



**Town of Jamestown
Public Services Department**

Wastewater Collection Pretreatment

Residual Fats, Oil and Grease Control Policy

Updated and Adopted November 20, 2007

Town of Jamestown

Residual Fats, Oil and Grease Control Policy

*Reference Town of Jamestown Sewer Use Ordinance,
Preliminary Treatment Devices*

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1. Purpose

Fats, oil and grease (FOG) is a major concern for the Town of Jamestown wastewater collection system. When not disposed of properly, FOG forms thick layers inside sewers constricting flow, similar to the way cholesterol affects blood flow in our arteries. Clogged sewers result in sewage spills and overflows, which creates environmental and public health concerns.

The provisions of this policy are applicable to any non-residential facility, connected to the Town of Jamestown wastewater collection system, involved in the preparation or serving of food and/or food products.

FOG discharges may be from residential, commercial, or industrial users and represent a significant problem for wastewater collection systems and treatment plants. One significant source of FOG is restaurants due to the amount of grease used in cooking and other food preparation work. Improper cleanup practices allow food particles, oil and grease, and cleaning products to flow to the wastewater collection system.

The Town of Jamestown Public Services Department devotes equipment and man hours to unstopping and cleaning the wastewater collection system which includes, but not limited to, manholes, lift stations, gravity lines, and service lines clogged with oil and grease.

2. Authority

By the adoption of the Sewer Use Ordinance (SUO) of the Town of Jamestown, the Town requires that all wastewater discharges will comply with said ordinance and this policy. Section Ten, Preliminary Pretreatment Devices, of the SUO states the requirement of grease removal.

Also in conjunction with Chapter 10, Traps, Interceptors, and Separators of the North Carolina State Building Code, Volume II - Plumbing Code or latest version.

Pursuant to requirements of the Town of Jamestown Wastewater Collection system Permit (WQCS00314) Article I, Section 4.

The intent of this policy is to also ensure compliance with rules and regulations of the United States Environmental Protection Agency and the North Carolina Department of Environment and Natural Resources.

3. Definitions

The following terms shall have the meanings hereinafter designated and/or in addition to the terms and phases as specifically indicated otherwise.

Fats, Oils and Greases – 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”.

Greases – means rendered animal fat, vegetable shortening, and other such oily matter used for the purposes of and resulting from cooking and/or preparing foods. Includes the accumulation of oils, fats, cellulose, starch, proteins, and wax.

Oil – Any one or a combination of mineral, vegetable, and synthetic substances and animal and vegetable fats that are used in a variety of processes.

Food Service Establishment – A facility primarily engaged in activities of preparing, serving, or otherwise making foodstuffs available for consumption by the public such as restaurants, commercial kitchens, caterers, hotels, cafeterias, delicatessens, meat cutting-preparations, bakeries, ice cream parlors, cafes, hospitals, schools, bars, correctional facilities, care institutions and any other facility discharging kitchen or food preparation wastewaters which, in the Town’s discretion, would require a grease trap installation by virtue of its operation. Preparation activities include but are not limited to cooking by frying, baking, grilling, sautéing, rotisserie, broiling, boiling, blanching, roasting, toasting, 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.

Grab Sample – means a sample which is taken from a waste stream on a one-time basis without regard to the flow in the waste stream and over a period of time not to exceed 15 minutes.

Grease Interceptor – A device utilized to effect the separation of grease and oils in wastewater effluent from a Food Service Establishment. Such interceptors may be of the “outdoor” or “underground” type normally of a 1000 gallons or more capacity.

Grease Trap – A device utilized to effect the separation of grease and oils in wastewater effluent from a Food Service Establishment. Such traps are the “under-the-counter” type normally 100 gallons or less capacity.

Local Limits – A maximum pollutant level placed on wastewater discharged to the Town’s sewer. These limits are listed in the Town of Jamestown Water and Sewer Use Ordinance.

Minimum Design Capacity – means the design features of a grease interceptor and its ability or volume required to effectively intercept and retain greases and grease-laden wastewater’s discharged to the public wastewater system.

Non-Cooking Establishment - means a facility primarily engaged in the preparation of precooked food products that do not include any form of cooking. These include cold dairy and frozen food product preparation and serving establishments.

Sewer Use Ordinance (SUO) - A Town legal document stating the requirements of all facilities (including restaurants) discharging to the local POTW.

