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Fats, Oils and Grease Pretreatment Ordinance Sections

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Fats, Oils and Grease Pretreatment Ordinance
[Adopted]

Section 1. Purpose.

The purpose of this Article is to outline the wastewater pretreatment requirements for Food Preparation Establishments and other commercial facilities that discharge fats, oils and grease in their wastewater flow. All new and existing facilities that generate and discharge fats, oils and grease in their wastewater flow shall install, operate and maintain a FOG pretreatment system. The requirements of this Article shall supplement and be in addition to the requirements of the Borough of Naugatuck's Sewer Use Ordinance.

Section 2. Definitions.

WATER POLLUTION CONTROL AUTHORITY (WPCA)– Authorized representative of the Borough of Naugatuck.

CONTACT PERSON - The Contact Person shall mean the individual responsible for overseeing daily operation of the Food Preparation Establishment and who is responsible for overseeing the Food Preparation Establishment's compliance with the FOG Pretreatment Program.

FOG - FATS, OIL AND GREASE - Any fats, oils and grease generated from the food preparation process as identified by the most current EPA method as listed in 40-CFR 136.3.

FOG INTERCEPTOR - A passive tank installed outside a building and designed to remove fats, oil and grease from flowing wastewater while allowing wastewater to flow through it, and as further defined herein.

FOG RECOVERY UNIT - All active indoor mechanical systems designed to remove fats, oil and grease by physical separation from flowing wastewater, as further defined herein.

FOG PRETREATMENT SYSTEM - Refers to properly installed and operated FOG Interceptors, FOG Recovery Units, and other alternate system as approved by the Water Pollution Control Authority.

FOOD PREPARATION ESTABLISHMENTS - means Class III and IV food service establishments and any other facility discharging fats, oil and grease above the effluent limits in Section 5(c)(2) of the Department of Environmental Protection's *General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments* such as but not limited to restaurants, hotel kitchens, hospital kitchens, school kitchens, bars, factory cafeterias and clubs.

NON-RENDERABLE FATS, OILS AND GREASE - is fats, oils, and grease generated from food preparation processes that have been contaminated during the food preparation process thereby prohibiting this material from being rendered.

NOTIFICATION OF APPROVED ALTERNATE FOG PRETREATMENT SYSTEM - Written notification from the Water Pollution Control Authority for authorization to install and/or operate an alternate FOG Pretreatment System.

RENDERABLE FOG - is uncontaminated fats, oils and grease from the food preparation process that can be used as a source of material that is free of impurities and can be recycled into products such as animal feed and cosmetics.

RENDERABLE FOG CONTAINER - Means a closed, leak-proof container for the collection and storage of food grade fats, oil and grease.

REGIONAL FOG DISPOSAL FACILITY - is a publicly owned treatment works or privately owned treatment works that is permitted by the Connecticut Department of Environmental Protection for the separation and disposal by incineration or other methods of FOG from the wastewater of a facility.

Section 3. Application to Install a FOG Pretreatment System.

A. FOG Pretreatment Systems shall be provided for all new and existing Food Preparation Establishments, including restaurants, cafeterias, diners, and similar non-industrial facilities using food preparation processes. FOG Pretreatment Systems shall not be required for private living quarters or dwelling units.
B. All new Food Preparation Establishments or Establishments that change ownership as determined by the Water Pollution Control Authority shall submit an application to install a FOG Pretreatment System prior to opening the facility. The FOG System must be installed and functioning within 30 of the application approval date.
C. All existing Food Preparation Establishments which require a new FOG Pretreatment System, as determined by the Water Pollution Control Authority, shall submit an application for the installation of a new FOG Pretreatment System By July 1, 2010. The application shall be in accordance with Borough of Naugatuck’s Sewer Use

Ordinance. The approved FOG Pretreatment System shall be installed no later then July 1, 2011.

D. All existing Food Preparation Establishments which have an existing FOG Pretreatment System may, as determined by the Water Pollution Control Authority, keep the existing FOG Pretreatment System in operation. Such facilities shall submit an application for an "Alternate FOG Pretreatment System" as described in {*Section 6 C*}. Such application shall be submitted By July 1, 2010.

E. All costs and related expenses associated with the installation and connection of the FOG Interceptor(s) or Alternate FOG Pretreatment System(s) shall be borne by the Food Preparation Establishment. The Food Preparation Establishment shall indemnify the Borough of Naugatuck and its Agents for any loss or damage that may directly or indirectly occur due to the installation of the FOG Pretreatment System.

