

- (1) The provisions of this article.
- (2) Limits, conditions, fees, charges or other matters established by ordinance or by action of the city council.
- (3) Monthly or periodic service bills or statements; however, errors in the method of calculating such bills or in determining relevant concentrations or masses necessary to compute such bills shall be subject to appeal.
- (4) Notice of show cause hearings or other preliminary or non-binding determination by the POTW Director; however, any final action or final determination shall be appealable.

(Ord. No. 96-04, 1-8-96; Ord. No. 07-15, 5-7-07; Ord. No. 08-09, 5-5-08)

Sec. 5-1064. Severability.

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

(Ord. No. 07-15, 5-7-07)

Sec. 5-1065. Conflict.

All other ordinances or parts of ordinances inconsistent or conflicting with any part of this article are hereby repealed to the extent of such inconsistency or conflict.

(Ord. No. 07-15, 5-7-07)

ARTICLE E

Grease Control

Sec. 5-1071. General.

(a) *Citation.* This article may be cited as the Grease Control Ordinance and shall take affect on January 1, 2007.

(b) *Purpose.* The intent of this article is to help provide the public with information concerning the problems caused by discharging fats, oils and grease into the municipal sewer system. Further, this article provides the guidelines and procedures to implement the requirements that will insure compliance with the sewer use ordinance (Article D of this chapter) so that food preparation and serving establishments can avoid the civil penalties and other adverse consequences of violations.

(c) *Policy.*

- (1) The city continues to experience sewer blockages and overflows caused by the accumulation of fats, oils and grease on the inside surfaces of its sanitary sewer lines and its sewer treatment infrastructure. Food preparation or serving establishments and cooking establishments as defined herein are a major contributor of fats, oils and grease to the municipal sewer system. Other businesses also add to the problem. Those businesses must engage in best management practices which in some cases include the installation, operation and maintenance of grease separator devices.
- (2) Grease separation devices, either interceptors or traps, shall be required when necessary for the proper handling of wastewater to prevent the violation of the prohibited discharge standards established by § 5-1052(b)(14) of Article D of this chapter. The type of device and the minimum design capability of the device shall be sufficient to meet all discharge limitations.
- (3) Normally residential users will not be required to install grease separation devices except in unique cases where there is reason to believe that fats, oils and grease are being discharged into the sanitary sewer system in excessive amounts for normal residential use.
- (4) In summary, it is the policy of the city to comply with the mandates and requirements of the United States Environmental Protection Agency as well as the North Carolina Department of Environmental and Natural Resources and to protect the municipal sewer

system. The cost of correcting problems associated with the accumulation of fats, oils and grease in the municipal sewer system should be paid by the users that create the problem or violate discharge limitations.

(d) *Authority.* This article is adopted pursuant to N.C.G.S. 160A-312; the provisions of the sewer use ordinance (Article D of this chapter); and, the various provisions of federal and state law under which the sewer use ordinance was adopted including the Clean Water Act.

(e) *Construction.* This article is intended to supplement the sewer use ordinance (Article D of this chapter) and shall be interpreted and construed in a manner consistent with the sewer use ordinance. In the event this article conflicts with the North Carolina Plumbing Code, adopted by the city, the Plumbing Code shall control.
(Ord. No. 06-26, 11-6-06)

Sec. 5-1072. Definitions.

(a) Those definitions and abbreviations set out in § 5-1051.1 of the sewer use ordinance (Article D of this chapter) shall also apply to this article.

(b) Further, the following terms and conditions and abbreviations, as used in this article, shall have the meanings hereinafter designated.

Best Management Practices (BMP). Procedures and practices that reduce the discharge of FOG to the building drain and ultimately to the POTW including, among other things, regular maintenance, service, scheduled cleaning of grease separator devices and always includes following the directions and recommendations of the manufacturer.

City. The City of Morganton or any official or agent, acting with authority on its behalf.

Director. The POTW Director.