Sanitary Sewer Overflow - An overflow or discharge of raw sewage from municipal wastewater systems often due to a blockage in a line.

User - means any person, including those located within the Town's area of extraterritorial jurisdiction, who contributes, caused or permits the contribution or discharge of wastewater into the POTW, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

Wastewater Collection System - The collection of pipes, manholes, pumps, lifts, and other equipment throughout town designed to handle and safely transport non-potable water wastes.

4. General Requirements

All food service establishments discharging wastewater to the Town of Jamestown wastewater collection system are subject to the following requirements:

1. All Food Service Establishments shall have grease-handling facilities installed and maintained, at the User's expense. Non-Cooking Establishments and other commercial, institutional and/or industrial establishments may also require grease-handling facilities be installed when deemed necessary by the Public Services Director.
2. An administrative fee of \$100.00 per year to be paid to the Town is required of all Food Service Establishments. This fee is to be used to offset cost associated with inspections, testing, and equipment.
3. Any Food Service Establishments without any grease handling facilities will be allowed a compliance deadline not to exceed six (6) months from the date of notification to have approved grease-handling equipment installed.
4. The following shall not be discharged into the Fat, Oil, Grease Removal System:
 - a) Waste that does not contain fat, oil, grease, and that otherwise does not require treatment;
 - b) Wastewater from dish washing machines or wastewater with temperature exceeding 150°F;

- c) Ground residue from food waste grinders and garbage disposals;
 - d) Sanitary waste;
 - e) Emulsifiers, chemicals, and enzymes.
5. Food service establishments whose grease handling facilities or methods are either under-designed or substandard, or not adequately maintained to prevent floatable fats, oils or greases from entering the wastewater system shall be notified, in writing, of the deficiencies, required improvements, and provided a compliance deadline. The Food Service Establishments shall be required to provide a schedule whereby corrections will be accomplished.
 6. Food Service Establishments whose operations cause or allow excessive grease to discharge or accumulate in the Town's wastewater collection system may be liable to the Town for related clean-up costs (See Enforcement). The User will be liable for any fines dispensed from the State of North Carolina or the United States of America.
 7. This Policy maintains the discharge limitation from users of the Town's wastewater collection system for oil and grease at 100 mg/L (milligrams per liter). Additionally the Policy requires the user to install and keep maintained, at his expense, a grease trap/interceptor at his establishment.

New Establishments

All new Food Service Establishments shall be required to install grease interceptor(s) approved by the Public Services Director. Grease interceptor(s) shall be adequately sized, with no interceptor less than 1,000 gallons total capacity, unless approved by the Public Services Director.

No new Food Service Establishments will be allowed to initiate operations until grease handling facilities are installed and approved by the Public Services Director.

Existing Establishments and/or New Establishment Locating in Existing Buildings

All existing food service establishments and new food service establishments locating in existing buildings shall have grease handling facilities, meeting the same requirements for installation and design as for new establishments.

Where it is determined by the Public Services Director that the installation of an approved "outdoor" grease interceptor is not feasible or physically impossible to install, then an adequate and approved "under-the-counter" grease trap, may be allowed for use on individual fixtures, including sinks, dishwashers, and other potentially grease containing drains. The location of these units must be located as near as possible to the source of the wastewater.

Exemption from Installation Requirements

A food service establishment determined to have no immediate adverse impact on the Town's wastewater collection system because of the business type may be granted an exemption from the grease trap/interceptor installation requirements.

The Public Services Director may, at any time, revoke an exemption and require that a grease trap/interceptor be installed.

To obtain an exemption, a food service establishment must provide written request to the Director of Public Services stating grounds for the exemption and request an inspection. Approval may only be by the Public Services Director or his designee.

Exemption for grease trap/interceptor requirements by virtue of the business type:

1. Residential Group Home Classification by NC State Agency having authority;
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 serves 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.

Trap/Interceptor Design and Sizing Requirements

All grease traps/interceptors shall be designed according to minimum standards of the North Carolina Plumbing Code and be of a type, capacity, and location approved by the Public Services Director. Such traps/interceptors may be of the "outdoor" or "underground" type normally of a 1,000 gallon capacity or more, or the "under-the-counter" package units which are typically less than 100 gallon capacity.

All grease interceptors must have each chamber directly accessible from the surface. It shall be properly located to allow for complete access to the inner

chambers to provide means for servicing and maintaining of the interceptor in working and operating condition, and for inspecting, viewing, and sampling of effluent wastewater.

