TITLE 18

WATER AND SEWERS[1]

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CHAPTER 1

WATER AND SEWERS

SECTION
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18-101. Fluoridation of water. The water department is hereby authorized and instructed to make plans for the fluoridation of the water supply of Ashland City, Tennessee, to submit such plans to the Department of Health and Environment of the State of Tennessee for approval, and upon approval to add such chemicals as fluoride to the water supply in accord with such approval as will adequately provide for the fluoridation of said water supply.

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[1]Municipal code references
Building code: title 12.
Refuse disposal: title 17.
Requirements for underground utility facilities: title 14, chapter 4.

The cost of such fluoridation will be borne by the revenues of the water system. (1973 Code, § 13-101)

18-102. Tampering with hydrants, valves, etc. No person shall tamper with or turn on or turn off any of the stop cocks, valves, hydrants, spigots, or fire hydrants, or take or use water or permit water to flow from any of said parts of the water system belonging to the Town of Ashland City, Tennessee, or being a part of the water system of said town, without express permission or authority from the city council. (1973 Code, § 13-102)

18-103. Customers to install pressure controls, etc.; municipality not liable for pressure fluctuations, etc. All customers of the municipal water system shall, at their own expense, have attached or installed at their places of residence, business establishments, or other places for water service, satisfactory and sufficient water pressure controls, cut-offs, etc., necessary to properly control the pressure or lack of pressure of water at any time, so that in case of any high pressure, low pressure, or fluctuations in pressure in the municipality's water mains or lines the customers may protect their property from any damages. Also, each prospective customer desiring water service shall be required to have installed at his expense a check valve on the new service before the town will turn on water for the new service. The municipality shall not be liable to any customer for any damages of any kind that may result or be caused to the customer's plumbing, or other property, by any such interruptions, cessations, high pressure, low pressure, or fluctuations of any kind in the municipality's water mains or water lines. The municipality will endeavor to furnish continuous water service but does not guarantee to the customer any fixed pressure or continuous service.

In connection with the operation, maintenance, repair, and extension of the municipal water system, the water supply may be cut off without notice when necessary or desirable and each customer must be prepared for such emergencies. The municipality shall not be liable for any damages from such emergencies. The municipality shall not be liable for any damages from such interruption of service or for damages from the resumption of service without notice after any such interruption. (1973 Code, § 13-103)

18-104. Usage fees for water service inside and outside the corporate limits. (1) Inside and outside the corporate limits a fee or charge shall be made and is hereby levied for the privilege of tapping or making a connection by any private water line with the town water system. There is hereby established a capacity fee and a tap fee. Any time there is a master meter installed for a multi-unit building then a tap fee and a master fee shall be required for every unit as well as the cost of a master meter. All meters inside corporate limits are required to be no less than one inch (1"), unless they are preexisting meters which may require a low flow sprinkler system. We further reserve the right to charge any engineering costs in addition to these fees. In the event that the

developer on new construction installs the taps there will only be the capacity fee.

	Meter Size	Fee
(a)	3/4"	$1,250.00 capacity fee and $1,250 tap fee
(b)	1"	$1,500.00 capacity fee and $1,500.00 tap fee
(c)	2"	$3,000.00 capacity fee and $3,000.00 tap fee
(d)	3"	Expense (machinery, labor, and material) plus $3,500.00 capacity fee
(e)	4"	Expense (machinery, labor, and material) plus $4,000.00 capacity fee
(f)	6"	Expense (machinery, labor, and material) plus $5,000.00 capacity fee
(g)	8"	Expense (machinery, labor, and material) plus $6,500.00 capacity fee
(h)	10"	Expense (machinery, labor, and material) plus $10,000.00 capacity fee

(2) Usage fees for the fire protection sprinkler system inside the corporate lines. The fee or charge shall be as follows:

	Meter Size	Fee
(a)	2"	$400.00 capacity fee plus machinery, labor and material expense
(b)	3"	$600.00 capacity fee plus machinery, labor and material expense
(c)	4"	$800.00 capacity fee plus machinery, labor and material expense
(d)	6"	$1,200.00 capacity fee plus machinery, labor and material expense
(e)	8"	$1,600.00 capacity fee plus machinery, labor and material expense
(f)	10"	$2,000.00 capacity fee plus machinery, labor and material expense
(g)	12"	$2,400.00 capacity fee plus machinery, labor and material expense

