Albemarle County Service Authority

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MEMORANDUM

To: Board of Directors
From: Gary W. Fern, P.E., Executive Director
Date: December 9, 2009
Re: Fats, Oils, and Grease
cc: James M. Bowling, IV

At the November Board Meeting, the Board of Directors conducted a Public Hearing regarding the inclusion of Section 19 – Fats, Oils and Grease into the ACSA Rules and Regulations. In addition, proposed amendments to Section 1 - General Conditions, Sub-section 1-04.Definitions were proposed to define terms used in Section 19. As a result of the Public Hearing and Board comments, the following items were addressed:

1. The definition of Best Management Practices, Kitchen was revised.
2. Section 19.11, Item 3. was revised to match the language of Section 19.13.
3. Section 19.23-Appeal Process was added.

Board Action

We request that the Board of Directors approve the attached resolution incorporating the amendments to Section 1 and addition of Section 19, Fats, Oils, and Grease to the ACSA Rules and Regulations.

GWF/dbh

Attachment

010501FOGSection19BoardMemo120909

SECTION 1 - GENERAL CONDITIONS [Amended 12/17/09]

1-01. INTRODUCTION.

1. The purpose of this publication is to establish and furnish information on the rules and regulations which have been adopted by the Albemarle County Service Authority of Albemarle County, Virginia in accordance with the *Virginia Water and Waste Authorities Act* of 1950, as amended, and which are applicable to the public water and sanitary sewerage facilities now existing or which may, in the future, be under the jurisdiction of the Albemarle County Service Authority. This publication establishes the rates, rules and regulations which govern the use of the public water and sanitary sewerage facilities within the Jurisdictional Areas of the Albemarle County Service Authority.

2. Inquiry for information or clarification of any item herein pertinent to these policies shall be directed to the Executive Director, Albemarle County Service Authority, 168 Spotnap Road, Charlottesville, Virginia.

1-02. VALIDITY.

1. If any section, subsection, sentence, clause or phrase of these ordinances is, for any reason, held to be invalid, such decision shall not affect the validity of any other part of this ordinance which can be given effect without such invalid part or parts.

2. No statement or regulation contained in this publication shall be construed to interfere with any additional requirements which may be imposed by the State Board of Health or Water Control Board.

3. In the event of any deviation between the rules and regulations in this publication, and applicable rules and regulations of the State Board of Health or the Water Control Board, it shall be understood that the rules and regulations of said State agencies shall prevail insofar as the sanitary sewerage works and public water supply facilities within the jurisdictional Areas are concerned.

1-03. EFFECTIVE DATE.

These Rules and Regulations shall take effect and be in full force from and after July 1, 1983.

1-04. DEFINITIONS.

Unless the context specifically indicates otherwise, the meaning of terms used herein shall be as follows: [Revised 3/21/91]

ACSA or **Authority** or **Service Authority** - The Albemarle County Service Authority, including its governing and operating bodies and designated agents. Any office referred to solely by title (e.g., Executive Director, Manager of Accounting) shall be the person retained in this position by the Authority.

Act - The *Virginia Water and Waste Authorities Act* of 1950, as amended.

Action Level, FOG – The minimum concentration of fats, oils and grease which indicates a food service establishment must adjust its protocol to remain in compliance with Section 19. [Added 12/17/09]

Applicant - Any person or entity requesting water and/or sewer service from the Authority.

Assisted Living Facility – A multi-family structure where the injured or aged are provided non-continuous care.

Auxiliary Meter - A water meter dedicated to the service of an irrigation system when the property's non-irrigation water needs are supplied by a primary meter. [Added 01/01/06]

Backflow - The flow of water or other liquids, mixtures, or substances into the distributing pipes of a potable water supply from any other than its intended source. Backsiphonage and backpressure are types of backflow.

Best Management Practices, Kitchen – A schedule of activities and prohibition of practices designed to prevent or reduce the introduction of fats, oils and grease into the ACSA wastewater collection system. [Added 12/17/09]

Board - The Board of Directors of the Authority.

B.O.D. - Biochemical Oxygen Demand; the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at 20 degrees C., expressed in parts per million. The laboratory determination shall be made in accordance with the procedures set forth in Standard Methods).

Building Sewage Drain - That part of the lowest horizontal piping of a sewage system which receives the discharge from the sanitary sewer inside the walls of the building and conveys it to the building sewer beginning five (5) feet (1.52 meters) outside the inner face of the building wall.

Building Sewer - The extension from the building sewage drain to the public sewer or other place for disposal.

Commercial Food Service Establishment – A commercial facility, discharging to the ACSA wastewater collection system, engaged entirely or primarily in the activities of preparing, serving, or otherwise making food and/or drink available for consumption by the public. This includes, but is not limited to, such establishments as restaurants, cafeterias, delicatessens, luncheonettes, sandwich shops, food courts, ice cream parlors, coffee shops, bakeries, catering businesses, grocery stores, and butcher shops. This also includes such commercial facilities as motels, inns, bed and breakfast establishments, and related lodging facilities, where food preparation and serving are an integral part of the operations, and includes bars, taverns, pubs, nightclubs, and related establishments serving alcohol, where food preparation and serving are an integral part of the operations. [Added 12/17/09]

Construction Approval - A letter issued by the Authority to a developer which authorizes him to construct facilities for which the design plans and specifications have been approved by the Authority.

