CONTROL OF FATS, OILS AND GREASE

Section 1. General

In an effort to curb overflows from grease accumulation in its sanitary sewer mains, the Town of Chapin adopts this Fats, Oils and Grease Control section. Any industrial, commercial or nonresidential facility connected to the sanitary sewer collection and treatment system involved in the preparation or serving of foods and other establishments with the potential to discharge fats, oils and greases will be subject to the conditions of this Section.

The purpose of this Section is to aid in the prevention of sanitary sewer blockages and obstructions from contributions and accumulation of fats, oils, and greases into the sanitary sewer system from industrial or commercial establishments, particularly food preparation and serving facilities.

In addition to the control of fats, oils, and grease each user shall take appropriate steps to prevent the discharge of petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, including, but not limited to fuel oil; sludge; oil refuse; oil mixed with wastes other than dredged spoil; fats, oils or greases of animal, fish, or marine mammal origin; vegetable oils, including oil from seeds, nuts, fruits, or kernels; and other oils and greases, including synthetic oils and mineral oils in amounts that will cause interference or pass-through of the sewer collection and/or treatment systems.

Section 2. Definitions.

Chain of custody: a multi-part form approved by the Town of Chapin Utilities such as a manifest which documents the collection, transportation, and delivery of a sample(s), usually from the point of sample collection to delivery at a testing laboratory. The form shall document a description of the sample, who collected it, where it was collected from, and what time the sample was collected. Each time the sample(s) is transferred to another person, the time and date shall be noted along with the name of the receiving party such that any and all persons having custody of the sample(s) at one time or another can be specifically identified.

Chapin: The governing body of the Town of Chapin, South Carolina and its Administration; its political subdivision, and/or its geographical area.

Fats, oils, and greases (FOG): 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 the United States Code of Federal Regulations 40 CFR 136, as may be amended from time to time. All are sometimes referred to herein as grease or greases.

Food service establishments: Those industrial, commercial or nonresidential establishments primarily engaged in activities of preparing, serving, or otherwise making food available for consumption by the public, such as restaurants, bars, private clubs, religious organizations, commercial kitchens, caterers, motels, hotels, schools, hospitals, cafeterias, prisons, correctional facilities, residential health care institutions, and other entities which may prepare food and have the potential to discharge grease to the sanitary sewer system. These establishments use one (1) 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. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, food by-product in or on a receptacle that requires washing. Those permanent facilities required to have a South Carolina Department of Health and Environmental Control food service license shall normally be included.

Grease interceptor: A structure or device designed for the purpose of removing and preventing fats, oils, and greases from entering the sanitary sewer collection system. These devices are often below-ground units in outside areas and are built as two- or three- chambered baffled tanks.

Grease trap: A device for separating and retaining waterborne greases and grease complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection and treatment system. Such traps are typically compact under-the-sink units that are near food preparation areas.

Minimum design capability: The design features of a grease interceptor and its ability or volume required to effectively intercept and retain greases from grease-laden wastewaters discharged to the public sanitary sewer. All systems shall be designed such that no more than 100 mg/l of fats, oils, and/or grease shall be discharged to the public sewer system at any time.

Neutralizing Device: A tank or manufactured device installed to dilute or neutralize acids or corrosive liquids prior to discharge into collector lines. Such devices shall be automatically provided with a sufficient intake of diluting water or neutralizing medium, so as to make its contents non-injurious before being discharged into the collection system.

Non-residential establishment: A facility or business, having the potential to discharge FOGs and/or other oils and greases into the sanitary sewerage system, in which the primary purpose is not for the general inhabitance of persons, and may include food service establishments and other commercial or industrial activities such as automotive repair facilities, machine shops, schools, car washes, and manufacturing facilities.

Oil separator: A device which serves to trap and retain oils or flammable liquid to prohibit the introduction into the sewer system by accident or otherwise.

Sand separator: A device which is designed to trap sand and other solids and prohibit entry into the sewer system and may operate in conjunction with or as a component of a grease interceptor or oil separator.

SCDHEC: South Carolina Department of Health and Environmental Control

TCU: Town of Chapin Utilities, a department of the Town of Chapin providing water and sewer services.

User : Any person, including those located outside the jurisdictional limits of the Town, who contributes, causes or permits the contribution or discharge of wastewater into a publicly owned treatment works (POTW), including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

Section 3. Wastewater discharge limitations.

In addition to those items referenced in Section 1 generally, no user shall allow wastewater discharge from subject grease interceptor, grease trap, or alternative pretreatment technology to exceed one hundred (100) milligrams per liter of fats, oil and grease as measured by methods provided in 40 CFR 136.

Section 4. Food service establishment and non-residential users with potential to discharge FOGs; permit requirement.

