharge or cause to be discharged any wastewater with a FOG concentration in excess of one hundred (100) milligrams per liter, or in concentrations or in quantities which will harm either the sewers, or the Water Pollution Control Facility, as determined by the Authority.

Section 5. Pretreatment System Requirements.

- A. An application for the design and installation of a FOG Pretreatment System shall be subject to review and approval by the Authority as per Peters Township Ordinance 219 as amended by Ordinance 232, Authority Building Sewer Specifications and subject to the requirements of all other applicable codes, ordinances and laws.
- B. Every fixture at the subject facility shall be constructed, operated and maintained in a manner to ensure that the discharge of food preparation wastewater is directed solely to the FOG Interceptor. No valve or piping bypass equipment that could prevent the discharge of food preparation wastewater from entering appropriate treatment equipment shall be present.
- C. The Contact Person at each FSE shall notify the Authority when the FOG Pretreatment System is ready for inspection and connection to the public sewer. The connection and testing shall be made under the supervision of the Authority.
- D. All applicable County, State and local plumbing/building codes shall be followed during the installation of the FOG Pretreatment System.
- E. FOG Pretreatment System Requirements:

- (1) The FOG Pretreatment System shall be installed on a separate building drain line connected to only those fixtures or drains which would allow fats, oils, and grease to be discharged. This shall include, but not limited to:
 - (a) Pot sinks;
 - (b) Pre-rinse sinks;
 - (c) Any sink into which fats, oils and grease are likely to be introduced;
 - (d) Soup kettles or similar devices;
 - (e) Wok stations;
 - (f) Floor drains or sinks into which kettles may be drained;
 - (g) Automatic hood wash units;
 - (h) Dishwashers without pre-rinse sinks; and
 - (i) Any other fixtures or drains that is likely to allow fats, oils and grease to be discharged.
- (2) No food grinder shall discharge to the FOG Pretreatment System without being preceded by a solids interceptor.
- (3) No fixture or drain other than those listed in Paragraph (1) above shall be directly connected to the FOG Pretreatment System unless approved by the Authority.
- (4) Grease traps shall conform to the Plumbing and Drainage Institute G-101 (PDI G101).
- (5) An outdoor grease interceptor shall have a minimum detention time of 30 minutes with all fixtures discharging simultaneously.
- (6) FOG Pretreatment System shall have a minimum of two compartments. The interceptor shall be of the two compartment type, have sampling ports as required by the Authority, and shall be water tested in accordance with testing procedures for sanitary manholes.
- (7) A grease interceptor shall be watertight and constructed of precast concrete, or other durable material. It shall be located so as to be accessible for convenient inspection and maintenance. No permanent or temporary structures or containers shall be placed directly over the FOG Interceptor. FOG Interceptors installed in areas subject to traffic shall be designed to accommodate traffic loading.

- (8) Grease interceptors constructed of precast concrete, shall be designed in general conformance to the Plumbing and Drainage Institute G-101 (PDI G-101).
- (9) Separate cleanout covers shall be provided over the inlet and outlet of the FOG Interceptor as to provide easy access for inspection and cleaning. Cleanout ports shall be fitted with manhole extensions to grade. In areas subject to traffic, the extensions shall be ductile iron frames and round manhole covers.
- (10) The outlet discharge line from the FOG Pretreatment System shall be directly connected to the municipal sanitary sewer.
- (11) The FOG Pretreatment System shall be located as to be readily accessible for cleaning, maintenance, and inspections. They should be located close to the fixture(s) discharging the grease laden waste stream.

Section 6. Pretreatment Equipment Maintenance

- A. The FOG Pretreatment System shall be maintained continuously in satisfactory and effective operation at the FSE's expense.
- B. The Contact Person shall be responsible for the proper removal and disposal, by appropriate means, of the material removed from the FOG Pretreatment System.
- C. The Contact Person shall ensure that the FOG Interceptor is inspected when pumped to ensure that all fittings and fixtures inside the interceptor are in good condition and functioning properly. The depth of grease inside the tank shall be measured and recorded in the maintenance log during every inspection along with any deficiencies, and the identity of the inspector.
- D. The Contact Person shall determine the frequency at which its FOG Interceptor(s) shall be pumped according to the following criteria:
 - (1) The FOG Interceptor shall be cleaned by a subsurface sewage disposal cleaner whenever twenty-five (25) percent of the operating depth of the FOG Interceptor is occupied by fats, oils, grease, and settled solids. Cleaning of FOG Interceptors shall include the complete removal of all contents, including floating materials, wastewater and settled sludge. FOG interceptor cleaning shall include scraping excessive solids from the wall, floors, baffles and all piping. After cleaning, wastewater may be decanted back into the trap/interceptor taking care not reintroduce FOG back into the system.
 - (2) A maintenance log shall be maintained on the premises, and shall include the following information: dates of all cleaning and repair activities, volume pumped, grease depth, grease trap/interceptor cleaner's name, method of the waste disposal, means of disposal for all material removed from the FOG Interceptor, and the name of the individual recording the information. The

maintenance log and Grease Trap/Interceptor Cleaner's receipts shall be made available to the Authority for inspection on demand. Interceptor cleaning and inspection records shall be maintained on file onsite a minimum of two (2) years.