Contractor - Any person(s), firm, group or affiliates charged with the responsibility of constructing the facilities described in the Authority's *General Water and Sewer Construction Specifications*. [Revised 6/20/85]

County - The County of Albemarle, Virginia, its governing and operating bodies and designated agents.

Cross-Connection - Any actual or potential connection between the potable water supply and a source of contamination or pollution. Cross-connection includes any potable water supply outlet which is submerged or can be submerged in wastewater or any other source of contamination.

Customer - Any person or entity recorded in the accounts of the Authority as receiving water and/or sewer services and responsible for payment for such services.

Developer - Any person, firm, corporation or association having an interest, whether legal or equitable, sole or partial, in any premise requiring the design and construction of facilities which would be under the jurisdiction of the Authority and would become part of the public utilities system of the Authority.

Existing Buildings - Those existing buildings for which a Certificate of Occupancy has been issued by the Albemarle County Inspections Department. [Added 6/19/86]

Equivalent Residential Connections (ERC's) - The conversion of metered services to the equivalent of single-family residential connections per the following ratios: [Added 6/29/89]

Meter Size	Ratio	ERC's
5/8"	1	1
1"	2.5	2.5
1 1/2"	5	5
2"	8	8
3"	15	15
4"	25	25
6"	50	50

Facilities - Any and all component and pertinent parts of the entire systems of the water and sanitary sewer utilities under the jurisdiction of the Authority, such as water pipe lines and their appurtenances, water storage tanks, filtration or treatment facilities and pumping stations, sewer lines and their appurtenances, sewage pumping stations and treatment plants, including these items and others now constructed, installed, operated or maintained by the Service Authority, or any which may be approved and accepted in the future as additions to or extensions of the systems.

Fats, Oils and Grease (FOG) – Organic, non-petroleum 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 "oil and grease." [Added 12/17/09]

Food Service Establishment (FSE) – Any facility in which the activities of preparing, serving, or otherwise making food and drink available for consumption by the public are at least a part of the operations of the facility. This includes commercial food service establishments, other commercial office buildings with food service, industries with food service, and institutions with food services. [Added 12/17/09]

General Water and Sewer Construction Specifications - The Specifications of the Authority, Adopted January 20, 1983, as amended.

Grab Sample - A water sample collected in an instantaneous manner without regard to possible variations in the flow rate or the chemical concentrations of the sample. [Added 12/17/09]

Gray Water – Non-industrial wastewater that has been generated from all uses of potable water with the exception of toilets. For the purposes herein, specific reference is made to the kitchen operations of a food service establishment, and includes such activities as draining, rinsing, soaking, and cleaning. [Added 12/17/09]

Grease Control Device – A device utilized to bring about the separation of waterborne fats, oils and grease from wastewater by reducing the flow rate of the wastewater, and thus eliminate or reduce the oil and grease discharged to the ACSA wastewater collection system. Note that a distinction is made herein between grease interceptor and grease trap; other references may use these terms interchangeably. [Added 12/17/09]

Grease Interceptor – A large-capacity grease control device that is an underground tank or vault, typically constructed of precast concrete, consisting of at least two chambers, and holding several hundred to a few thousand gallons of liquid. It is generally located outside a facility with access lids at ground level, and operates by providing greater retention time which allows for more efficient separation of fats, oils and grease from the wastewater. [Added 12/17/09]

Grease Trap – A small-capacity grease control device that is constructed of resistant metal or plastic, typically holds fewer than 50 gallons of liquid, and is located inside a facility. It may be positioned below floor level or directly beneath a facility sink, and operates to reduce flow rate by a series of baffles. [Added 12/17/09]

Health Hazard - Any condition, devices, or practices in the water supply system and/or its operation which create or, in the judgment of the Authority, may create, a danger to the health and well-being of any customer.

Hexane Extractable Material (HEM) – The typical name used by analytical laboratories for detectable and measurable fats, oils and grease using the analytical test procedures established in the United States Code of Federal Regulations 40 CFR 136. The name refers to the extraction solvent (hexane – C_6H_{14}) used in the analytical procedure. [Added 12/17/09]

Hospital – A building or buildings where the sick or injured are provided overnight medical or surgical care.

Industry with Food Service – An industrial facility, discharging to the ACSA wastewater collection system, within which a cafeteria is engaged in the activities of preparing, serving, or otherwise making food and/or drink available for consumption by its employees. [Added 12/17/09]

Institution with Food Service – An institutional facility, discharging to the ACSA wastewater collection system, engaged, at least in part, in the activities of preparing, serving, or otherwise making food and/or drink available for consumption by its students, patients, residents, inmates, congregants, and/or employees. This includes, but is not limited to, such institutional establishments as schools, hospitals and related medical facilities, residential treatment centers, nursing homes, assisted living facilities, adult day care centers, child day care establishments, correctional facilities, and churches. For the assisted living facilities, adult day care centers, and child day care establishments, this includes services provided in a residential (home) setting. [Added 12/17/09]

Irrigation System - A device or combination of devices having a pipe or other conduit installed in the landscape for the purpose of applying ACSA provided water to residential or commercial lawns, landscapes or greenspace.