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 to finish grade and be designed and maintained to prevent inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, grease removal, and wastewater sampling activities.

Maintenance and Inspections

Maintaining and Cleaning Grease Handling Facilities

The user is solely responsible for maintaining the grease handling facilities at a capacity capable of intercept fat, oil and grease and operate efficiently at all times, or to achieve compliance with the 100 mg/l grease and oil limit.

The exclusive use of enzymes, grease solvents, emulsifiers, etc. is not considered acceptable grease trap maintenance practice.

To ensure continuous and adequate operation of grease-handling facilities regularly scheduled maintenance of grease-handling facilities is required. The user shall determine and strictly follow an appropriate cleaning / pump-out schedule, based on the type of establishment and the amount of grease to be generated.

Users shall empty and service grease interceptors to achieve compliance with the discharge limits as often as necessary, but in any event no longer than every 90 days. The Town may require a specific schedule if deemed necessary by the Public Works Director.

Grease traps shall to be serviced and documented daily or at the manufactured recommended frequency. If the grease trap is not serviced daily, the user must demonstrate compliance with the 100 mg/l grease and oil limit.

The user shall be responsible for the proper removal and disposal of captured material, by appropriate means. All organic and inorganic solids, such as grit, rocks, gravel, sand, eating utensils, cigarettes, shells, towels, rags, etc, which settle into the sludge pocket and thereby reduce the effective volume of the grease trap/interceptor, are required to be removed and all floating material is required to be skimmed from trap or basin tank.

Water removed from interceptor(s) shall not be reintroduced to the trap itself or to the Town's wastewater collection system without prior written approval from the Town of Jamestown and unless all of the following conditions are met:

- 1) The grease waste hauler's truck is specifically designed for this purpose.
- 2) The hauler has written authorization from the food service establishment.
- 3) The Town has inspected the individual truck and observed the discharge. The discharge may be sampled at the Town's discretion.)

Record Keeping

The user shall maintain written record of grease trap maintenance on-site for a period of three (3) years. These records will be reviewed by the Town of Jamestown during their inspection of your establishment.

A copy of each interceptor service record shall be sent to the Public Services Director at the Public Services Department, Town of Jamestown, PO Box 848, Jamestown, North Carolina 27282, no later than 15 days after the end of the month during which the maintenance occurred.

A complete report shall include:

- 1) A receipt signed by the person responsible for performing the work. The date on the receipt must indicate the actual date the work was performed, not a billing date.
- 2) The receipt shall bear the name, address, phone number, and a contact name of the business performing the work.
- 3) The disposal method and destination of material removed.
- 4) Indicate the interceptor was refilled with clean water.
- 5) The size (in gallons) and location (above or below ground, in or outside of building, etc...) of the interceptor in relation to the food service establishment.

It is highly recommended that the user be present during any cleaning, pumping, or skimming performed by a contractor, in order to appropriately respond to any questions the Town may have about the services performed.

Inspections

All food service establishments' grease-handling facilities shall be subject to review, evaluation, and inspection by authorized representative(s) of the Town of Jamestown during normal working hours.

Results of inspections will be made available to user. The Town may make recommendations for correction and improvement.

The Town will inspect each establishment to ensure compliance with this policy. This may include sink and trap set-up, quantity of grease in the trap, clarity of the effluent, grease recycling bin, and vendor hauling records. However, the Town will initiate additional inspections, sampling, and pursue enforcement if the required hauling vendor paperwork is not in order or if the facility is located in the area where a blockage occurs.

Sampling

The Town may require that any user monitor and test their discharge for fat, oil and grease in such a manner and with such methods as are specified by the Director of Public Works. All monitoring results shall be reported to the Town within 5 days of their receipt by the user. In addition, as a condition of discharging to the system, all users may be monitored by the Town without prior notice.

Those food service establishments whose effluent discharge is determined to cause interference in the conveyance or operation of the Town's wastewater collection system will be required to sample its grease trap discharge and have it analyzed for fat, oil and grease, at the expense of the user. Results of such analyses shall be reported to the Town.

Samples for fats, oils and greases must be obtained using grab collection techniques. Sampling shall be done from a point near the effluent tee or nearest manhole to get an indication of the effluent flowing from the interceptor. The sample may be collected and analyzed for grease and oil concentration by a certified contracted laboratory.

The reports shall include the date, exact place, method, and time of sampling, the name of the person(s) taking the samples, the dates analyses were performed, lab performing the analyses, the techniques or methods used, and the results of such analyses.