F. Applications to Install a FOG Pretreatment System or a "Alternate FOG Pretreatment System" shall be submitted on standard forms provided by the WPCA and shall be accompanied by a Fifty Dollar fee ($50.00). A letter of intent or contract from the approved FOG cleaner/hauler shall be submitted as part of the application.

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, as determined by the currently approved test for total recoverable fats and grease listed in 40 CFR 136.3, or in concentrations or in quantities which will harm either the sewers, or Water Pollution Control Facility, as determined by the Water Pollution Control 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 Water Pollution Control Authority per the Borough of Naugatuck's Sewer Use Ordinance, and subject to the requirements of all other applicable codes, ordinances and laws.

B. Except as provided by {*Section 6*}, the wastewater generated from Food Preparation Establishments shall be treated to remove FOG using a FOG Interceptor.

C. Every structure 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, or Alternate FOG Pretreatment System. No valve or piping bypass equipment that could prevent the discharge of food preparation wastewater from entering appropriate treatment equipment shall be present.

D. The Contact Person at each Food Preparation Establishment shall notify the Water Pollution Control 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 plumbing inspector, and/or Water Pollution Control Authority.

E. All applicable local plumbing/building codes shall be followed during the installation of the FOG Pretreatment System.

F. FOG Interceptor Requirements.

(1) The FOG Interceptor shall be installed on a separate building sewer line servicing kitchen flows and shall be connected only to those fixtures or drains which would allow fats, oils, and grease to be discharged. This shall include:
   (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 are likely to allow fats, oils and grease to be discharged.

(2) No food grinder shall discharge to the FOG Interceptor.

(3) No fixture or drain other than those listed in Paragraph (1) above shall be directly connected to the FOG Interceptor unless approved by the *Water Pollution Control Authority*.

(4) An outdoor, FOG interceptor shall have a minimum depth of four (4) feet and a minimum detention time of:
   (a) At least twenty-four (24) hours of the maximum daily flow from the fixtures described in subparagraph (1) of this section based on water meter records or other methods of calculation as approved by the Water Pollution Control Authority, or
   (b) 1000 gallons, whichever is greater.

(5) FOG Interceptors shall have a minimum of two compartments. The two compartments shall be separated by a baffle that extends from the bottom of the FOG interceptor to a minimum of five (5) inches above the static water level. An opening in the baffle shall be located at mid-water level. The size of the opening shall be at least eight (8) inches in diameter but not have an area exceeding one hundred eighty (180) square inches.

(6) FOG 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.

(7) FOG Interceptors constructed of precast concrete, shall meet the following requirements:
   (a) All concrete FOG Interceptors shall be fabricated using minimum 4,000-psi concrete per ASTM standards with four (4) to seven (7) percent air entrainment.
   (b) The FOG Interceptor shall have a minimum liquid depth of thirty-six (36) inches, measured from the bottom of the tank to the outlet invert.
   (c) The air space provided between the liquid height and the underside of the tank top shall be a minimum of eight (8) inches.

(d) All structural seams and/or lifting holes shall be grouted with non-shrinking cement or similar material and coated with a waterproof sealant. In areas where seasonal high ground water is at an elevation greater than the bottom of the FOG Interceptor, but below the top of the FOG Interceptor, the exterior top, sides and bottom shall be coated with a waterproof sealant creating a water tight condition for the tank. In areas where seasonal high ground water is at an elevation greater than the top of the FOG Interceptor, the exterior of the manhole extensions to grade shall be coated with a waterproof sealant creating a water tight condition for the extension.

(e) The manhole cover shall be placarded with the warning "Entrance into the tank could be fatal".

(f) Voids between the FOG Interceptors walls and inlet and outlet piping shall be grouted with non-shrinking cement and coated with a waterproof sealant.

(g) The liquid capacity of the tank shall be marked on the top of the tank between the outlet access hole and the outlet wall or on the vertical wall between the top of the tank and the top of the outlet opening.

(h) The invert elevation of the inlet shall be between three (3) inches and six (6) inches above the invert elevation of the outlet.

(8) All non-concrete septic tanks must be approved for use by the *Water Pollution Control Authority*.

(9) Separate cleanout covers shall be provided over the inlet and outlet of the FOG Interceptor so 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 ductile iron frames and round manhole covers. Where concrete covers are used, the lid must either weigh a minimum weight of fifty-nine (59) pounds or contain a locking mechanism to prevent unauthorized entrance. The manholes, extensions, and inlet and outlet access holes to the FOG Interceptor shall have a minimum inside diameter of seventeen (17) inches.