All food service and other establishments with the potential of discharging wastewater containing fats, oils and grease to the TCU sanitary sewer collection systems are to be permitted by the Town and subject to the following requirements:

1. Grease interceptor requirements: All permitted food service and related establishments are required to install, operate, and maintain an approved type and adequately-sized grease interceptor necessary to maintain compliance with the objectives of the ordinance and related regulations. All grease interceptors must meet the requirements of the TCU standards in addition to Town and/or Lexington County building codes and the latest addition of the International Plumbing Code as adopted by the South Carolina Building Codes Council.

2. Implementation: All new food service establishment facilities and other non-residential facilities with the potential to discharge FOGs and/or other greases and oils are subject to grease interceptor and/or oil/water separator requirements. All such facilities must obtain prior approval from TCU for grease interceptor design and sizing prior to submitting plans for a building permit. The grease interceptor must 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 International Plumbing Code fixture

criteria, between the influent and effluent baffles with twenty (20) percent of the total volume of the grease interceptor being allowed for sludge to settle and accumulate, identified hereafter as the sludge pocket.

Existing facilities with planned modification in plumbing improvements or not in accordance with the ordinance or TCU Public Sewer & Water Regulations and Specifications standards will be required to provide plans to comply with the grease interceptor requirements. All existing establishments, determined by TCU to have a reasonable potential to adversely impact the Town's sewer systems will be notified of their obligation and provided with a compliance schedule to install a grease interceptor and related appurtenances.

3. The construction and location criteria for grease Interceptors shall be in accordance with Environmental Protection Agency (EPA) Guidance Document, "On site Wastewater Treatment and Disposal Systems," Chapter 8.

4. Prior to placing the grease interceptor and/or grease trap into operation the owner of the establishment shall request an inspection and shall be approved by TCU.

5. Variance to install a grease trap in lieu of grease interceptor: Grease interceptors required under this ordinance shall be installed unless TCU authorizes the installation of an indoor grease trap or other alternative pretreatment technology and determines that the installation of a grease interceptor would not be feasible. The food service establishment bears the burden of demonstrating that the installation of a grease Interceptor is not feasible. If an establishment desires, because of documented space constraints, an alternative to an out-of-building grease interceptor, the request for an alternative grease trap or location shall contain the following information. In addition to general information the following information must be provided by the food service establishment:

a. Location of TCU sewer main and easement in relation to available exterior space outside building.

b. A schematic or plan of existing plumbing at or in a site that uses common plumbing for all services at that site.

c. Specific manufacturer literature on the proposed system.

d. Inability to pay for the required modifications shall not be deemed an acceptable reason for non-compliance.

Section 5. Grease interceptor design requirements.

1. Grease interceptor sizing and installation must be approved by TCU. The grease interceptor must 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 International Plumbing Code fixture criteria, between the influent and effluent baffles with twenty (20)

percent of the total volume of the grease interceptor being allowed for sludge to settle and accumulate, identified hereafter as the sludge pocket. No interceptor total volume shall be less than 1000 gallons. The grease interceptor shall have a minimum of two (2) compartments with fittings designed for grease retention.

2. Grease interceptors shall be installed at a location where they shall be easily accessible for inspection, cleaning, and removal of intercepted grease. The grease interceptor may not be installed in any part of the building where food is handled. Location of the grease interceptor must meet the approval of TCU, and may require approval of the Town or the County building official and/or SCDHEC.

3. All grease Interceptors, whether singular or in series, must be directly accessible from the surface and must be fitted with an extended outlet sanitary tee that terminates 6" to 12" above the tank floor. The minimum access opening dimensions shall be 18" x 18" or a minimum of 24" in diameter. Two (2) access openings (inlet and outlet) to underground traps are required and should be removable with ease by one person.

See typical detail for 1,000 gallon capacity trap in the detail section.

4. All below ground grease Interceptors must either be two-chambered or individual tanks in series. If two-chambered, the dividing wall must be equipped with an extended elbow or sanitary tee terminating 6" to 12" above the tank floor. An extended outlet sanitary tee must also be provided at the outlet of the second chamber. Both chambers must be directly accessible from the surface.

Section 6. Grease interceptor Operation & Maintenance requirements.