Jurisdictional Area - The territory included within the boundaries of the Authority and in which the Authority has been privileged to provide and regulate both existing and future water and sanitary sewerage facilities.

Nonpotable Water - Water that is not safe for human consumption or that is of questionable potability.

Nursing Care Facility – A building or buildings where the injured or aged are provided continuous overnight care and include centralized kitchen and/or dining services.

Person - Any individual, firm, corporation, association, society or group.

Plumbing Fixture - Installed receptacles, devices or appliances supplied with water or that receive or discharge liquids or liquid-borne wastes.

Plumbing System - The water supply distribution pipes, plumbing fixtures, including their respective connections, devices and appurtenances within the property lines of the premises; and water-treating or water-using equipment.

Potable Water - Water free from impurities in amounts sufficient to cause disease or harmful physiological effects. Its bacteriological and chemical qualities shall conform to the requirements of the Virginia Waterworks Regulations of the State Department of Health.

Premise - Any building, group of buildings, or land upon which buildings are to be constructed which is or may be served by the facilities of the Service Authority.

Primary Meter - A water meter installed to measure all water supplied to a customer exclusive of water supplied to an irrigation system or to measure water supplied to an irrigation system when no other water use is required on the property or all meters installed prior to January 1, 2006. [Added 01/01/06]

Public Sewer - A sewer in which all owners of abutting properties have equal rights, and which is controlled by the Service Authority.

Rain Sensor - An electric device that measures rainfall and will override the irrigation cycle of an irrigation system, thus turning it off when a predetermined amount of rain has fallen. To meet the requirements of this section, a rain sensor shall be adjusted to shut off irrigation systems in response to one-fourth (1/4) inch or less. [Revised 06/17/04]

RWSA - The Rivanna Water and Sewer Authority, its representatives and designated agents.

Sanitary Sewage - That water-carried waste which derives principally from dwellings, business buildings, institutions, industrial establishments and the like, exclusive of any storm and surface waters.

Sanitary Sewer - A sewer to which storm, surface and ground waters are not intentionally admitted.

Sewage - A combination of water-carried waste from residential, commercial, institutional and industrial establishments, together with such ground, surface and storm waters as may be present.

Sewer Volume Charge - The charge made on all users of the public sewerage system whose wastes do not exceed in strength the concentration values established as representative of normal domestic sewage.

Sewerage - The system of sewers and appurtenances for the collection, transportation, pumping, and treatment of sewage.

Shall or **will** - Are mandatory; **may** is permissive.

Undeveloped Lot – Any parcel of land on which no building exists which requires water or sewer for occupancy. [Added 1/27/05]

Wastewater Collection System – Sanitary sewers, manholes, and pump stations used to convey wastewater to a wastewater treatment plant for processing. [Added 12/17/09]

Water Line or **Main** - A pipe or conduit for transporting water.

Water Service - The pipe which extends underground from the primary meter or auxiliary meter to the exterior face of a structure. [Added 06/18/09]

Water System - All structures, appliances and equipment owned and operated by the Authority and used to collect, store, and transport water for drinking or domestic use and the distribution of water to the public.

SECTION 19 – FATS, OILS AND GREASE [Added 12/19/09]

19-01. INTRODUCTION.

Fats, oils and grease (FOG) are a significant concern for the ACSA in the operation of the wastewater collection system. When not disposed of properly, they congeal and accumulate along the walls of the sanitary sewers. This constricts the pipes, impedes the flow of wastewater, and raises the potential for blockage. Grease also affects the proper operation of pump stations, leading to sewage accumulation in wet wells. Either of these situations can eventually result in a sanitary sewer overflow in which wastewater is discharged from a manhole, or wastewater enters residences and businesses. This is both an environmental issue and a public health concern, in which sewage can contaminate the ground, local bodies of water, and any property with which the wastewater comes into contact.

The financial burden related to excessive FOG is potentially two-fold. Maintenance crews of the ACSA devote considerable time to cleaning sewerage components, and treatment processes may be hindered at the wastewater treatment plants.

FOG discharges relate directly to the preparation, cooking, and disposal of food items. These can originate from residences and from commercial, institutional, and industrial facilities. However, it is restaurants and related commercial food service establishments that are the most significant source of FOG due to the amount of oil and grease used in cooking, and with other food preparation.

19-02. PURPOSE.

This Section is adopted for the following purposes:

1. To set forth requirements for non-residential users of the ACSA wastewater collection system to capture and dispose of FOG, enabling the ACSA to comply with applicable federal and state laws, and with the Sewerage User Regulations of the Rivanna Water and Sewer Authority (RWSA), incorporated herein as Appendix A. Specifically, Part II, Section 1, Paragraph b prohibits the discharge of any wastewater containing more than 100 parts per million (ppm) of FOG.
2. To reduce the operational and maintenance costs of the ACSA by limiting the introduction of FOG into the wastewater collection system.
3. To reduce the impact on the RWSA wastewater operations by limiting the amount of FOG delivered by the ACSA wastewater collection system.
4. To protect the general public health and prevent environmental disturbances by eliminating or reducing sanitary sewer overflows due to grease accumulations.

