



**ORDINANCES GOVERNING OPERATING PROCEDURES
FAT, OIL, AND GREASE CONTROL**

SEWER USE ORDINANCE

Section 21-27 Definitions

Action Level means the concentration based numeric value that the Grease interceptor effluent, at the device's outlet tee and prior to mixing with any other waste water from the contributing establishment's property, are expected to achieve on a consistent or stipulated basis.

Common interceptor means one or more interceptors receiving FOG laden wastewater from more than one establishment. Common interceptors may be located at shopping centers, malls, entertainment complexes, sporting arenas, hotels, multi-tenant "flex" spaces, mixed use spaces, and other sites where multiple establishments are connected to a single grease interceptor. The owner of the property on which the common grease interceptor is located shall be primarily responsible for the maintenance, upkeep, and repair of the common interceptor.

Fats, oils, and greases means organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in 40 CFR 136, as may be amended from time to time. All are collectively referred to herein as "grease" or "greases" or "FOG".

Food Service Establishments or "FSE" means those establishments primarily engaged in activities of preparing, serving, or otherwise making available for consumption foodstuffs and that use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching, infrared heating, searing, barbecuing, and any other food preparation or serving activity that produces a consumable food product in or on a receptacle requiring washing to be reused.

FOG Enforcement Response Plan means the document and written plan and procedures by which the Director of Water Resources implements an enforcement strategy applicable to the FOG control and management program established herein. The plan applies to FOG program violations and matters of program noncompliance. Stipulated penalties for specific and programmatic infractions are addressed in the plan.

FSE User is defined as a specific user group employing a common FOG interceptor. User(s) shall include property owners who provide common interceptors for one or more independent establishments, including tenants.

Grease trap or interceptor means a device for separating waterborne greases and grease complexes from wastewater and retaining such greases and grease complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection and treatment system. Grease traps also serve to collect solids that settle, generated by and from activities that subject Users to this section, prior to the water exiting the trap and entering the sanitary sewer collection and treatment system. Grease traps and interceptors are collectively referred to herein as "grease interceptors." Grease interceptors are at least 500 gallons and are remotely located. Grease traps are devices designed to capture grease from one to a maximum of four fixtures.

Minimum design capability means the design features of a grease interceptor and its ability or volume required to effectively intercept and retain greases and settled solids from grease-laden wastewaters discharged to the public sanitary sewer.

Non cooking establishments means those establishments primarily engaged in the preparation of precooked foodstuffs that do not include any form of cooking, but that may produce a consumable food product in or on a receptacle requiring washing to be reused.

On-site grease interceptor treatment or Onsite Treatment means mechanisms or procedures utilized by a User to treat grease interceptor contents on the User's site, followed by the reintroduction of such treated wastewater back into the interceptor. On-site grease interceptor treatment may only be accomplished by a User if the User or the User's contract service provider is permitted by the NC Division of Waste Management as a septage management firm or service provider.

Sanitary Sewer Overflow – An overflow or discharge of raw sewage from publicly owned treatment works (POTW) due to a blockage in a line.

Service provider means any third party not in the employment of the User that performs maintenance, repair, and other services on a User's grease interceptor at the User's directive.

User's contract service provider is permitted by the NC Division of Waste Management as a septage management firm or service provider.

Section 21-30.1(14) Prohibition

Fats, oils, or greases of animal or vegetable origin in concentrations greater than two hundred (200) mg/L whether emulsified or not, provided that up to five hundred (500) mg/L may be discharged by permit authority. Also prohibited are any wastes containing the above substances which may solidify or become viscous in the system at temperatures between thirty-two (32) and one hundred fifty (150) degrees Fahrenheit.

SECTION 21-29 FATS, OILS, AND GREASES

Section 21-29.1 Purpose

The purpose of this section is to support Section 21-32.5 of the City of Rocky Mount Sewer Use Ordinance in preventing the introduction and accumulation of fats, oils, and greases (FOG) into the municipal wastewater system which will or tend to cause or contribute to interference in the daily operation of the Publicly Owned Treatment Works (POTW). Food Service Establishments and other industrial or commercial establishments generating wastewater containing fats, oils or greases are subject to this section. This section shall regulate such users by requiring that grease interceptors and other approved strategies be installed, implemented, and maintained in accordance with the provisions hereof.