(1973 Code, § 13-103, as amended by Ord. #58, Sept. 1988; Ord. #115, Oct. 1994; Ord. #250, Feb. 2002, Ord. #330, March 2007, Ord. #398, Feb 2013, and Ord. #436, Sept. 2015, replaced by Ord. #489, Jan. 2018 ***Ch12_6-11-19***, and Ord. #506, July 2018 ***Ch12_6-11-19***)

18-105. Deleted. (1973 Code, § 13-105, as amended by Ord. #59, Sept. 1988, Ord. #116, Oct. 1994, and Ord. #330, March 2007, and deleted by Ord. #489, Jan. 2018 ***Ch12_6-11-19***)

18-106. Usage fees for sewer service. A fee or charge shall be made and is hereby levied for the privilege of making a connection to the sewer system. There is hereby established a capacity fee and a tap fee. Any time there is a master meter installed for a multi-unit building then a tap fee and capacity fee is required for every unit as well as the cost of a master meter. We further reserve the right to charge any engineering costs in addition to these fees. In the event that the developer on new construction installs the taps there will only be the capacity fee. All usage or connection fees shall be:

	Meter Size	**Fee**
(a)	3/4"	$1,250.99 capacity fee and $1,250.00 tap fee
(b)	1"	$1,500.00 capacity fee and $1,500.00 tap fee
(c)	2"	$3,000.00 capacity fee and $3,000.00 tap fee
(d)	3"	Expense (machinery, labor, and material) plus $3,500.00 capacity fee
(e)	4"	Expense (machinery, labor, and material) plus $4,000.00 capacity fee
(f)	6"	Expense (machinery, labor, and material) plus $5,000.00 capacity fee
(g)	8"	Expense (machinery, labor, and material) plus $6,500.00 capacity fee
(h)	10"	Expense (machinery, labor, and material) plus $10,000.00 capacity fee

Customers are required to install their tank to our specifications. (1973 Code, § 13-106, as amended by Ord. #60, Sept. 1988; Ord. #61, Oct. 1988; Ord. #117, Oct. 1994, Ord. #330, March 2007, Ord. #398, Feb 2013, and Ord. #436, Sept. 2015, and replaced by Ord. #489, Jan. 2018 ***Ch12_6-11-19***, and Ord. #506, July 2018 ***Ch12_6-11-19***)

18-107. Water and sewer scheduled rates and charges. (1) The following shall apply and be put into effect immediately upon proper passage of this section and shall be billed each and every month of the calendar year, and that said rates are hereby adopted, fixed and established as set forth in the following schedule to wit:

	Water Rates		**Sewer Rates**
	Inside City Limits	**Outside City Limits**	**All**
Base charge (minimum fee)	$10.89	$20.44	$10.89
All rates are per 1,000 gallons			
First gallon used to last gallon	$7.17	$8.18	$7.17

The water and sewer rates may be adjusted each budgeting cycle to meet the operational requirements including expenses and debt service obligations.

Flat Rate Sewer- Monthly	$8.00
Non-refundable application fee-owner	$50.00
Non-refundable application fee-renter	$100.00
Residential STEP fee- monthly	$9.50
Commercial STEP fee- monthly	10% of combined water and sewer total
Returned check	Amount allowable by state law
Reconnection fee- inside city limits	$50.00
Reconnection fee- outside city limits	$75.00
After hours reconnection fee- inside city limits	$75.00
After hours reconnection fee- outside city limits	$100.00

Industrial rates outside of the industrial park sewer system may be charged at the rate listed above but be charged on the number of gallons of sewer versus number of gallons of water if the industrial user installs a dedicated line to the plant with an appropriate manhole for testing of the sewer and approval of the line by the Town of Ashland City.

(2) Billing and payment. (a) Utility bills for residences will be rendered monthly. Commercial and industrial customers may be billed monthly or more frequently, at the discretion of the governing board. The city clerk shall notify each customer or user of said water and/or sewer services of the amount owing by such customer or user of said services, or either of same.

(b) Utility bills shall include a "net" amount and a "gross" amount. The gross amount is due as specified on the bill and is the net plus ten (10) percent.

(c) Should the net date for payment of a bill fall on a weekend or a holiday, the bill may be paid on the following business day at the net amount.

(d) When a customer does not pay current bill by the cut off date, service shall be discontinued in accordance to the utility's discontinuance of service policy.