19-03. APPLICABILITY.

The provisions of this Section are applicable to all commercial food service establishments, commercial office buildings with food service, industries with food service, and institutions with food service that discharge to the ACSA wastewater collection system. Collectively, these shall hereinafter be referred to as Food Service Establishments (FSEs).

19-04. GENERAL REQUIREMENTS.

1. All FSEs shall install, operate, and maintain at their expense, a grease control device.
2. All FSEs shall obtain a FOG Waste Discharge Permit.
3. A concentration of 100 ppm of FOG, measured as Hexane Extractable Material, in the discharge of an FSE is established as an Action Level.
4. The maintenance costs related to excessive grease in the ACSA wastewater collection system, and traceable to the food service operations of an FSE, shall be the responsibility of the FSE.
5. The maintenance and clean-up costs of a sanitary sewer overflow that is related to excessive grease in the ACSA wastewater collection system, and traceable to the food service operations of an FSE, shall be the responsibility of the FSE.

6. Any fines imposed upon the ACSA by the Commonwealth of Virginia or the United States of America in regard to a sanitary sewer overflow which is related to excessive grease in the ACSA wastewater collection system, and traceable to the food service operations of an FSE, shall be the responsibility of the FSE.

19-05. EXEMPTION FROM GREASE CONTROL DEVICE REQUIREMENTS.
The ACSA may grant an exemption from the requirements to install and maintain a grease control device to an FSE which is determined to have no, or minimal, adverse grease impact upon the ACSA wastewater collection system due to the nature of the FSE operations. To be considered for an exemption, the FSE shall provide a written request to the ACSA, stating in detail the grounds for the exemption. Following review of the request, the ACSA may elect to inspect the FSE during its normal business hours. The final decision on granting an exemption shall rest with the Executive Director or his designated agent, and a written response shall be provided to the FSE. At any time, the ACSA may revoke the exemption and require installation of a grease control device.

There shall be limited circumstances in which an exemption is granted, and shall likely be related to the following:

1. A commercial establishment which serves only food that is typically considered snack food, both packaged and unpackaged, with or without warming.
2. A school, industry, or commercial office building within which a lunchroom may exist, yet the only food that is made available to the students, employees, or guests is from snack and drink machines.
3. A bed and breakfast establishment which prepares and serves only the breakfast meal to its guests and employees, with fewer than four (4) guest rooms, and fewer than eight (8) guests.
4. A residential care facility for the aged, infirmed, or disabled within which fewer than four (4) adults are provided care.
5. A day care facility for the aged, infirmed, or disabled within which fewer than six (6) adults are provided care.
6. A day care facility for babies and children within which fewer than six (6) children are provided care.
7. A church within which a kitchen facility may exist, yet it can be shown that on-site food preparation and cleaning do not exceed that of a private residence.

19-06. NEW ESTABLISHMENTS.
The ACSA shall require all new FSEs to install the appropriate grease control device(s) prior to initiating operations. In general, this shall be a grease interceptor for all restaurants, supermarkets, hospitals, schools, motels, and industries. Further, the ACSA shall require any FSE with a grease control device to obtain a FOG Waste Discharge Permit.

19-07. EXISTING ESTABLISHMENT; NEW ESTABLISHMENT IN EXISTING BUILDING.
All existing FSEs shall have grease control devices that meet the same general requirements for installation and design as for new establishments. This shall also pertain to a new establishment that begins operations in an existing building, and an existing FSE that expands its food service operations.

If the ACSA determines the grease handling facilities or methods of an existing FSE are inadequate to prevent excessive FOG from entering the ACSA wastewater collection system, the FSE shall be notified in writing of the deficiencies, listing the required improvements and a compliance deadline. Required improvements may include additional training of the kitchen staff, modifications of the grease control device maintenance schedule, the installation of a larger, or additional, grease trap, or the installation of a grease interceptor. The ACSA may require the FSE to provide a schedule of corrective action to attain full compliance.

The ACSA shall allow an FSE without a grease control device a compliance deadline not to exceed two (2) months for the installation of a grease trap(s), or not to exceed six (6) months for the installation of a grease interceptor, following written notification from the ACSA. If an FSE which is required to install a grease interceptor does not have an existing grease trap, then the latter shall be installed within two (2) months of notification by the ACSA, unless the grease interceptor is installed within that same time period.

The Executive Director or his designated agent may decide in certain instances that the installation of a grease interceptor on an existing FSE property is physically impossible due to space limitations, is not feasible due to inadequate slope for proper gravity flow, or for other reasons. In these instances, he may allow installation of a grease trap, or traps, meeting the design specifications listed herein. The FSE manager shall be responsible for aggressive kitchen Best Management Practices and grease trap maintenance programs to produce wastewater that meets the FOG discharge requirements. Such FSEs may be subject to routine sampling to confirm compliance with the requirements herein.

19-08. GRANDFATHERING OF EXISTING ESTABLISHMENTS.
The ACSA shall allow existing FSEs, in which a grease trap or grease interceptor has been installed prior to the effective date of this Section, to continue operation of the existing device, if the device is effective:

1. In keeping grease from accumulating in the ACSA wastewater collection system and in the sewer lines of the FSE.
2. In producing wastewater in which FOG remains below the Action Level.