Section 21-29.2 Interceptor Installation and Maintenance

(a) Grease interceptors or traps shall be installed and maintained at the User's expense when a User operates a food service establishment. Grease interceptors may be required in non-cooking or cold dairy and frozen foodstuffs establishments and other industrial or commercial establishments when the establishment generates wastewater containing fat or grease in excess of Section 21.30.1 as provided in the City of Rocky Mount's Sewer Use Ordinance. The Director of Water Resources is authorized to determine when an interceptor or trap is necessary to prevent contribution or accumulation of grease to the sanitary sewer collection and treatment system. Upon notification by the Director of Water Resources or his or her designee that the User is subject to the terms of an enforcement action, as stipulated in the FOG Enforcement Response Plan, said User shall not allow wastewater discharge concentration from subject grease interceptor to exceed the action level as prescribed in the Sewer Use Ordinance, expressed as hexane extractable material. All grease interceptors shall be of a type, design, and capacity approved by the Director of Water Resources and shall be readily and easily accessible for maintenance and repair, including cleaning and City inspection. All grease interceptors shall be serviced and emptied of accumulated waste content as required to maintain the minimum design capability or effective volume of the grease interceptor, but not less often than every sixty (60) calendar days or as permitted in a valid program modification. Users who are required to pass wastewater through a grease interceptor shall adhere to the following provisions:

(b) Grease Interceptor sizing formula to obtain minimum design capability for new installations, amendments, or modifications to existing installations shall be as follows:

$$GI = SC \times FF \times RT \times SF$$

Whereby:

GI = interceptor volume in gallons

SC= Seating capacity

RT= Retention Time (0.4 hours)

SF= 9.375 Storage Factor (dimensionless)

FF= Flow factor (gallons/seat/hour)

Deep frying and dishwasher	FF = 3.0
No deep frying and dishwasher	FF = 2.5
Deep frying and disposable serving ware	FF = 2.5
No deep frying, reusable serving ware, and no dishwasher	FF = 2.0
No deep frying and disposable serving ware	FF = 1.5
No cooking of any type and disposable serving ware	FF = 0.5

(c) Provide for a minimum hydraulic retention time of 24 minutes (0.40 hours) at actual peak flow between the influent and effluent baffles, with twenty-five percent (25%) of the total volume of the grease interceptor being allowed for any food-derived solids to settle or accumulate and floatable grease derived materials to rise and accumulate, identified hereafter as a solids blanket and grease cap respectively.

(d) Remove any accumulated grease cap and solids blanket as needed, but at intervals of not longer than sixty (60) calendar days at the User's expense, or in accordance with a valid program modification or other requirements established by the Director of Water Resources. Grease 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 in this solids blanket and thereby reduce the effective volume & detention time of the grease interceptor.

(e) Operate and maintain the grease interceptor to achieve and consistently maintain any applicable grease action level. "Consistent" shall mean any wastewater sample taken from such grease interceptor must meet the terms of numerical limit attainment described in Section 21-29.2(a).

(f) If a User documents that conditions exist ("space constraints") on their establishment site that limit the ability to locate a grease interceptor on the exterior of the establishment, the User may request an interior location for the interceptor. Such request shall contain the following information:

- (1) Location of City sewer main and easement in relation to available exterior space outside building.
- (2) Existing plumbing layout at or in a site.