- (3) Grease Traps may be cleaned by a subsurface sewage disposal cleaner, plumber or employee of the FSE. The cleaning requirements for grease traps and interceptors are the same.
- E. All material removed and hauled from subsurface FOG Pretreatment Systems must be performed by a subsurface sewage disposal cleaner. Pumped material shall be disposed of at a Regional Wastewater Disposal Facility and not disposed of into the Authority sewer system.
- F. The Contact Person shall be responsible for the cost and scheduling of all actions needed to comply with this Resolution. The Contact Person shall be notified in writing of violations of this Resolution by the Authority. Actions to comply with this Resolution shall be completed within the time limits as given below:

Time Limits to Correct Violation

Equipment not registered

30 days

Equipment not properly installed

30 days

Violations

see Section 11 below

Section 7. FOG Minimization.

- A. The Contact Person shall make every practical effort to reduce the amount of FOG contributed to the sewer system.
- B. Renderable fats, oil, and grease shall not be disposed of in any sewer or FOG Interceptor. All renderable fats, oil, and grease shall be stored in a separate, covered, leak-proof container, stored out of reach of vermin, and collected by a renderer.
- B. Small quantities of FOG scraped or removed from pots, pans, dishes and utensils shall be directed to the municipal solid waste stream for disposal.
- C. Kitchen Best Management Practices (BMP's) shall be implemented to reduce the introduction of FOG into the sewer system.

Section 8. Right of Entry.

Each FSE shall allow Authority personnel, and/or their duly authorized agents, bearing proper credentials and identification, access at all reasonable times to all parts of the premises for the purpose of inspection, observation, records examination, measurement, sampling, and testing in accordance with the Authority's Rules and Regulations.

The refusal of any FSE to allow the Authority or it's representative, entry onto or into the FSE premises for the purpose of inspection, sampling effluents, or inspecting and copying records or performing such other duties as shall be required by the Authority shall be a violation of this Resolution. The Authority may seek a warrant or use such

other legal procedures as may be advisable and reasonably necessary to discharge the duties of the Authority.

Section 9. Inspection of FSE

The Authority may inspect FSE's on both a scheduled and unannounced basis. Inspections shall include all equipment, food processing and storage areas and shall include a review of the processes that produce wastewater discharges through the grease trap/interceptor. The inspector may also inspect the maintenance logbook and file, other pertinent data, the grease trap/interceptor and its level and contents, and may take samples as necessary.

The inspector shall record all observations in a written report. Any deficiencies shall be noted and made part of a permanent file.

Section 10. Reporting

Every FSE shall maintain cleaning/maintenance logs on a form provided. These logs must be made available upon demand. Pump-out slips may also be transmitted to the Authority after each cleaning.

Section 11. Violation Enforcement

- 1. FIRST INSPECTION: Upon an unsatisfactory first inspection, finding that the trap is not being routinely cleaned and maintained, we will issue a courtesy notice to clean the device immediately and to maintain it from that time forward. The courtesy notice will only be provided once. All future actions after a courtesy notice has been sent will proceed directly to a non-compliance notice.
- 2. SECOND INSPECTION: If upon an unsatisfactory second or follow-up inspection to the courtesy notice, continued neglect is identified, a notice of noncompliance will be issued to advise the establishment that it is in violation of local ordinances and state and federal statutes. The device must be cleaned immediately and be maintained from that time forward.

3. THIRD INSPECTION:

- A) If upon an unsatisfactory third or follow-up inspection after the noncompliance notice identifies continued neglect, a sample of the establishment's discharge will be collected and analyzed for grease and oil concentration. The test will be performed by a contracted laboratory. All costs will be charged to the establishment's sewer account.
- B) When the results of the analysis become available, the establishment will be notified in writing as to the test results. If the concentration of grease and oil exceeds the Authority's discharge limit of 100 mg/L, a complaint will be filed with the District Justice for violation of the Authority Rules & Regulations, and an order to comply will be issued. The Authority reserves the right to prohibit the Food Service Establishment from discharging wastewater into the Authority System.

- C) The establishment's discharge will be considered in noncompliance until laboratory analysis confirms compliance.
- D) The Authority reserves the right to impose reasonable costs and fees for conducting inspections.

End of Appendix E