The ACSA may require an existing FSE which operates a grease trap to add a sample valve to the discharge pipe from the device, and prior to a union with any building sewage drain. The ACSA may require an existing FSE which operates a grease interceptor to add a sample box to the discharge pipe from the device, and prior to a union with any building sewage drain. This requirement of a sample valve or sample box shall typically be limited to FSEs in which there is a history of poor grease control device maintenance.

The ACSA may require an existing FSE which expands its food service operations to install a larger grease trap, additional grease traps, or a grease interceptor, to replace or operate in conjunction with an existing grease trap.

19-09. DESIGN, SIZING, AND INSTALLATION REQUIREMENTS.
All grease traps and interceptors shall be designed, sized, and installed according to the standards of the Virginia Uniform Statewide Building Code~~, the International Plumbing Code, and the ACSA *General Water and Sewer Construction Specifications*~~ and the International Plumbing Code.

Various formulas exist to calculate the proper size of a grease interceptor. The ACSA shall not require the use of any one formula, but rather the use of sound engineering judgment in this instance.

General specifications are as follows.

A. A grease trap shall:

1. Be constructed of corrosion-resistant metal or plastic.
2. Be accessible for cleaning, maintenance, and inspection.
3. Contain properly installed and functioning baffles necessary to achieve the appropriate retention time to allow for proper separation of FOG and solids from the gray water.

4. Handle the flow from no more than three (3) kitchen sinks, and be located as close to the sink(s) as possible.
5. Receive the discharge from any dishwasher that operates at 130 degrees Fahrenheit or less (chemical sanitizing dishwasher). Depending upon the number of sinks, this may require the installation of a second grease trap.
6. Not receive discharge that exceeds 130 degrees Fahrenheit.
7. Not receive discharge from a food grinding unit unless a properly-sized solids interceptor has been installed.
8. Receive only gray water.
9. Be installed with a flow control or restricting device in order to restrict the flow to the rated capacity of the trap.
10. Be installed with a sample valve on the discharge line from the device and prior to a union with any building sewage drain.

B. A grease interceptor shall:

1. Be constructed of precast concrete meeting the standards of ASTM C1227-09, or of corrosion-resistant fiberglass.
2. Be sized from a minimum of 1,000 gallons to a maximum of 3,000 gallons.
3. Contain multiple chambers and properly-positioned tee piping to achieve a thirty (30) minute retention time before gray water is discharged to the ACSA wastewater collection system.
4. Be installed on the FSE property and in a location outside the FSE, with access for inspection, cleaning, pumping, and maintenance.
5. Not be installed in areas subject to heavy traffic, where possible, and shall be accessible for inspections at all times, having no permanent or temporary structure or container placed directly over the unit.
6. Have a minimum 24 inch diameter manhole, extended to finish grade, over each chamber, interior baffle wall, and sanitary tee.
7. Have solid, water-tight manhole covers that prevent infiltration of stormwater or other surface water. Any gaskets shall be positioned beneath the cover.
8. Be designed with a minimum eight (8) inch diameter sample box or sample tee at the outlet.
9. Receive the discharge from all FSE drains and fixtures through which grease may be released, including all sinks, food grinding units, dishwashers, and floor drains.
10. Receive only gray water.
11. Be installed at a minimum distance of ten (10) feet from dishwashers and sinks to allow for optimal cooling of the wastewater.
12. Not receive discharge that exceeds 150 degrees Fahrenheit.
13. Include a properly-sized solids interceptor, or have its volume increased by 25%, when receiving discharge from a food grinding unit.
14. Be installed with an approved flow control or restricting device.

19-10. FOG WASTE DISCHARGE PERMIT.

The ACSA shall require all FSEs which currently possess, or are required to install, a grease control device to obtain a FOG Waste Discharge Permit. No FSE shall discharge to the ACSA wastewater collection system without first obtaining a permit.

The permit application shall, at a minimum, include the following information:

1. The name, address, and telephone number of the applicant, and the name, address, and telephone number of the ACSA account owner, if different from the applicant.
2. A description of the food service operations, cuisine, the hours of operation, and number of meals served per day.
3. A detailed list and number of all kitchen food preparation appliances, and kitchen fixtures, including size.

4. All grease control devices, or other pretreatment equipment, currently installed.

The ACSA may request other information of the FSE, related to the food service operations and potential food service discharges, to properly evaluate the permit application.

The completed FOG Waste Discharge Permit application shall be submitted to the ACSA for review. The ACSA may elect to inspect the FSE during its normal business hours. If the application is accepted, a draft permit shall be issued within thirty (30) days after receipt of the permit application. The applicant shall be allowed a thirty (30) day comment period. Upon expiration of the comment period, the ACSA shall issue or deny a permit. A permit shall contain general, and possibly specific, conditions for the FSE.

Permits shall be issued for a period of three (3) years. An expired permit shall continue to be in effect and enforceable if failure to reissue the permit is not due to any delinquency on the part of the FSE. No permit shall be transferable.