Fats, oils and greases. Organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules and are detectable or measurable under the guidelines establishing test procedures for the analysis of pollutants promulgated by the United States Environmental Protection Agency. More specifically reference is made to 40 CFR 136. Sometimes referred to as FOG, grease or greases and among other things includes animal fats, vegetable oils or the product containing such compounds.

Food service establishments. An industrial, institutional or commercial facility that processes, prepares or serves food for public consumption. Typically there are two (2) types of food service establishments.

a. *Cooking establishment.* A food service establishment that uses cooking by

frying, baking, grilling, sautéing, rotisserie cooking, broiling, blanching, roasting, toasting, poaching or boiling in the preparation or service activity that leaves a fat, oil or grease residue on pots; pans, plates and other implements that must be washed for reuse. Examples include: restaurants, cafe, cafeteria, snack bar, grill, delicatessen, catering service, bakery, grocery stores, butcher shops and other similar establishments.

b. *Noncooking establishment.* An establishment primarily engaged in the preparation of precooked foodstuffs that do not include any form of cooking or related activities such as cold dairy and frozen food stuff preparation and serving establishments.

Grease separation device. A device that separates and either retains or removes FOG from wastewater prior to discharging the wastewater into the sanitary sewer system. Normally these devices also serve to collect solids that will settle in the wastewater generated by or resulting from food preparation activities prior to the wastewater exiting the device and entering the sanitary sewer system. The devices generally fall into two (2) categories.

a. *Grease interceptor.* A grease separation device consisting of a vault located outside the building and may include two (2) or more compartments or baffle chambers designed to trap or retain the grease as the wastewater flows between compartments. The interceptor provides adequate time for the wastewater to cool, allowing grease not collected in the traps to congeal and rise to the surface where it accumulates until the interceptor is cleaned.

b. *Grease trap.* A small reservoir built into the wastewater piping system a short distance from the grease producing area. Baffles in the reservoir retain the wastewater long enough to allow the grease to congeal and rise to the surface so that it can be removed and disposed of properly.

c. The terms may be used interchangeably.

Minimum design capability. The design features of a grease separation device, trap or interceptor, and its ability or volume required to effectively intercept and retain greases from the grease containing wastewater discharged into the sanitary sewer system.

User. Any person who discharges wastewater into the municipal sewer system or who allows or permits wastewater to be contributed or discharged into the municipal sewer system, including discharge of wastewater by mobile sources, such as those services which discharge hauled wastewater. By discharging wastewater into the POTW, users located outside the city limits agree to comply with the terms and conditions established in this article as a condition of service and in accordance with the provisions of § 5-1051(c) or in accordance with any permit issued to them. The term user also includes property owners who provide a common grease separator device for one or more independent establishments such as tenants in a shopping center or mall. Informally, the term *discharger* or *customer* refers to a user. (Ord. No. 06-26, 11-6-06)

Sec. 5-1073. Education.

In order to promote public awareness about FOG issues and the various problems resulting from the discharge of grease into the sanitary sewer system, the city may undertake a program to educate the public concerning the problems caused by FOG and solutions to those problems. Further, the city may, in an effort to provide guidance to food service establishments, establish best management practices and other resources to assist food service establishments in mitigating the harmful effects of FOG. Any such program will include information concerning this article and the requirements hereof as well as the requirements of the Plumbing Code relating to grease separation devices. Information regarding enforcement and enforcement techniques, especially the procedure for imposing penalties under this article should be included in the program. (Ord. No. 06-26, 11-6-06)

Sec. 5-1074. Prohibited.

The discharge of wastewater containing fats, oils and grease into the POTW by food service establishments, except in compliance with the requirements of this article, is prohibited and is a violation of the sewer use ordinance (Article D of this chapter). (Ord. No. 06-26, 11-6-06)

Sec. 5-1075. Grease separation device required.

(a) New facilities.