- (3) A Statement of Understanding, signed by the User or authorized agent, acknowledging and accepting conditions the Director of Water Resources may place on permitting an identified interior location. Conditions may include requirements to use alternative mechanisms, devices, procedures, or operations relative to an interior location.
- (4) Such other information as may be required by the Director of Water Resources.
- (g) If the User performs on-site grease interceptor treatment pursuant to a modification granted under Section 21-29.2(f), the User shall:
- (1) Prior to commencement of Onsite Treatment obtain written approval by and from the Director of Water Resources of all processes utilized in said Onsite Treatment.
 - (2) If any pumped wastes or other materials removed from the grease interceptor are treated in any fashion on-site and reintroduced back into the grease interceptor as an activity of and after such on-site treatment, the user shall meet the criteria contained in Section 21-29.2(g)(3) below.
 - (3) Attain and adhere to the criteria listed below:
 - (i) After 30 minutes of settling time, not more than 3.0 milliliter per liter of settleable solids, as measured in a 1 liter Imhoff cone shall be allowed, and;
 - (ii) Within and not more than 24 hours after onsite grease interceptor servicing, not more than 2" (inches) of settleable solids and/or grease shall be allowed to have accumulated therein as a result of said operations.
 - (iii) Service vehicles and equipment used in onsite Grease interceptor servicing shall be registered with the North Carolina Division of Waste Management.
 - (iv) When service is being provided, grease interceptor service vehicles and equipment shall have onboard, at all times, a certificate of approval for the operations and methods used, issued by the Director of Water Resources.
 - (v) Any tanks, tankage, or vessel(s) associated with a modification shall be empty upon arrival at the initial FSE User site.
- (h) The use of biological or other additives as a grease degradation or conditioning agent is permissible only upon prior written approval of the Director of Water Resources. Any User using biological or other additives shall maintain the trap or interceptor in such a manner that attainment of any grease wastewater, action level, solids blanket or grease cap criteria, goal or directive, as measured from the grease interceptor outlet or interior, is consistently achieved.
- (i) The Director of Water Resources may make determinations of grease interceptor adequacy, need, design, appropriateness, application, location, modification(s), and conditional usage based on review of all relevant information regarding grease interceptor performance, facility site and building plan review by all regulatory reviewing agencies and may require repairs to, or modification or replacement of grease interceptors.

Section 21-29.3 Record Keeping

(a) The User shall maintain a written record of grease interceptor maintenance for three (3) years. All such records will be available for inspection by the City's Representatives at all times. These records shall include:

- (1) FSE name and physical location
- (2) Date and time of grease interceptor service
- (3) Name of grease interceptor service company
- (4) Name and signature of grease interceptor service company agent performing service
- (5) Notes of any deficiencies in grease interceptor structure or access
- (6) Established service frequency and type of service: full pump-out, partial pump-out, on-site treatment (type or nature of operations)
- (7) Number and size of each grease interceptor serviced at FSE location
- (8) Approximated amount, based upon the best professional judgment of the contract service provider, of grease and solids removed from each grease interceptor
- (9) Total volume of waste removed from each grease interceptor
- (10) Destination of removed wastes, food solids, and wastewater disposal
- (11) Signature and date of FSE personnel confirming service completion
- (12) Such other information as required by Director of Water Resources

Section 21-29.4 Inspections

(a) All Food Service Establishments grease handling facilities shall be subject to review, evaluation, and inspection by authorized representatives of the Director of Water Resources during normal working hours,

(b) Results of inspections will be made available to User. The City's inspector may make recommendations for correction and improvement.

(c) The City's inspector will inspect each establishment as needed , to check such things as, but not limited to, the sink and trap set-up, quantity of grease in the interceptor, clarity of effluent, grease recycling bin, and vendor hauling records. However, the City inspector will initiate additional inspections, sampling, and pursue enforcement if the required hauling vendor paperwork is not complete or if the facility is located in the area where blockages have occurred.

Section 21-29.5 Design and Permit Modifications

- (a) No non-grease laden sources are allowed to be connected to sewer lines intended for grease interceptor service.
- (b) Access manholes shall have an installed diameter of 24 inches, a maximum weight of 50 pounds, and shall be provided over each chamber, interior baffle wall, and each sanitary tee. The access penetrations, commonly referred to as "risers" into the grease interceptor shall also be, at a minimum, 24 inches in diameter. 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.
- (c) A User may request a modification to the following requirements of this ordinance. Such request for a modification shall be in writing and shall provide the information set forth below.
 - (1) The Director of Water Resources may modify the 60 day grease interceptor pump-out frequency when the User provides data and performance criteria relative to the overall effectiveness of a proposed alternate and such can be substantiated by the Director of Water Resources. Proposed alternatives may include: documented measurement of solids and grease loading of interceptor with sludge judge, grease interceptor pumping or maintenance matters, bioremediation as a complement to Grease interceptor maintenance, grease interceptor selection and sizing criteria, onsite grease interceptor maintenance, and specialized kitchen sanitation which reduces loading to interceptor.
 - (2) The Director of Water Resources may modify the method(s) or procedure(s) utilized to service a grease interceptor when the User provides data, and performance criteria relative to the overall effectiveness of a proposed alternate method or procedure and such can be substantiated by the Director of Water Resources. If a modification to maintenance and service procedures is permitted it shall be a conditional discharged permit approval.
 - (3) Any modification must be approved by the Director of Water Resources in written form before implementation by the User or User's designated service provider. The User shall pay modification fees as set forth in the Administrative Policy X.9.1 Water and Sewer Miscellaneous Fees.