1. All such grease interceptors shall be serviced and emptied of accumulated waste content as required in order to maintain minimum design capacity or effective volume. These devices should be inspected at least monthly. Users who are required to maintain a grease interceptor shall:

a. Maintenance of grease traps/interceptors must include thorough pump-out and/or cleaning as needed by removing any accumulated grease cap and sludge pocket as often as necessary, up to and including daily, but at intervals of not longer than ninety (90) days at the user's expense. 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 into this pocket and thereby reduce the effective volume of the grease interceptor.

b. If any skimmed or pumped wastes or other materials removed from a grease interceptor are treated in any fashion on site and reintroduced back into the grease interceptor as an activity of and after said on-site treatment, the user shall be responsible for the attainment of the established grease numerical limit of 100 mg/l on all discharges of wastewater from said grease interceptor into the Town sanitary sewer collection and treatment system.

c. Operate the grease interceptor in a manner so as to maintain said device such that attainment of the grease limit is consistently achieved. Consistent shall

mean any wastewater sample taken from the effluent of said grease interceptor shall be equal to or less than the limit stated in Section 3 Wastewater discharge limitations.

d. The use of biological or enzyme additives as a grease degradation agent is conditionally permissible, upon written approval by TCU. Any establishment using this method of grease abatement shall maintain the trap or interceptor in such a manner that attainment of the grease wastewater discharge limit, as measured from the trap's outlet, is consistently achieved. Upon determination that any such products has caused interference with the Town's collection and/or treatment systems the User shall be notified to immediately discontinue the use of any such products.

e. The use of automatic grease removal systems is conditionally permissible, upon prior written approval by the TCU. Any establishment using this equipment shall operate the system in such a manner that attainment of the grease wastewater discharge limit, as measured from the unit's outlet, is consistently achieved.

f. TCU reserves the right to make determinations of the grease interceptor adequacy and need, based on review of all relevant information regarding grease interceptor performance, facility site and building plan review and to require repairs to, or modification or replacement of such units.

g. In no case shall the total accumulation of grease, oil, floating materials, and sediment be allowed to occupy more than twenty-five percent (25%) of the capacity of the first stage of the grease interceptor.

h. If sampling test results for an establishment are more than twenty-five percent (25%) of the wastewater discharge limit, and the establishment does not have an approved extension to its cleaning schedule, the establishment shall immediately clean and inspect the trap and will be required to clean its grease interceptor(s) at an interval of thirty (30) days or less, for a period of time to be determined by TCU.

4. The user shall maintain a written record of trap maintenance for a minimum of three (3) years. All such records will be available for inspection by TCU at all reasonable times. TCU may require the submittal of any maintenance contracts, hauling manifests, and cleaning records. Records shall include at a minimum the date of service, estimated volume removed, person and/or company performing the service, and the means and location of disposal. TCU reserves the right to observe any and all cleaning and maintenance activities whether performed by the user or a contracted operator.

5. Non grease-laden sources are not allowed to be connected to the sewer lines intended for grease interceptor service.

6. Access manholes, with a minimum diameter of twenty-four (24) inches, shall be provided over each 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.

Section 7. Grease trap requirements.

1. Upon approval by TCU, a grease trap complying with the provisions of this section may be installed instead of a grease interceptor. The grease trap must be installed in the waste line leading from sinks, drains, and other fixtures or equipment in food service and other establishments where grease may be introduced into drainage or sewage system in quantities that can affect line stoppages or hinder sewage treatment or private sewage disposal.

2. Grease trap sizing and installation must be approved by TCU.

3. No grease trap shall be installed which has a stated flow rate of more than fifty-five (55) gallons per minute except when specifically approved by TCU.

4. Grease traps shall be maintained in efficient operating conditions by periodic removal of the accumulated grease in accordance with an established schedule. No such collected grease shall be introduced into any drainage piping or public sewer and shall be properly disposed or recycled in accordance with acceptable practices and all environmental regulations.

5. No food waste disposal unit or dishwasher shall be connected to or discharge into a grease trap.

6. Wastewater in excess of one hundred-forty degrees Fahrenheit (140º F / sixty degrees Celsius (60º C) shall not be discharged into a grease trap.

Section 8. Requests for cleaning schedule extension.

An establishment may apply to TCU for an extension of the required cleaning frequency set forth in the ordinance. The representative of the establishment who wishes to apply for the cleaning schedule extension shall notify TCU in advance of the intent to apply for the extension. TCU may grant an extension on a required cleaning frequency on a case-by-case basis where the user has demonstrated, with defensible analytical results, the specific grease interceptor or grease trap will produce an effluent in consistent compliance with the ordinance if such an extension is granted.

The notification of intent to apply for an extension shall include:

1. Facility information:

a. The name and address of the facility;

b. Name and telephone number of the facility contact;

c. Normal business hours; and

d. The type of business;

2. Treatment unit information:

a. The type of treatment unit and the capacity in gallons;

b. A brief description of the treatment unit;

c. The time(s) of day the greatest hydraulic and organic loadings to the treatment unit normally occur;

d. The date of the most recent cleaning and inspection of the unit;

e. A statement of the physical condition of the unit; and

f. Where applicable, the name of any treatment products used.