(e) Utility bills are recognized, as a routine bill owed by the customer. The customer's failure to receive a bill does not change in any way the customer's obligation to pay the amount due in a timely manner.

(f) The following bill payment method/locations are acceptable:

(i) Mail - payment will be posted according to the postmark on the payment.

(ii) Drop-off box - payment posted on business day that box is opened.

(iii) Town hall and other designated areas as approved by the governing body.

(iv) Automatic ach withdrawal.

(v) Credit card.

(g) The following residential dwellings shall have a separate meter for each living unit:

(i) Single family dwellings and duplexes if being served by more than one (1) electric meter base after the effective date of the ordinance comprising this chapter. However, duplexes may elect to have one (1) commercial tap upon giving reasonable notice the city.

(ii) Triplexes and multiplexes (three or more meters) if individually owned;

(iii) Condominiums after the effective date of the ordinance comprising this chapter. However, condominiums may elect to have one (1) commercial tap if the bill will be paid by one (1) individual such as a homeowners association upon giving reasonable notice to the city;

(iv) Mobile homes and mobile home parks after the effective date of the ordinance comprising this chapter.

(v) Apartment buildings that were receiving utility service prior to the implementation of the ordinance comprising this chapter.

(h) The following residential dwellings shall have one (1) commercial tap for all living units:

(i) Apartment buildings consisting of four (4) or more units;

(i) All customers in section (g) and (h) above who are allowed to receive service to multiple users though a single meter shall be charged commercial rates if those differ from residential rates. In addition, the following method of bill computation shall apply:

The bill shall be calculated by the number of units multiplied by the base charge for water and sewer plus the fee for gallons of water and sewer used. The total bill shall be the responsibility of the customer who contracted for the metered service.

Example:

12 unit residential complex

12 units multiplied by the base charge plus water usage

(j) Each customer must give a one (1) day notice to the utility of service termination.

(k) Procedure for customer notification of discontinuance of service:

(i) In person: customer must present acceptable identification, or

(ii) Mail or fax: customer must include address, account number, and one other form of positive account identification

(3) Adjustments of billing. (a) It is the customer's responsibility to keep his plumbing system in good working order.

(b) The "utility" will first determine that the meter was properly read. If an investigation of the meter and meter records establishes that the meter was misread or that there was a failure of utility equipment, a new bill will be issued using an estimated reading based on an average of the past 12 months billings for this period. There will be no penalty assessed in the event the adjustment procedure delays payment past the penalty date.

(c) If an investigation of the meter and meter record establishes that the meter was properly read and that there was no failure of utility equipment, the bill will remain valid and payable.

(d) Adjustments for water. (i) Will be considered only if the leak caused the bill to be five (5) times an average bill. A signed affidavit showing proof of repair will be required before an adjustment can be issued. The calculation for a bill five times greater is as follows:

(A) Determine the average usage of past 12 months then subtract average from usage billed;

(B) Take one-half of usage difference;

(C) Add average usage and one-half of difference, and

(D) The total usage will be the new amount billed. Only one (1) adjustment for water will be allowed in one calendar year.

Example:	12 Month Average	=	5,500 gallons
	Bill with leak	=	35,500 gallons (This is 5 times greater than average)
	Difference	=	30,000 gallons
	One-half of difference	=	15,000 gallons
	Average + difference	=	20,500 gallons (Adjusted bill amount)

(ii) Adjustments for sewer will be considered when a leak occurs in the water system of the customer and the leak does not enter the sewer system. The sewer bill will be adjusted to an average annual bill. An example of this would be a pipe leak in the ground on the customer's property. Water leaks that enter into the sewer system, such as a faucet leak, will be adjusted on the same basis as a water leak. Sewer adjustment is limited to two (2) consecutive billing periods per leak.

(iii) Adjustments for swimming pools will be for sewer only and one (1) per calendar year. The adjustment will be based on the capacity of water in gallons held by the pool.

(e) Adjustments on water and sewer bills will not be made on the following:

(i) Routine dripping faucets, leaking commodes, or any type of faulty customer plumbing;

(ii) Premises left or abandoned without reasonable care for the plumbing system;

(iii) Watering of lawns or gardens.

(f) The "utility" shall not be obligated to make adjustments of any bills not disputed within thirty (30) days from the billing date.

(g) All requests for billing adjustments must be received by phone, in writing or in person at the business office of the "utility" during regular business hours or official meetings of the "utility."