Enforcement

Enforcement actions against Food Service Establishments will be taken in accordance with this policy. However, the Town of Jamestown reserves the right to implement other enforcement responses available to it under the Town of Jamestown Sewer Use Ordinance and Code of Ordinance, and North Carolina Law, separately or in combination with this policy.

The enforcement response plan outlined below will be an effective way to ensure that the Town of Jamestown takes fair, consistent and equitable enforcement actions against Food Service Establishment for violations of this FOG Control Policy and/or the Town of Jamestown Ordinances. In response to unusual instances of non-compliance, judgment and flexibility will be needed. Some violations may require a response that deviates from this enforcement action plan depending on the particulars of the situation.

Food service establishments whose operations cause or allow excessive grease to discharge or accumulate in the Town's wastewater collection system may be liable to the Town for costs related to service calls for line blockages, line cleanings, line and pump repairs, and other repairs, including all labor, materials, and equipment. Failure to pay all service-related charges may be considered grounds for discontinuance of services.

The User will be liable for any fines dispensed from the State of North Carolina or the United States of America.

Notice of Non-Compliance

If a food service establishment fails to complete and return mandatory survey questionnaires or it is found that the grease handling facilities are not installed or are not being routinely cleaned and maintained, The Town may issue a notice of non-compliance to advise the Food Service Establishment that it is in violation of the Town Sewer Use Ordinance and this policy. The Town will provide general information of required steps to be taken to comply with this policy. However, it is the responsibility of the establishment to determine corrective action act to comply with this policy.

A Notice of Non-compliance will only be provided once. All future actions after issuance of a Notice of Non-compliance justify proceeding directly to a Notice of Violation.

Notice of Violation

If it is determined the food service establishment is in violation of this policy, the Town will issue a Notice of Violation to advise the establishment that it is in violation of the Town Sewer Use Ordinance, Code of Ordinance, and/or this policy and what needs to be done in order to correct the violation.

A Notice of Violation shall be issued to the property owner for a specific Food Service Establishment and sent by certified mail. A notice of violation shall require that corrective action be taken by a given date and/or may require attendance at a meeting to submit a compliance schedule agreement. Failure to install a grease trap will result in a fine of \$250.00 per month until a properly sized trap/interceptor is installed. Civil penalties may be imposed, as well as, consideration for discontinuance of water and sewer services to the property.

Primary reasons for the issuance of a notice of violation are, but not limited to:

1. Failure to complete and return survey questionnaire by the due dates, as required by written notification;
2. Failure to install a grease trap/interceptor by an assigned date;
3. Failure to provide a collection drum or container for segregating oils, grease and/or greasy solids by an assigned date;
4. Failure to properly maintain, clean/pump out, the grease trap/interceptor at a frequency that ensures efficient operation;
5. Failure to repair grease trap/interceptor by an assigned date;
6. Failure to maintain grease trap/interceptor maintenance records on site;

7. Failure to provide grease trap/interceptor maintenance records to the Public Services Department within specified time;
8. Failure to pay appropriate fee(s) and/or fine(s);
9. Denied authorized inspector access to your facility to observe conditions, obtain information, and/or perform sampling related to discharges to the Towns wastewater collection system on a given date.

Once a violation is found to exist, all cost associated with follow-up sampling and testing will be at the User's expense.

If the concentration of grease and oil exceeds the discharge limit, the food service establishment will be routinely inspected and the discharge will be considered in non-compliance until laboratory analysis confirms compliance.

Order to Comply

If, after a follow-up inspection to the notice of violation it is found that the Food Service Establishment has continued the violation(s), the Town will issue an Order to Comply to again advise the food service establishment that it is in continued violation of the Town Code of Ordinance and this policy. The Town will again provide general information of required steps to be taken to comply with this policy. However, it is the responsibility of the establishment to determine what course of action must be done and act to abate the violation and comply with this policy. Failure to comply with the Order to Comply will include a fee of \$250.00 per billing cycle and the cost to install a grease trap, \$50.00 per day civil penalty, and/or discontinuance of water and sewer services to the property.

Discontinuance of Water and Sewer Services

If, after a follow-up inspection to the Order to Comply identifies continued violation(s), discontinuance of water and sewer services to the property may be considered.