- (1) All new buildings, structures and facilities of any kind, classified as a cooking establishment, or any existing building, structure or facility which will be expanded or renovated to include a cooking establishment shall be required to install a grease separation device in accordance with the requirements of this article prior to the issuance of a certificate of occupancy.

- (2) Non-cooking establishments may be required to install a grease separation device if the POTW Director determines that its operation will discharge a significant amount of grease into the sanitary sewer system. In determining whether a non-cooking establishment is or will discharge a significant amount of grease, the POTW Director will consider:
 - a. The onsite drainage problems encountered by the establishment;
 - b. The history of FOG problems in the sanitary sewer system in the area of the establishment;
 - c. The likelihood of the discharge of grease because of the type of food and food products; and,
 - d. The process for handling food used by the establishment.

- (3) Malls, shopping centers and other commercial or institutional development, where the potential exists for a food service establishment, are encouraged to provide an appropriate plumbing stub-out for a separate line for future installation of a grease separation device. The owner or developer of commercial and institutional malls and developments shall consider suitable property physical space and sewer gradient in order to provide for the installation of an exterior grease separation device for any flexible space contained within the development. Physical property restrictions and sewer gradient issues shall not be a defense to the city's requirement that an exterior in-ground grease separation device (interceptor) be installed in the event there is a change in use adding a new or enlarging an existing food service establishment.

(b) Existing facilities. Existing buildings, structures and facilities classified as a cooking establishment that already have a grease separation device installed shall not be required to replace the grease separation device so long as the device is regularly cleaned and maintained by a qualified service company and provided the device continues to effectively prevent the discharge of grease into the municipal sewer system. Food service establishments in existence prior to the effective date of this article that do not have an effective grease separation device installed shall be required to install an approved grease separation device; however, the POTW Director may allow up to six (6) months in which to complete the installation.

(c) *Failure of devices.* In the event any grease separation device, currently installed in any existing food service establishment or hereafter installed, fails to effectively intercept, retain and/or remove grease from the wastewater prior to its discharge into the municipal sewer system, the POTW Director shall have the right to order repairs to the device; order the installation of a new grease separation device; or, replace a grease trap with a grease interceptor, all at the expense of the user.

(d) *Type.* The design, size and type of grease separation device is subject to the approval of the POTW Director using the minimum design capability recommended by the manufacturer of the device, best management practices taking into consideration the amount and type of grease created and the further guidelines set forth in this article. The POTW Director shall prepare and maintain on file written recommendations and directions for the sizing and installation of grease separation devices, recommendations for when traps or interceptors are appropriate and any special consideration for particular types of cooking establishments. (Ord. No. 06-26, 11-6-06)

Sec. 5-1076. Rules and regulations.

All grease separation devices shall be designed, installed and maintained in accordance with the rules and regulations set forth in this section.

(a) *Survey and inspection.* The city will conduct an initial survey of all buildings, structures and facilities classified as a food service establishment and which discharge into the city POTW to determine which establishments have grease traps and interceptors installed, whether such devices are properly working and adequate to meet the requirements of this article; or should be required to install such devices in order to insure compliance with this article. Subsequent, random inspections of all food service establishments connected to the sanitary sewer system will be conducted to insure continuing compliance.

(b) *Design.* Plans for the installation all new exterior grease separation devices (traps or interceptors) shall be submitted to and approved by the city prior to installation. The plans, at a minimum, shall include a site utility schematic showing the separate kitchen waste line intended to receive kitchen waste and wastewater only, the location of the grease separation device, sufficient information to determine the size and type of grease separation device as well as sufficient information to identify the manufacturer and the serial and model number of the device. The plans shall demonstrate the minimum design capability for all exterior grease separation devices including:

- (1) Exterior grease separation devices shall be designed to 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 North Carolina Plumbing Code fixture criteria, between the influent and effluent baffles with twenty percent (20%) of the total volume of the grease device being allowed for sludge to settle and accumulate.