Denial of a permit shall be based upon an incomplete application, an unacceptable size and/or design of the grease control device(s), failure to pay charges that have been levied, a history of FOG discharge violations, or other related factors.

19-11. FOG WASTE DISCHARGE PERMIT CONDITIONS.
The issuance of a FOG Waste Discharge Permit shall contain the following conditions or limits:

1. A requirement for the proper installation, operation, and maintenance of the approved grease control device(s).
2. A requirement for documentation of a cleaning and maintenance schedule for the grease control device(s).
3. A ~~requirement~~ recommendation for implementation and documentation of a kitchen Best Management Practices program.
4. The establishment of a concentration of 100 ppm of FOG, measured as Hexane Extractable Material, as an Action Level.
5. A requirement for any laboratory testing of FOG, Biochemical Oxygen Demand (BOD), and Total Suspended Solids (TSS) to be at the expense of the FSE. Testing may be conducted at least once during the permit period to document that Section 19.11.4 is being met.
6. A requirement to report to the ACSA any anticipated expansion of food service operations prior to initiating such a project.
7. The issuance of a permit shall not relieve the FSE from complying with applicable laws, regulations, and ordinances promulgated by other governmental authorities.
8. The FSE agrees to hold harmless the ACSA and its employees from any liabilities arising from the operations of the FSE.

The terms and conditions of the permit are subject to modification by the ACSA at any time as just cause exists. The ACSA shall inform an FSE of any proposed change in the issued permit at least thirty (30) days prior to the effective date of the change, and shall give the FSE a reasonable timetable for compliance.

19-12. GENERAL MAINTENANCE OF GREASE TRAPS AND INTERCEPTORS.
Proper maintenance of grease traps and interceptors is crucial to establish optimal efficiency of the devices, and thus eliminate or minimize the discharge of grease from the FSE. A grease control device shall be cleaned as often as necessary to ensure that:

1. There is no evidence of grease in the ACSA wastewater collection system that can be traced directly to the operations of the FSE.
2. There is no evidence of grease in the sewer lines of the FSE.

3. The discharge of FOG to the ACSA wastewater collection system remains below the Action Level.
4. Floating material and sediment do not accumulate to impair the operation of the device.
5. No oil or grease is observed to discharge from the device.

The ACSA shall provide a detailed packet of information that describes proper cleaning and maintenance of the devices. However, due to varying designs and sizes, the FSE shall follow specific manufacturer guidelines for cleaning and maintenance in all instances.

General guidelines for cleaning and maintenance include:

1. Grease traps and interceptors shall be kept free at all times of such solid materials as gravel, sand, bones, shells, cigarettes, utensils, towels, and rags that will reduce the effective volume of the device and increase the frequency of cleaning.
2. The total depth of the surface FOG, combined with the settled solids, should not exceed approximately 25% of the total depth of the liquid/solid column.
3. Based upon the above, a grease trap will typically require cleaning every 1-4 weeks, and a grease interceptor will generally require cleaning every 2-3 months. However, the actual loading on a device shall determine the specific cleaning schedule in all instances, and this schedule may require periodic adjustment based upon food volume and specific menu items.

19-13. KITCHEN BEST MANAGEMENT PRACTICES.
The application of kitchen Best Management Practices (BMP) by an FSE serves as a critical initial step in reducing the amount of FOG that enters a grease control device, and therefore in prolonging the periods between cleaning and maintenance. The ACSA strongly encourages each FSE to establish a kitchen BMP program, and provide continuous training and monitoring of employees. If requested by an FSE, the ACSA shall provide a packet of information that describes aspects of a kitchen BMP program.

19-14. WASTE GREASE DISPOSAL.
All FSEs are encouraged to use designated buckets for the disposal of waste grease removed from grease traps during cleaning. Such material shall not be combined with cooking oil that is to be recycled. Buckets should have a well-sealing lid and shall be disposed of at a facility permitted to receive such waste.

19-15. GREASE INTERCEPTOR CLEANING AND MAINTENANCE.
Specific requirements for the servicing of grease interceptors shall include the following:

1. Cleaning and related maintenance shall be contracted to a company that is permitted by the Commonwealth of Virginia to transport waste.
2. Such service shall be performed at least every three (3) months, unless written permission for a schedule of less frequent service has been provided by the ACSA.
3. Cleaning and maintenance shall include the evacuation of all contents of the interceptor, including floating materials, gray water, and settled solids.
4. All waste removed from an interceptor shall be disposed of at a facility permitted to receive such wastes.
5. Gray water or potable water shall be returned to the interceptor following waste evacuation and cleaning.
6. Other than the gray water immediately returned to the interceptor to complete maintenance, none of the waste material removed from an interceptor shall be discharged to the ACSA wastewater collection system.

19-16. PROHIBITIONS.
The following practices and devices are prohibited:

1. Any modification of a grease interceptor, such as alteration or removal of a flow constricting device, that causes flow to rise above the design capacity of the unit or reduce the retention time.
2. Interceptor cleaning that involves only skimming the surface layer, partial cleaning, or the use of any method that does not remove the entire contents of the vessel.
3. The introduction of such agents as concentrated detergents, other surfactants, emulsifiers, degreasers, solvents, or any other type of product that will liquefy grease wastes.
4. The addition of any chemical enzyme product unless written permission has been granted by the ACSA.
5. The addition of bacteria unless written permission has been granted by the ACSA.
6. The use of automatic, or mechanically operated, grease removal systems unless written permission has been granted by the ACSA.