(h) The mayor or his designee shall file a written report of the customer billing adjustment and the action of the staff regarding the adjustments.

(i) The governing body has the discretion to grant adjustment associated with natural disasters.

(j) The governing body authorizes the department head and/or administrator the discretion to grant a payment plan for a person with extenuating circumstances.

(4) Service connections. (a) The service connection to single family residences shall be limited to serving one residence only. No other dwelling, whether located on the same parcel or on an adjoining parcel, shall be served through the same service connection. Customers may

have lines extended to barns and other uninhabited buildings as part of his service, provided that the installation meets the utility's specifications.

(b) A residential tapping priviledge shall not entitle a customer to connect a commercial or industrial business such as a beauty parlor or repair shop to the utility's lines without notifying the utility and paying the additional amount required for a commercial or industrial tap.

(c) Authorized employees, representatives and contractors of the utility shall have access to all properties served by the utility at reasonable times for the purpose of reading meters, maintaining and inspecting lines and connections to the utility (or believed to be connected to the utility), observation, measurement, sampling and testing as provided by the policies of the utility and by state and federal law.

(d) The failure of a customer to comply with the provisions of this and other ordinances and policies of the utility shall constitute a breach of contract by the customer. Any customer found to be violating any provision of this ordinance shall be served by the utility with written notice stating the nature of the violation and providing a time limit for the satisfactory correction thereof. The offending customer shall, within the period of time stated in such notice, permanently cease all violations.

(e) Any customer who shall continue any violation beyond the time limit stated in the notice shall be disconnected from the system at the convenience of the utility.

(f) If more than one customer is served from a single residential meter instllation, the reliability and lifespan of the equipment is impaired. Failure to give notice of additions or changes in load to utility equipment shall render the customer liable for any damage to utility lines or other equipment caused by the addition or modified installation.

(g) The following residential dwellings shall have a separate meter for each living unit:

(i) Single family dwellings and duplexes if being served by more than one electric meter base after the effective date of this ordinance

(ii) Triplexes and multiplexes (three or more meters) after the effective date of this ordinance;

(iii) Condominiums after the effective date of this ordinance;

(iv) Mobile homes after the effective date of this ordinance;

(v) Mobile home parks applying for service after the effective date of this ordinance,

(vi) Apartment buildings applying for new service after the effective date of this ordinance, except by written agreement with the utility.

(h) The following residential dwellings shall be allowed to maintain multiple living units on one commercial tap:

(i) Mobile home parks consisting of five (5) or more units that were receiving utility service prior to the implementation of this ordinance

(ii) Apartment buildings consisting of five (5) or more units that were receiving utility service prior to the implementation of this ordinance.

(iii) Hotels, motels and campgrounds consisting of five (5) or more units, regardless of when service was initiated.

(i) All customers in section (g) above who are allowed to receive service to multiple users through a single meter shall be charged commercial rates if those differ from residential rates. In addition, the following method of bill computation shall apply:

The bill shall be calculated by the number of units, less one, multiplied by the minimum charge plus the original billed amount. The total bill shall be the responsibility of the customer who contracted for the metered service.

Example:

12 Unit Residential Complex

12 units multiplied by minimum billing plus usage.

(5) Bad check. When financial institutions return a check or ach withdrawal to the city for insufficient funds or account closed the city will levy a service charge for the amount of check or withdrawal and will require the check to be picked up or the ach withdrawal to be paid by a specified date. Bad check/ach withdrawal service charge is established under this subsection and the customer may be required to pay the amount by money order, cashier's check or cash, at the discretion of the utility personnel.

(6) Charges for new service. (a) Any customer or potential customer desiring utility service from this utility shall fill out a customer application form. The fee associated with the application is not a security deposit and is not refundable unless the utility cannot, within a reasonable period of time, provide service.

(b) No application fee shall be assessed to a property owner who resumes responsibility for service formerly in the name of a tenant.

(c) A tap fee is a charge made when utility service is initially run from the main line to the customer's property line. The ownership of the tap is conveyed along with the property.

(d) A residential or commercial/industrial tap shall entitle a customer to utility service to one and only one dwelling or business. If a second residential dwelling or business is to receive service on the same or neighboring tract, a second tap must be obtained, unless otherwise determined by the governing body.

(e) If any customer fails to disconnect any additional dwellings during the allotted time period, the customer's service shall be disconnected for violation of the rules and regulations of this utility at the convenience of the utility.