(10) The inlet and outlet piping shall be PVC meeting ASTM D 1785 Schedule 40 with rubber compression gaskets or solvent weld couplings. The joints must meet ASTM D 3212 specifications. The Water Pollution Control Authority may approve other piping materials for use. The minimum diameter of the inlet and outlet piping shall be four (4) inches. The inlet and outlet shall utilize a tee-pipe fitting on the interior of the FOG Interceptor. No caps or plugs shall be installed on the tee-pipes. The tee-pipe on the inlet and outlet shall extend to within twelve (12) inches of the bottom of the tank and at least five (5) inches above the static liquid level of the tank.

(11) The FOG Interceptor shall be set level of a consolidated, stable base that has been mechanically compacted, with a minimum of six (6) inches of crushed stone so that no settling or tipping of the FOG Interceptor can occur. Select backfill shall be placed and compacted around the FOG Interceptor in a manner to prevent damage to the tank and to prevent movement caused by frost action.

(12) The outlet discharge line from the FOG Interceptor shall be directly connected to the municipal sanitary sewer.

(13) The FOG Interceptor shall be located so as to maintain the separating distances from well water supplies set forth in Section 19-13-B51d of the Public Health Code.

(14) The following minimum-separating distances shall be maintained between the FOG Interceptor and the items listed below:

(a) Property line 10 ft

(b) Building served (no footing drains) 15 ft

(c) Ground water intercepting drains, footing drains and storm drainage systems 25 ft

(d) Open watercourse 50 ft (Subject to Inland Wetland Commission Approval)

(15) When necessary due to installation concerns, testing for leakage will be performed using either a vacuum test or water-pressure test.

(1) Vacuum Test - Seal the empty tank and apply a vacuum to two (2) inches of mercury. The tank is approved if 90 percent of the vacuum is held for two (2) minutes.

(2) Water-Pressure Test - Seal the tank, fill with water, and let stand for twenty-four (24) hours. Refill the tank. The tank is approved if the water level is held for one (1) hour.

Section 6. Alternate FOG Pretreatment System.

A. When it is not practical for the Food Preparation Establishment to install an outdoor in-ground FOG Interceptor per {*Section 5*}, an Alternate FOG Pretreatment System may be utilized upon approval by the Water Pollution Control Authority and upon receiving a "Notification of Approved Alternative FOG Pretreatment System." Approval of the system shall be based on demonstrated (proven) removal efficiencies and reliability of operation. The Water Pollution Control Authority will approve these systems on a case-by-case basis. The Contact Person may be required to furnish analytical data demonstrating that FOG discharge concentrations do not exceed the limits established in this ordinance.

B. Alternate FOG Pretreatment Systems shall consist of a FOG Recovery Unit meeting the requirements of {*Paragraph D below*}, unless there are special circumstances that preclude such installation, as approved by the Water Pollution Control Authority, and in accordance with {*Paragraph E*}.

C. Alternate FOG Pretreatment Systems shall meet the requirements of {*Section 5, A through E*}, and shall be installed immediately downstream of each of the fixtures and drains listed in {*Section 5 F. (1)*}, and shall meet the requirement of {*Section 5 F. (2) and (3)*}.

D. Alternate FOG Pretreatment System Requirements.

(1) FOG Recovery Units shall be sized to properly pretreat the measured or calculated flows using methods approved by the Water Pollution Control Authority.

(2) FOG Recovery Units shall be constructed of corrosion-resistant material such as stainless steel or plastic.
(3) Solids shall be intercepted and separated from the effluent flow using a strainer mechanism that is integral to the unit.
(4) The FOG Recovery Unit shall operate using a skimming device, automatic draw-off, or other mechanical/hard wired electrical means to automatically remove separated FOG. This automatic skimming device shall be controlled using a timer or level control. The operation of the automatic skimming device shall be field adjustable. The FOG Recovery Unit timer shall be set to operate the unit no less than once per day.
(5) FOG Recovery Units shall be fitted with an internal or external flow control device to prevent the exceedence of the manufacturer's recommended design flow.
(6) FOG Recovery Units shall be located to permit frequent access for maintenance, and inspection.