- (2) New in ground devices shall have a capacity of not less than one thousand (1,000) gallons unless otherwise approved by the POTW Director.
- (3) The length to width ration of the device shall not be less than 2:1.
- (4) The device shall have interior baffles that efficiently distribute flows and each baffle must extend six (6) inches above the waterline, but not above the inlet pipe.
- (5) Interior baffle walls shall be located not less than two-thirds ($\frac{2}{3}$) nor more than three-fourths ($\frac{3}{4}$) of the distance from the inlet end wall.
- (6) The device shall contain at least nine (9) inches of freeboard between the top of the device and the top of the baffles.
- (7) All devices shall have inlet and outlet piping T's. The inlet T shall extend at least twenty-five percent (25%) into the wastewater depth and the outlet T shall extend fifty percent (50%) into the wastewater depth. Both the inlet and outlet piping T's shall plugged at the top and have a minimum diameter of three (3) inches.
- (8) Each device must provide an access manhole over the inlet and outlet compartment having an opening of at least twenty-four (24) inches in diameter and be level with the finish grade of the surrounding land. The access manhole shall have a readily removable cover constructed of cast iron or an equivalent traffic bearing material. The manholes shall be constructed in a manner to prevent surface and storm water runoff from entering the device.
- (9) All devices must be water tight as verified by a vacuum or water type test with a compressive strength of not less than thirty-five hundred (3,500) pounds per square inch. All joints must be properly sealed to prevent infiltration or leaks.
- (10) The device shall be vented according to the North Carolina Plumbing Code with a vent pipe of not less than two (2) inches in diameter. Devices may be vented through the top in which case the bottom of the vent pipe shall not be closer than six (6) inches to the static waterline or may be vented through the side of the access opening.

- (11) Only kitchen waste may be discharged into the device including wastewater from pot sinks, food preparation sinks, can washes, the kitchen floor drain and dishwashers.
- (12) Devices installed in vehicular traffic patterns shall be designed to the H-20 bridge load for vehicular traffic conditions. Devices installed in non-traffic locations must meet a minimum structure design of one hundred fifty (150) pounds per square foot.
- (13) Devices must adhere to AC1-318 Building Code for Reinforced Concrete, ASTM C 1227-93 Standards for Pre-Cast Concrete Tanks and ASTM C 890 Structural Design Loading for Pre-Cast Water and Wastewater Structures.
- (14) Devices that are constructed of polyethylene or fiberglass must be able to withstand the appropriate loading (traffic or non-traffic) or perform under a vacuum test to simulate loading and include twelve thousand (12,000) pounds per square inch ultimate tensile strength and eight hundred thousand (800,000) pounds per square inch flexural modulus of elasticity (i.e. must meet standard ASTM D790).
- (15) All pre-manufactured devices must bear the manufacturer's serial number and the date manufactured. The minimum design standards of any device that is not pre-approved by the State of North Carolina shall be certified by a registered professional engineer.
- (c) *Installation.* The installation of a grease separation device shall be at the sole expense of the user and be completed by a plumber properly licensed under North Carolina law and inspected and approved by the city prior to being placed into operation.
- (d) *Maintenance.*
- (1) All grease separation devices shall be regularly cleaned and properly maintained at all times at the expense of the user. Only qualified, properly licensed contractors may service the device.
- (2) Proper maintenance shall include the complete removal of all trap or interceptor contents, including floatable materials, wastewater and sludge. All of the waste removed must be disposed of at a facility properly licensed under North Carolina law by the North Carolina Division of Solid Waste.
- (3) Waste grease collected from fryers, grill drip pans, oven drippings and other grease generating sources including exhaust hoods shall not be allowed to enter the grease separation device, but shall be collected separately and recycled using a qualified, professional company.
- (4) The frequency of cleaning and maintenance may vary depending upon the amount of fats, oils, grease and suspended solids generated by each establishment, the size of the grease separation device and manufacturer's recommendation, but all such devices shall be pumped at intervals not to exceed thirty (30) days for exterior grease separation devices and fourteen (14) days for traps or interceptors located within the establishment.
- (5) The user shall keep accurate service and maintenance records and shall report the results of all cleanings, maintenance and service events on report forms provided by the city by the fifteenth (15th) day of each calendar month.
- (6) The use of biological additives as a grease degradation agent is not an acceptable maintenance program and the use of such agents is prohibited except with the prior written approval of the POTW Director.
- (e) *Other prohibitions.* Users shall comply with the following:
- (1) The separation, decanting or back flushing of a grease control device is prohibited.
- (2) The discharge of grease trap or grease interceptor waste into the city sewer collection system or the stormwater control system is prohibited.
- (3) Outdoor oil and grease recycling areas shall be covered and secured to prevent infiltration of storm water and surface water runoff.