(f) The owner of a property may be allowed to call in to have temporary service restored to his rental property without having to come in to the office in person, as long as all accounts are current.

(7) Temporary or seasonal charges. (a) Customers requiring temporary service shall pay all costs of connecting and disconnecting service, in addition to the regular charge for water used, provided such temporary service can be feasibly provided at the discretion of the utility. No application fee shall be assessed to a property owner who resumes responsibility for service formerly in the name of a tenant.

(b) The customer shall pay all costs for the discontinuance and reinstatement of service for any other purposes for the customer's exclusive benefit.

(c) If a customer wishes service to be temporarily turned off, he must contact the utility in person or in writing. Depending on the duration of the cut-off, the utility will valve off or remove the meter, at its discretion.

(d) As long as the account is active, a minimum bill will be assessed at each billing period. All taps made after the acceptance of this ordinance will be considered an active account so a minimum bill will be assessed. (The minimum bill reflects each customer's share of the overhead to operate the system). By keeping the account active, the customer can demand service at any time and therefore must share in the costs. (1973 Code, § 13-107, as amended by Ord. #54, Jan. 1988; Ord. #57, April 1988; Ord. #74, _____; Ord. #113, Oct. 1994; Ord. #118, Oct. 1994; Ord. #128, March 1995; Ord. #143, Jan. 1996; Ord. #97-171, July 1997; and Ord. #98-192, Nov. 1998; replaced by Ord. #211, March 2000; and amended by Ord. #217, June 2000; Ord. #233, June 2001; Ord. #289, Sept. 2001; Ord. #243, Oct. 2001; Ord. #262, Dec. 2002; Ord. #279, Nov. 2003, Ord. #317, May 2006, Ord. #322, Aug. 2006, Ord. #348, July 2008, Ord. #355, March 2009, Ord. #362, Sept. 2009, Ord. #371, Sept. 2010, Ord. #383, June 2011, Ord. #387, Nov. 2011, Ord. #396, Sept. 2012, Ord. #419, June 2013, Ord. #434, Sept. 2015, Ord. #448, July 2016 ***Ch12_6-11-19***, Ord. #470, June 2017 ***Ch12_6-11-19***, Ord. #507, July 2018 ***Ch12_6-11-19***, and Ord. 524, June 2019 ***Ch12_6-11-19***)

18-108. Regulating surface water to sanitary sewer lines. It shall be unlawful for any person to connect to the sanitary sewer line any rain water leaders, roof leaders or gutters, surface drains, or ground water drains. (1973 Code, § 13-108)

18-109. Grinder pumps prohibited. The director of public utilities is assigned the ability and responsibility of assigning which sewerage system types shall be installed. This shall include STEP/STEG systems to be placed on the Hwy 12S corridor force main. Gravity sewerage systems shall be placed where gravity mains are prominent. This shall include grinder stations to pump sewerage in a gravity area due to elevation restrictions. This section gives the

director of public utilities the authority to manage appurtenances to successfully manage and maintain the sanitary sewerage system of the Town of Ashland City. (Ord. #138, Aug. 1996, as replaced by Ord. #446, June 2016 ***Ch12_6-11-19***)

18-110. Sewer infrastructure required. All new sewer line construction provided to the town as a result of private development shall meet the gravity sewer requirements as promulgated by the Tennessee Department of Health and Environment unless otherwise excepted by the City Council of the Town of Ashland City. (Ord. #160, Sept. 1996)

18-111. Extenuation of the city's existing water and sewer systems by a property developer. Any and all sewer and water main extensions within new developments within the corporate limits of the Town of Ashland City shall be installed by and at the expense of the developer. This includes but is not limited to existing buildings that change their use. Such lines shall be installed in accordance with the city's standard specifications for water and wastewater and will be subject to inspections during installation and finalization to confirm that they comply with such specifications.

Upon completion of said lines, and confirmation that they comply with the city's specifications, the city will assume ownership and responsibility for all future operations and maintenance with the exception that the developer is responsible for any and all maintenance or repair for one (1) year from the date of completion.

If the city should determine that the design capacity of the line should be Increased to allow the services of areas other than the development, the city will pay the difference between the cost of the line sized for the development versus the cost of the main to serve the expanded area.

Prior to the installation of any water or sewer main, the developer shall pay to the city, the total set tap fee per unit as set out by ordinance.