E. Other Alternate FOG Pretreatment System

(1) Other Alternate FOG Pretreatment Systems that do not meet the requirements of {*Section 5 F or Section 6 D*}, may be considered for approval by the Water Pollution Control Authority on a case-by-case basis. The application shall include:

(a) Documented evidence that the proposed Alternate FOG Pretreatment System will not discharge FOG concentrations that exceed the discharge limits per {*Section 4*}.
(b) Plans and specifications for the proposed system including plans and profile of system installation, manufacturer's literature, documentation of performance and any other information detailing the proposed alternate system.
(c) A written Operation and Maintenance Plan, which shall include the schedule for cleaning and maintenance, copies of maintenance log forms, a list of spare parts to be maintained at the subject facility, and a list of contacts for the manufacturer and supplier. Following receipt of written Notification of Approved Alternate FOG Pretreatment System from the Water Pollution Control Authority, the Operation and Maintenance Plan shall be maintained on the premises. The plan shall be made available for inspection on demand by the Water Pollution Control Authority.
(d) A written FOG Minimization Plan, which shall include procedures for all Food Preparation Establishment employees to minimize FOG entering the wastewater collection system.
(e) A description of a FOG Pretreatment Training Program for Food Preparation Establishment employees in FOG minimization procedures.

(2) A Notification of Approved Alternate FOG Pretreatment System may be granted for a duration not to exceed three (3) years, with extensions, when demonstrated to the satisfaction of the Water Pollution Control Authority that

the proposed Alternate FOG Pretreatment System, Operation and Maintenance Plan, FOG Minimization Plan and FOG Pretreatment Training Program are adequate to maintain FOG concentration in the wastewater discharge below the limits set in {*Section 4*}.

Section 7. Pretreatment Equipment Maintenance

A. The FOG Pretreatment System shall be maintained continuously in satisfactory and effective operation, at the Food Preparation Establishment's expense.

B. The Contact Person shall be responsible for the proper removal and disposal, by appropriate means, of the collected 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, or a minimum of once every three (3) months, whichever is more frequent. Cleaning of FOG Interceptors shall include the complete removal of all contents, including floating materials, wastewater and settled sludge. Decanting back into the FOG Interceptor shall not be permitted. FOG interceptor cleaning shall include scraping excessive solids from the wall, floors, baffles and all piping.

(2) If the Contact Person can provide data demonstrating that less frequent cleaning of the FOG Interceptor will not result in a grease level in excess of twenty-five (25) percent of the operating depth of the FOG Interceptor, the Water Pollution Control Authority may allow less frequent cleaning. The Contact Person shall provide data including pumping receipts for four (4) consecutive cleanings of the FOG Interceptor, complete with a report from the Grease Trap/Interceptor Cleaner indicating the grease level at each cleaning, and the FOG Interceptor maintenance log.

(3) A maintenance log shall be maintained on the premises, and shall include the following information: dates of all activities, volume pumped, grease depth, grease trap/interceptor cleaner's name, location 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 Water Pollution Control Authority for inspection on demand. Interceptor cleaning and inspection records shall be maintained on file a minimum of five (5) years.

E. All material removed and hauled from FOG Pretreatment Systems must be performed by a subsurface sewage disposal cleaner or entity approved by the *Water Pollution*

Control Authority. Pumped material shall be disposed of at a Regional FOG Disposal Facility.

F. The Contact Person shall be responsible to submit maintenance reports to the Water Pollution Control Board every 2 years. Reports shall be submitted before July 1 in each odd year (2013, 2015, 2017, etc.). The Contact Person shall notify the WPCA within 30 days of changing approved FOG cleaner/haulers.

G. The Contact Person shall be responsible for the cost and scheduling of all actions need to comply with this *{Article}*. The Contact Person shall be notified in writing of violations of this Article by the Water Pollution Control Authority. Actions to comply with this *{Article}* shall be completed within the time limits as given below:

Violation	Days from Inspection to Correct Violation
Equipment not registered	30 days
Equipment not properly installed	90 days
Major violations (outdoor and indoor)	30 days
Minor Violations	90 days

H. If the required actions to comply with this article are not corrected within the time limits specified in Section 7. F. the property owner may be fined an amount as determined by the WPCA not to exceed ten dollars a day until the violations are corrected. The maximum fine shall not exceed five hundred dollars ($500.00).

Section 8. 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, septic tank or FOG Interceptor. All renderable fats, oil and grease shall be stored in a separate, covered, leak-proof, Renderable FOG Container, stored out of reach of vermin, and collected by a renderer.

C. Small quantities of FOG scraped or removed from pots, pans, dishes and utensils shall be directed to the municipal solid waste stream for disposal.