Personnel Responsible for Enforcement Actions

The Public Services Director is responsible for all enforcement actions. The Town Attorney may be requested to review escalated penalties prior to issuance, if the Public Services Director deems it necessary.

Severability

If any provision of this Policy is invalidated by any court of competent jurisdiction, the remaining provisions shall not be effected and shall continue in full force and effect.

Civil Penalties and Fees

Civil Penalties

Failure to comply with the Order to Comply will include a fee of \$250.00 per billing cycle and the cost to install a grease trap, \$50.00 per day civil penalty, and/or discontinuance of water and sewer services to the property. (See Order to Comply)

In addition to Civil Penalties, the Town may assess reasonable fees for reimbursement of cost for:

1. Legal fees.
2. Personnel and equipment expenses.
3. Cost associated with the clean up or decontamination of a site after the discharge of substances into the Town wastewater collection system, storm water, and or the environment that cause interference, pass-through or sanitary sewer blockage. This includes clean up and decontamination of all structures/areas including residential, commercial, and the environment.
4. Sampling and monitoring.
5. Other fees as the Town may deem necessary to carry out the requirements contained herein. These fees shall relate solely to the matters covered by this Policy and are separate from all other fees, fines, and penalties chargeable by the Town.

Fees

An administrative fee of \$100.00 per year to be paid to the Town is required of all Food Service Establishments. This fee is to be used to offset cost associated with inspections, testing, and equipment. (See General Requirements)

Frequently Asked Questions

Q. “Do I have a grease trap or interceptor?”

A. If you are not sure whether you have a grease trap or not, please contact a local plumber for assistance.

Q. “Do I need a grease trap?”

A. The Town of Jamestown requires installation of a grease handling device if your wastewater contains grease, oils, fats, sediments, particular matter, or any other material that can impair the flow of the wastewater through the wastewater collection system.

Q. “What is the difference between grease traps and interceptor?”

A. An interceptor is a device connected to your plumbing system, designed to remove oil and grease from the wastewater before it enters the Town’s wastewater collection system. It is a big concrete box portioned off to remove grease and food waste by trapping things that float and things that settle to the bottom. Interceptors are installed in the ground outside a food service establishment.

A grease trap is a smaller unit, often stainless steel, which works by the same principles. Grease traps are installed indoors, often under a counter.

Q. “How often should I service my grease interceptor?”

A. The proper pumping and cleaning frequency is dependent upon many variables, including but not limited to, type of food prepared, cooking and cleaning methods, volume of food or meals prepared, and the size of your grease interceptor. The Town requires that all grease interceptors be pumped and cleaned out at least every 90 days and grease traps daily.

Q. “What size grease trap should I have?”

A. To effectively remove oil and grease, a grease interceptor must retain the water long enough for the oil and grease to separate and float or rise to the baffle chamber. The period of time the water is detained in the unit is called the detention time. The Town of Jamestown requires that grease interceptors provide a minimum of 20 minutes hydraulic detention time between the influent and effluent baffles with 20 percent of the total volume of the grease interceptor being allowed for sludge pocket.

Q. “What kinds of problems do oil and grease cause?”

A. Oil and Grease in the wastewater system builds up on the walls of the sewer lines, accumulates in pump station wet wells and clogs pumping and control equipment. When oil and grease build up on the walls of the sewer line it reduces the system’s capacity and can result in complete blockage. This blockage results in sewer backups and overflows, greatly increased man hours and maintenance costs, and equipment downtime.

Q. “Isn’t my business grand-fathered in under the old rules?”

A. No, any establishment that does not have a properly sized and properly maintained grease interceptor is in violation of this Policy and Town Code of Ordinance.

Q. “Will a garbage disposal affect a grease interceptor?”

A. Absolutely, the ground up solids that go through the disposal will settle to the bottom of the grease interceptor and take up valuable space. The reduced volume will lower the detention time of the device and will reduce its efficiency. The increase loading will also lead to increased maintenance frequency and cost.

Q. “My restaurant doesn’t have space to install an exterior in-ground grease interceptor. Are there other options?”

A. It is possible to permit the installation of interior under-the-counter interceptors instead of exterior in-ground interceptors in instances of space limitations. However, this installation will require increased maintenance and implementation of best management practices to offset trap inefficiency. The automatic grease removal systems are another possible alternative.

Q. “How do I have an Interceptor installed?”

A. Most plumbers and plumbing contractors install grease interceptors. All Grease interceptors must be permitted by the Town and Guilford County prior to installation.