(Ord. No. 06-26, 11-6-06)

Sec. 5-1077. Waiver.

- (a) The POTW Director may waive or vary a particular requirement of this article if, based upon the facts, the POTW Director determines:

- (1) That a genuine hardship exists,
 - (2) The hardship was not caused by the user or the owner of the property on which the food service establishment is located, and
 - (3) The hardship is not purely financial, but is related to space limitations, elevations and other factors beyond the control of the user.
- (b) Among other things, the POTW Director may consider the following:
- (1) Space constraints that prevent the installation of grease control devices on the exterior of any building for buildings, structures and facilities previously constructed and in use on the effective date of this article.
 - (2) The existing plumbing system within any building, structure or facility is inadequate and cannot accommodate adequately sized grease separation devices.
 - (3) The availability of public sewer and the accessibility to existing sanitary sewer mains.
 - (4) The location of sanitary sewer laterals and their proximity to the foundation and footing of the building and whether such location prevents devices from being placed outside.
 - (5) The potential harm, including odor and nuisance issues, caused by the size and location of the grease separation device.
 - (6) The availability of alternative devices, where such devices can reasonably be located and the size of such devices.
- (c) When the POTW Director determines that a bona fide hardship exists, the Director may permit smaller interior grease separation devices to be installed or may vary the size and requirements of any exterior grease separation device provided the POTW Director makes a specific determination that the discharge of fats, grease and oil into the sanitary sewer system can be satisfactorily controlled after the requirements have been varied or waived.
- (d) Should a waiver or variance be granted, the POTW Director retains the right to inspect the grease separation devices from time to time, sample all wastewater and determine whether the discharge of fats, grease and oil are being adequately controlled. If the POTW Director determines that the grease separation devices, as permitted, are not adequate, then the POTW Director shall have the right to amend any waiver or variance granted and to enter the necessary orders to remedy the situation in order to adequately control the effects of inadequately controlled fats, oils and greases.

(e) All variances or waivers or other exceptions to the requirement of this article shall be confirmed in writing.

(f) Notwithstanding the right to grant waivers or variances, the POTW Director shall not permit the installation of any grease separation device that allows the user to violate the sewer use ordinance (Article D of this chapter).
(Ord. No. 06-26, 11-6-06)

Sec. 5-1078. Enforcement.

(a) A violation of any of the requirements of this article is a violation of the sewer use ordinance (Article D of this chapter) and may be enforced under §§ 5-1058, 5-1058.1, 5-1058.2, and 5-1058.3 of Article D of this chapter which includes, among other things, the issuance of administrative orders of compliance, the assessment of civil penalties, the issuance of criminal citations, the termination of service as well as any other remedy allowed therein.

(b) Further, the actual cost incurred by the city in cleaning up and/or remedying any spill or damage to the POTW caused by the failure of a user to comply with the provisions of this article shall be paid by the user as an additional cost recovery charge to be added to the user's bill and collected as a part of the fee charged for sanitary sewer service.
(Ord. No. 06-26, 11-6-06)