19-17 RECORDKEEPING.
FSEs with a grease control device shall maintain records of all cleaning and maintenance. These records shall include, at a minimum:

1. The date and time of service.
2. The name and signature of the FSE representative who performed or witnessed the service.
3. The contract company which performed the service (if applicable).
4. The name and signature of the contract company employee (if applicable).
5. The gallons of waste removed.
6. A copy of the service record or manifest from the contract company (if applicable).

Records shall be placed in a logbook, folder, or binder, shall be maintained on site for at least the previous three (3) years, and shall be made available immediately to the ACSA on demand during an inspection, or at intervals specified in a permit.

Any falsification of maintenance records is a violation of this policy.

19-18. INSPECTION VISITS.
Authorized representatives of the ACSA shall request the right to enter the premises to determine whether an FSE is in compliance with all requirements of this Section. Entry shall be during normal operating hours and for the purpose of inspection and evaluation of the FSE's grease control program.

Inspection may involve any or all of the following items:

1. The integrity of the grease control device
2. The amount of grease present in the device
3. Wastewater appearance and clarity
4. Cleaning and maintenance records
5. All food processing areas and fixtures
6. Sampling of discharge water from the device

The FSE shall keep its grease control device(s) accessible at all times. The ACSA shall have the option of requesting that a grease trap be opened by a representative of the FSE.

The ACSA shall make the result of the inspection available to the FSE representative verbally or in written form. A written report shall be delivered within ten (10) business days of the inspection if the FSE is found to be out of compliance with any of the requirements outlined in this Section, and shall include the necessary corrective action and a timetable for accomplishing such improvements.

19-19. USE OF CAMERAS.
As a part of the inspection of an FSE, the ACSA reserves the right to photograph the kitchen facilities and any grease control device, including its contents, for the purpose of documentation.

The ACSA also reserves the right to photograph the interior of the building sewage drain and/or building sewer. Photo documentation of grease accumulation along the walls of the pipe shall be evidence that the FSE must install a grease control device, that an existing grease control device is not being maintained properly, or that an additional grease control device may be required. The FSE may also be required to clean its building sewage drain and building sewer in coordination with ACSA maintenance crews. The expense of such cleaning shall be borne by the FSE.

19-20. SAMPLING AND TESTING.
The ACSA may periodically collect samples for laboratory testing as one means to determine if an FSE is in compliance with the requirements of this Section, and with other requirements of the *Rules and Regulations*. The expense of sample collection, shipment, and analyses shall be borne by the FSE.

Sampling and testing may consist of FOG, BOD, and TSS. Any additional sample collection and testing for these parameters shall be at the discretion of the ACSA, and shall relate to a history of the FSE's discharge, or to existing conditions.

Sampling shall involve grab samples which are collected, stored, transported, and analyzed in accordance with the procedures specified in 40 CFR Part 136. All testing shall be conducted by a private commercial laboratory which is in good standing with the Virginia Department of Environmental Quality, and which has attained, or is actively pursuing, certification within the Virginia Environmental Laboratory Accreditation Program (VELAP).

Sample collection from a grease trap shall be from the sample valve at the outlet of the device, if present, or from the nearest manhole that receives only the discharge of the FSE. Sample collection from a grease interceptor shall be from the sample box at the outlet of the device, if present, or from the nearest manhole that receives only the discharge of the FSE.

A copy of the analysis report of any laboratory testing on samples collected from an FSE shall be mailed to the FSE within ten (10) business days of receipt by the ACSA. The report shall include, at a minimum, an explanatory cover letter, the chain of custody form, the laboratory at which testing occurred, the results of the testing, the test methods used, and the dates of analyses.

19-21. ENFORCEMENT.
The following enforcement plan is designed to provide fair, consistent, and equitable action against FSEs for violations of the policies of this Section, and those of the *Rules and Regulations*, in general.

1. Notice of Non-Compliance.

   If an FSE is found to be in violation of any of the terms of this policy, the ACSA shall issue a written Notice of Non-Compliance. The notice shall state the specific violation(s), provide information on the required steps to be taken to be in compliance with the policy, and include a timetable for compliance. Additional testing, with the expense to be borne by the FSE, may be required. A Notice of Non-Compliance for a particular incident shall be provided on one (1) occasion. The need for any future action justifies proceeding to a Notice of Violation.

2. Notice of Violation.

   If an FSE fails to provide the corrective action required by a Notice of Non-Compliance, a Notice of Violation (NOV) shall be issued by certified mail. An NOV shall repeat the

specific violation(s), provide information on the required steps to be taken, and list the date(s) by which all corrective action must be completed.

Within ten (10) business days of receipt of this notice, the FSE shall submit to the ACSA a plan outlining the detail to meet the required corrective action. Submission of the plan in no way relieves the FSE of liability for any violations occurring before or after receipt of the NOV.