Section 21-29.6 Exclusions

- (a) A Food Service Establishment determined to have no immediate adverse impact on the City's sanitary sewer collection system because of the business type may be granted an exemption from the grease trap/interceptor installation requirements.
- (b) The Director of Water Resources may, at any time, revoke an exemption and require that a grease trap/interceptor be installed.
- (c) To obtain an exemption, a Food Service Establishment must request an inspection, and then be approved by the Director of Water Resources.

(d) The following are exempted from grease interceptor requirements due to business type:

- (1) An establishment classified as a residential group home by the State of North Carolina;
- (2) An establishment serving beverages only;
- (3) An establishment serving beverages and/or ready to eat, packaged, or unpackaged food items (with or without warming);
- (4) A snack bar with no food preparation other than food warming;
- (5) A produce stand that only offers whole, uncut fresh fruits, and vegetables;
- (6) A bed-and-breakfast that prepares and services breakfast only to guests, with no more than six (6) guestrooms and no more than twelve (12) guests;
- (7) Other establishments serving only ready to eat foods with or without food warming.

Section 21-29.7 Administrative Remedies

(a) Notification of Violation. Whenever the Director of Water Resources finds that any food service establishment has violated or is violating this section or any subsection hereof, or any prohibition, limitation, or requirements contained therein, the Director of Water Resources or his or her designee shall serve upon such a person a written notice stating the nature of the violation and the terms as they apply to the City of Rocky Mount FOG Enforcement Response Plan.

(b) Consent Orders. The Director of Water Resources is hereby empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement to comply with the requirements contained herein, which document shall contain a provision providing for the termination of water and sewer utility service in the event of failure to comply with the consent order or similar document. Such orders will include specific action to be taken by the discharger to correct the noncompliance within a time period specified by the order or other document.

(c) Termination of Service. The Director of Water Resources shall order termination of water and sewer utility service to the User in the event of failure to comply with the terms of the consent order or other document establishing an agreement to comply.

(d) Fees. The Director of Water Resources is hereby authorized to assess reasonable -cost against Users in an amount not to exceed the cost incurred by the City associated with obtaining compliance with the requirements contained herein including but not limited to the following City incurred cost:

- (1) Sampling costs
- (2) Inspection and re-inspections
- (3) Publication costs
- (4) Clean up and repair costs
- (5) Legal fees