3. A proposed sampling schedule, including:

a. The date(s) the user proposes to collect the samples;

b. The times each sample will be collected;

c. The name and telephone number of the person who will collect the samples, including qualifications; and

d. The name and telephone number of the laboratory which will analyze the samples and its SCDHEC laboratory identification number;

4. Other information as may be requested by TCU.

The user shall obtain approval of the proposed sampling schedule prior to initiation of the sampling and analyses. The user shall certify the sampling schedule will be carried out as submitted or as approved. TCU shall reserve the right to modify a sampling schedule as deemed necessary. The user shall be required to provide analytical results for not less than three (3) oil and grease analyses for samples collected during peak flow periods through the unit during the normal working hours of a twenty-four (24) hour period.

a. Samples shall be collected at an approved sampling port and shall be collected by a qualified person properly trained in the collection and handling of wastewater samples.

b. Samples shall be 45-60 days after the most recent cleaning.

c. Samples shall be analyzed, separately, by a reputable laboratory approved by SCDHEC using approved analytical procedures.

d. The user shall submit a written request for a cleaning schedule extension, including:

e. A copy of the cleaning and maintenance records for the treatment unit for the previous twelve months;

f. A copy of the laboratory analytical reports, including quality control data and appropriate chains of custody;

g. Incomplete or unverifiable results shall not be considered. TCU may grant extensions to the cleaning schedule as follows:

5. A thirty (30) day extension may be granted where the average oil and grease concentration of the analyses is less than 66% of the concentration limit and no single concentration exceeded 70% of the concentration limit.

6. A sixty (60) day extension may be granted where the average oil and grease concentration of the analyses is less than 50% of the concentration limit and no single concentration exceeded 60% of the concentration limit.

7. A ninety (90) day extension may be granted where the average oil and grease concentration of the analyses is less than 33% of the concentration limit and no single concentration exceeds 50% of the concentration limit.

8. In no case shall an extension greater than ninety (90) days be granted. Extensions granted shall begin on the date the samples for which results were submitted were collected as documented on the chain of custody. Where an extension has been granted, the unit shall consistently produce an effluent in compliance with the terms of this or other applicable Ordinance. TCU shall reserve the right to collect and analyze samples of any User's discharge and may revoke, without notice, any extension where TCU believes it is in the best interest of the proper protection and operation of its collection and treatment systems.

9. Where an extension has been granted and any sample analysis indicates an exceedance of the oil and grease limitation by twenty-five (25%) percent or more, the user shall immediately clean and inspect the trap and shall return to the original cleaning schedule. Where the User has been required to return to an original cleaning frequency, the user shall be required to submit a new request for extension if desired.

10. Where an extension has been granted and any sample analysis indicates an exceedance of the oil and grease limitation of any magnitude by less than25%, the user shall immediately clean and inspect the trap and shall decrease the maximum time between cleanings by at least thirty (30) days.

11. Where an extension has been granted and TCU must clean associated public sewer lines and the stoppage is traceable to or known or suspected to be caused by the user’s facility, the user shall immediately clean and inspect the trap and shall return to the original cleaning schedule. The user will be required to submit a new request for extension if desired.

Section 9. Violation; penalties.

Any person, establishment or entity which fails to comply with any of the regulations and requirements set forth in this section, including, but not limited to, cleaning grease interceptors or grease traps at necessary intervals, providing up-to-date cleaning logs, or which refuses to open grease interceptors or grease traps for inspections by TCU inspectors or exceeds discharge limits, is in violation of the regulation, and is subject to the following actions and penalties:

1. Notice of Violation: TCU shall serve or have served any person, establishment, or entity in violation of the regulation with written notice stating the nature of the violation, and providing a reasonable time limit for satisfactory compliance. This shall not relieve the person, establishment, or entity of liability for any violations occurring before or after receipt of the notice of violation.

2. Compliance order: A compliance order is an order which directs the person, establishment, or entity to achieve or restore compliance by a particular date specified within the order. Terms need not be discussed with the person, establishment, or entity in advance.

3. Should the user discharge grease in violation of this Section or Ordinance, and the Town initiated sewer system cleaning in order to restore a blockage or other malfunction of its collection or treatment systems, the individual, establishment, or entity responsible for causing the failure will be required to reimburse the Town for actions taken to restore its systems. The cost of the cleaning plus a fifteen percent (15%) handling fee shall be added to the individual, establishment, or entity's sewer utility bill.

4. Termination of Services: Any user that violates this ordinance is subject to termination of sewer and/or water services. Such user will be notified of the proposed termination of its services and be offered an opportunity to show cause why the proposed action should not be taken.

5. Penalties: Any person, establishment, or entity who violates any portion of this Section is guilty of a misdemeanor and is subject to a fine not to exceed five hundred ($500.00) dollars, with each day of violation or noncompliance to constitute a separate offense. In conjunction with fines, the Town is entitled to pursue all other criminal and civil remedies to which it is entitled under authority of statutes or other ordinances against a person, establishment, or entity in violation of this Section. Remedies may include, but not be limited to publishing of the responsible party’s name in the local media and/or notifying the SCDHEC.