Primary reasons for the issuance of an NOV include, but are not limited to:

a. Failure to install a proper grease control device by an assigned date.
b. Failure to repair a malfunctioning grease control device by an assigned date.
c. Failure to properly maintain and clean a grease control device at a frequency and in a manner that ensures efficient operation.
d. Repeated violations of the FOG Action Level.
e. Failure to keep grease control device maintenance records on site, or failure to provide the records to the ACSA upon request.
f. Falsification of grease control device maintenance records.
g. Failure to submit a FOG Waste Discharge Permit application.
h. Failure to pay a FOG Waste Discharge Permit fee.

Satisfactory response by an FSE to an NOV may be followed by a program of additional FOG, BOD, and TSS testing, with the expense to be borne by the FSE.

The ACSA shall consider suspension of water and sewer services if an FSE fails to respond satisfactorily to an NOV. Service suspension shall be enacted if the Executive Director determines the FSE presents an imminent danger to the health or welfare of the public or environment, or presents problems to the ACSA wastewater collection system.

19-22. COSTS AND CHARGES.

1. The cost of a FOG Waste Discharge Permit shall be Two Hundred Fifty Dollars ($250). This shall include the expense for the ACSA to collect samples for the testing of FOG, BOD, and TSS on one (1) occasion during the three (3) year permit period, if deemed necessary. The need for any additional testing shall be determined by the ACSA, and the expense shall be borne by the FSE.
2. The failure of an FSE to respond satisfactorily to an NOV, when the issue is the need for installation or repair of a grease control device, shall result in a charge of One Thousand Dollars ($1,000) per month until the device is installed or properly repaired.
3. The failure of an FSE to respond satisfactorily to an NOV, when the issue is repeated failure to properly maintain a grease control device, as well as repeated FOG discharge in excess of the Action Level, shall result in a charge of One Thousand Dollars ($1,000) per month until the device is properly maintained and FOG discharge limits are maintained below the Action Level.
4. The failure of an FSE to respond satisfactorily to an NOV, when the issue is the failure to keep grease control maintenance records on site and available to ACSA personnel, shall result in a charge of Five Hundred Dollars ($500).
5. The failure of an FSE to respond satisfactorily to an NOV, when the issue is the falsification of grease control device maintenance records, shall result in a charge of Five Hundred Dollars ($500).
6. The failure of an FSE to respond satisfactorily to an NOV, when the issue is the failure to submit a FOG Waste Discharge Permit application, or pay a permit fee, shall result in a charge of Five Hundred Dollars ($500) per month until the application is submitted or the fee is paid.
7. An FSE whose operations cause or allow grease to be discharged to the extent that it accumulates in the ACSA wastewater collection system, shall be liable for the costs to clean and/or repair the facilities, including all labor, materials, and equipment.

8. An FSE whose operations cause or allow grease to be discharged to the extent that it accumulates in the ACSA wastewater collection system, and results in a sanitary sewer overflow, shall be liable for the costs to clean and/or repair the facilities and affected area, including all labor, materials, and equipment.
9. An FSE whose operations cause or allow grease to be discharged to the extent that it accumulates in the ACSA wastewater collection system, and results in a sanitary sewer overflow, shall be liable for any fines dispensed by the Commonwealth of Virginia or the United States of America.
10. A commercial waste hauler or individual who discharges to the ACSA wastewater collection system the wastes collected from a grease interceptor shall be assessed a ~~fine~~ charge of up to Ten Thousand Dollars ($10,000) per occurrence.

Item #	Cost/Charge	Description/Infraction
1	$250/3 years	FOG Waste Discharge Permit
2	$1,000/month *	NOV- failure of an FSE to install or repair grease control device
3	$1,000/month *	NOV- repeated failure of an FSE to properly maintain grease control device, and repeated excessive FOG discharge from an FSE
4	$500	NOV - failure of an FSE to keep grease control maintenance records on site and available to the ACSA
5	$500	NOV- falsification by an FSE of grease control device maintenance records
6	$500/month *	NOV- failure of an FSE to submit a FOG Waste Discharge Permit application or pay a permit fee
7	~~assessed~~ Assessed amount	An FSE whose operations allow grease accumulation - all costs to clean and repair the ACSA facilities
8	~~assessed~~ Assessed amount	An FSE whose operations allow grease accumulation that results in a sanitary sewer overflow - all costs to clean and repair the ACSA facilities
9	~~assessed~~ Assessed amount	An FSE whose operations allow grease accumulation that results in a sanitary sewer overflow- all fines levied by the state or federal government
10	Up to $10,000/occurence	Commercial waste hauler or individual – illegal discharge of grease wastes to the ACSA system

*Until the violation is corrected to the satisfaction of the ACSA.

19.23.APPEAL PROCESS.
An FSE, commercial waste hauler, or individual shall have the right to appeal any of the costs or charges listed in Section 19.22.1 through 19.22.10 according to the following procedure:

1. **A notice to appeal shall be requested in writing and delivered to the office of the Executive Director no later than five (5) business days following the receipt of notice of the cost or charges to be levied.**
2. **The failure to file such notice to appeal within such time limit shall be deemed a waiver of the right to appeal.**
3. **Upon receipt of the appeal request, the Executive Director shall render a decision within thirty (30) calendar days.**
4. **The decision shall be sent by certified mail to the appellant.**

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