



County of Brunswick Public Utilities
Fats, Oil and Grease (FOG) Control Program

1.0 Scope and Purpose

1.1 The scope and purpose of this program shall be to address the prevention of sanitary sewer blockages and obstructions resulting from contribution and accumulation of fats, oils and grease (FOG) into the wastewater collection system from industrial or commercial establishments, particularly food preparation and serving facilities.

1.2 Legal Authority under North Carolina law, it is a crime to negligently violate any term, condition, or requirement of a pretreatment permit, or negligently fail to apply for a pretreatment permit, issued by local governments (G.S. 143-215.6B(f), to knowingly and willfully violate any term, condition, or requirement of a pretreatment permit, or knowingly and willfully fail to apply for a pretreatment permit, issued by local governments (G.S. 143-215.6(g)), to knowingly violate any term, condition, or a pretreatment permit, and to falsify information required under Article 21 of Chapter 143 of the General Statutes (G.S. 143-215.6B(i)).

2.0 Definitions

2.1 Fats, Oils and Grease. 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 (Federal Register), as may be amended from time to time. All are sometimes referred to herein as "FOG", "Grease" or "Greasess".

2.2 FOG Separation Device. A device for separating and retaining waterborne FOG and FOG complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection and treatment system. These devices also serve to collect settleable solids, generated by and from food preparation activities. FOG Separation Devices may also be referred to herein as "Grease Traps" or "Grease Interceptor".

2.3 Food Preparation Facilities (FPF's)

2.3.1 Cooking Establishments. Those establishments primarily engaged in activities of preparing, serving, or otherwise making available or 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, or poaching. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing.

2.3.2. Non- Cooking Establishments. Those establishments primarily engaged in the preparation of precooked foodstuffs that do not include any form of cooking. These include cold dairy and frozen foodstuffs.

2.3.3 Vehicle Maintenance Facilities. Those establishments primarily engaged in the repair and maintenance of motor vehicles.

2.4 Minimum Design Capability. The design characteristics of a FOG Device and its ability or volume required to effectively intercept and retain FOG from FOG-laden wastewater prior to their discharge to the public sanitary sewer collection system.

2.5 User. Any person within the service area of the County of Brunswick, who contributes, causes or permits the contribution or discharge of wastewater into the County Owned Treatment Works, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

3.0 General Requirements and Performance

3.1 FOG Separation Devices shall be installed and maintained by Users that are operating Cooking Establishments. FOG Separation Devices may also be required in Non-cooking Establishments and other industrial or commercial establishments when they are deemed necessary by the County of Brunswick for the proper handling of liquid waste containing FOG. All FOG Separation Device shall be installed and maintained at the User's expense.

3.2 Any User required to install or upgrade a FOG Separation Device shall complete the installation or upgrade within six (6) months after written notification from the County of Brunswick.

3.3 No User shall allow the FOG concentration in the wastewater discharged from subject FOG Separation Device to exceed 325 milligrams per liter, as identified by EPA Method 1664, or 275 milligrams per liter, as identified by EPA Method 413.

3.4 All FOG Separation Devices shall be of a type, design, and capacity approved by the County of Brunswick and shall be readily and easily accessible for cleaning, inspection and effluent sampling. Users shall understand and agree that the County of Brunswick reserves the right to make determinations of FOG Separation Device adequacy and need, based on review of all relevant information regarding, Device

performance, facility site and building plan review, and to require repairs, modifications and/or replacement of such Devices.

- 3.5** The County of Brunswick reserves the right to inspect kitchen facilities and grease separation devices during normal business hours upon one hour notification.