Section 21-29.8 Fees And Penalties

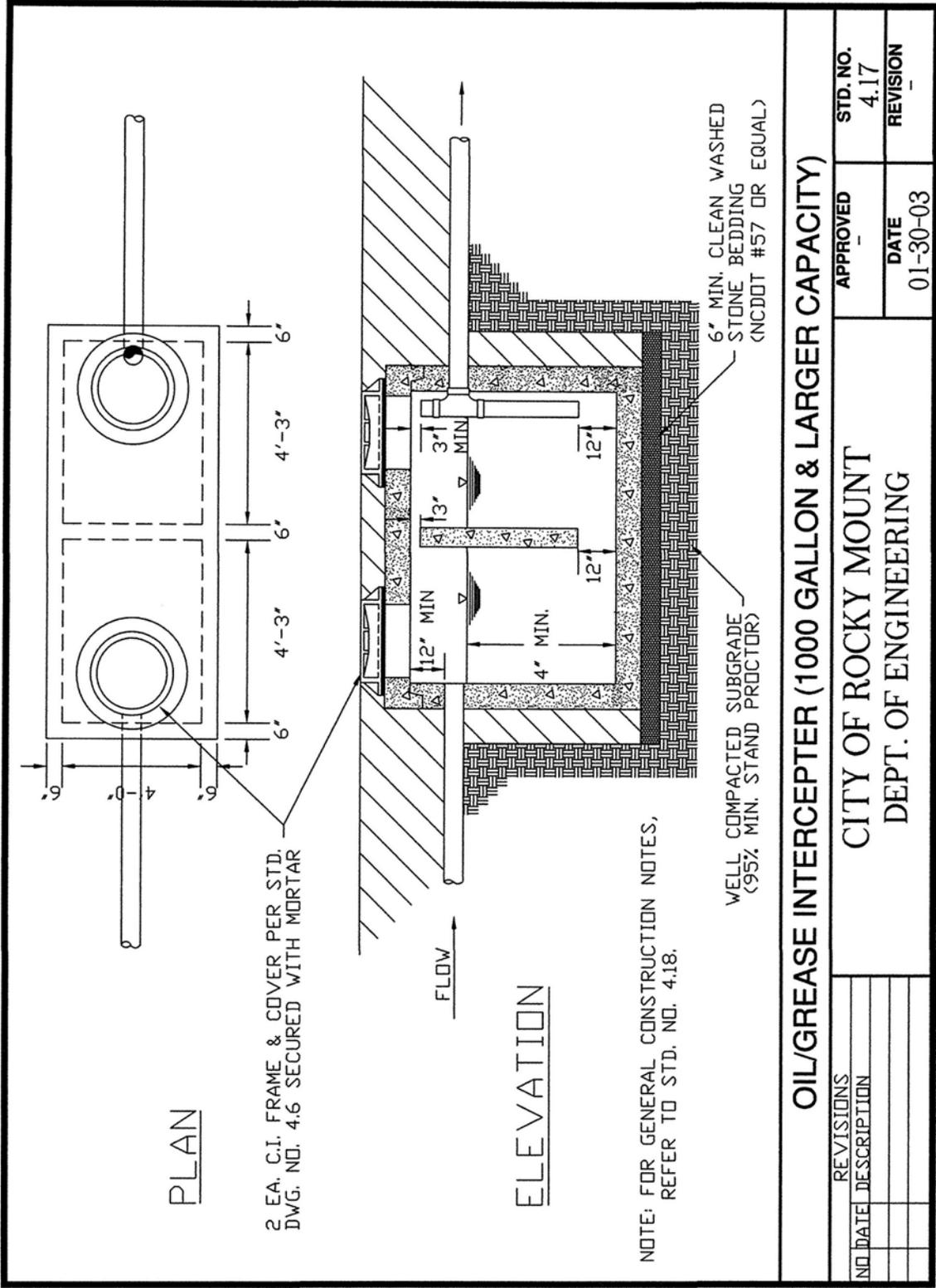
The schedules for annual fees and penalties shall be as set forth in Administrative Policy X.9.1 Water and Sewer Miscellaneous Fees of the City's Administrative Policy Manual and as provided in the City's FOG Enforcement Response Plan.

Section 21-29.9 Severability

If any provision, paragraph, word, subsection, or section of this ordinance is invalidated by any court of competent jurisdiction, the remaining provisions, paragraphs, words, subsections, and sections, shall not be affected thereby and shall continue in full force and effect.

Section 21-29.10 Conflict

All other ordinances and/or parts of other ordinances of the City inconsistent or conflicting with any part of this ordinance are hereby repealed to the extent of such inconsistency or conflict.



PLAN

2 EA. C.I. FRAME & COVER PER STD. DWG. NO. 4.6 SECURED WITH MORTAR

ELEVATION

NOTE: FOR GENERAL CONSTRUCTION NOTES, REFER TO STD. NO. 4.18.

WELL COMPACTED SUBGRADE (95% MIN. STAND PROCTOR)
 6" MIN. CLEAN WASHED STONE BEDDING (NCDOT #57 OR EQUAL)

OIL/GREASE INTERCEPTER (1000 GALLON & LARGER CAPACITY)

REVISIONS	
NO.	DATE/DESCRIPTION

**CITY OF ROCKY MOUNT
 DEPT. OF ENGINEERING**

APPROVED	STD. NO. 4.17
DATE 01-30-03	REVISION