4.0 Design and Maintenance

- 4.1** FOG Separation Devices shall generally be the “out-of-building” type, designed for outdoor, buried service.
- 4.2** FOG Separation Devices shall provide for a minimum hydraulic retention time of twenty-four (24) minutes at actual peak flow or twelve (12) minutes at the calculated theoretical peak flow rate as predicted by the Uniform Plumbing Code fixture criteria, with twenty (20) percent of the total volume of the Device being reserved for sludge to settle and accumulate, identified hereafter as a “sludge pocket”.
- 4.3** Provide FOG Separation Devices with at least one access opening over each chamber, with a minimum diameter of 24 inches. Influent and effluent riser pipes should be positioned directly under the access opening to facilitate inspection and wastewater sampling activities. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow and infiltration. The manholes shall also have readily removable covers to allow ease of access for maintenance, inspection and sampling.
- 4.4** Remove any accumulated FOG cap and sludge pocket as required to maintain Minimum Design Capability or effective volume of the FOG Separation Device but at intervals of no longer than thirty (30) days, at the User’s expense. FOG Separation Devices shall be kept free of inorganic solid materials such as grit, rocks, gravel, sand, eating utensils, cigarettes, shells, towels, rags, etc., which could clog piping or settle into the sludge pocket and thereby reduce the effective volume of the Device.
- 4.5** Users shall retain the services of a commercial cleaning company specializing in removal of FOG from food preparation facilities to maintain Fog Separation Devices. Collection of FOG and solids shall be disposed of properly in accordance with applicable laws and regulations.
- 4.6** Operate the FOG Separation Device in a manner so as to maintain said device such that attainment of the limit is consistently achieved. “Consistent” shall mean any wastewater sample taken from said FOG Separation Device shall be subject to terms of FOG concentration limit specified herein.
- 4.7** If any skimmed or pumped wastes or other materials removed from a FOG Separation Device are treated in any fashion on-site and reintroduced back into the Device as an activity of and after said on-site treatment, the User shall be responsible for the attainment of the FOG

concentration limit specified herein on all discharges of wastewater from said Device into the County of Brunswick sanitary sewer collection and treatment system.

- 4.8** Connection of non-grease laden sources to sewer lines discharging to FOG Separation Devices shall not be allowed.

5.0 Variances

5.1 The County of Brunswick, at their discretion, may grant a variance to a User as it relates to the requirements of this FOG Control Program based upon certified documentation that the requirements impose an unnecessary or unreasonable burden on the User. The FOG Separation Device at any establishment to which a variance is granted remains subject to the FOG concentration limit specified herein. The County of Brunswick may rescind or modify such a variance at any time if the Characteristics of the User's discharge or nature of the User's operations have changed or if the discharge is causing a detriment to the County of Brunswick wastewater collection and treatment system. Variances will only be granted by the County of Brunswick, Utilities Operations Board.

5.2 Requirements and situations for which variances may be considered include the following:

5.2.1 Requirements related to the size or capacity of the FOG Separation Devices such as locations where space constraints or other site conditions make it unreasonably difficult to install an "out-of-building" type FOG Separation Device.

5.2.2 Requirement for removal of FOG and solids at an interval of no longer than 30 days.

5.2.3 Allowing a restroom or other non-grease laden source to connect to a Grease Separation Device.

5.2.4 Allowing removal of FOG from Grease Separation Device by personnel other than a commercial cleaning company.

5.2.5 Use of biological additives as a FOG degradation agent.

6.0 Record-Keeping

The User shall maintain a written record of FOG Separation Device maintenance, including invoices from commercial cleaning companies, for a period three (3) years. All such records shall be kept at the establishment location and shall be made available for inspection by the County of Brunswick staff, upon request. Users shall be required to submit written reports at least once per year and as requested by the County of Brunswick.

7.0 Enforcement

Enforcement of the requirements of this Program shall be as provided for in the County of Brunswick Sewer Use Ordinance and revisions or main(s) amendments thereto. If the obstruction of a County of Brunswick sewer main occurs that causes a sanitary sewer overflow to the extent that an impact on the environment is realized and that said overflow or failure of the sanitary sewer collection system to convey sewage can be attributed in part or in whole to an accumulation of FOG in the County of Brunswick sewer main(s), the County of Brunswick will take appropriate enforcement actions, as stipulated in the County of Brunswick Sewer Use Ordinance, against the generator or contributor of such FOG.