All major sewer and water main extensions by a developer shall be further outlined in a contract between the city and the developer. (Ord. #190, Nov. 1998, as replaced by Ord. #199, April 1999, and Ord. #451, July 2018 ***Ch12_6-11-19***)

18-112. Water and sewer department rules and regulations. Water and sewer also has separate water and sewer department rules and regulations which may be modified from time to time. These are hereby referenced and incorporated into this chapter including but not limited to fines and penalties. (as added by Ord. #387, Nov. 2011)

CHAPTER 2

SUPPLEMENTARY SEWER USE ORDINANCE

SECTION
18-201. General provisions; purpose and policy.
18-202. Definitions and abbreviations.
18-203. Use of public sewers required.
18-204. Private sewage disposal.
18-205. Building sewers and connections.
18-206. Use of the public sewers.
18-207. Use of the sewers by industrial users.
18-208. Protection from damage.
18-209. Powers and authority of inspection.
18-210. Penalties.
18-211. Validity.
18-212. Policy in force.

18-201. General provisions; purpose and policy. This chapter sets forth uniform requirements for direct and indirect contributors into the wastewater collection and treatment system for the Town of Ashland City and enables the town to comply with all applicable state and federal laws required by the Clean Water Act of 1977 and the General Pretreatment Regulations (40 CFR, Part 403).

The objectives of this chapter are:

(1) To prevent the introduction of pollutants into the municipal wastewater system that will interfere with the operation of the system or contaminate the resulting sludge;

(2) To prevent the introduction of pollutants into the municipal wastewater system that will pass through the system inadequately treated into receiving waters or the atmosphere or otherwise be incompatible with the system;

(3) To improve the opportunity to recycle and reclaim wastewaters and sludges from the system; and

(4) To provide for equitable distribution of the cost of the municipal wastewater system.

This chapter provides for the regulation of direct and indirect dischargers to the municipal wastewater system through the issuance of permits to certain non-domestic users and through enforcement of general requirements for the other users, authorizes monitoring and enforcement activities, requires user reporting, assumes that existing customers' capacity will not be preempted or appropriated, and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

This chapter shall apply to the Town of Ashland City and to persons outside the town who are, by contract or agreement with the town, users of the Ashland City POTW. This chapter is a supplement to Chapter 1 in this title, as

amended. Except as otherwise provided herein, the city manager of the town's POTW shall administer, implement, and enforce the provisions of this chapter. (1973 Code, § 13-201)

18-202. Definitions and abbreviations. (1) Definitions. Unless the context specifically indicates otherwise, the following terms and phrases, as used in this chapter, shall have the meanings hereinafter designated:

(a) "Act or the act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et seq.

(b) "Approval authority." The director in an NPDES state with an approved state pretreatment program and the administrator of the EPA in a non-NPDES state or NPDES state without an approved state pretreatment program.

(c) "Authorized representative of an industrial user." An authorized representative of an industrial user may be:

(i) a principal executive officer of at least the level of vice-president, if the industrial user is a corporation;

(ii) a general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; or

(iii) a duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.

(d) "BOD." The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure, five (5) days at 20°C expressed in terms of weight and concentration (milligrams per liter).

(e) "Building drain." The part of the lower horizontal piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5) feet (1-5 meters) outside the inner face of the building wall.

(f) "Building sewer." The extension from the building drain to the public sewer or other place of disposal.

(g) "Categorical standards." National categorical pretreatment standards or pretreatment standard.

(h) "City administrator." The duly authorized representative of the Town of Ashland City.

(i) "City manager." The manager of the sewerage works of the Town of Ashland City, or his authorized deputy, agent, or representative.

(j) "Combined sewer." A sewer receiving both surface runoff and sewage.

(k) "Control authority." The "approval authority," defined hereinabove, or the city manager if the town has an approved pretreatment program under the provisions of 40 CFR 403.11.

(l) "Conventional pollutants." Those pollutants normally found.

(m) "Cooling water." The water discharged from any use such as air conditioning, cooling, or refrigeration, or to which the only pollutant added is heat.

(n) "Direct discharge." The discharge of treated or untreated wastewater directly to the waters of the State of Tennessee.

(o) "Environmental Protection Agency, or EPA." The U.S. Environmental Protection Agency or, where appropriate, the term may also be used as a designation for the administrator or other duly authorized official of said agency.

(p) "Garbage." Solid wastes from the domestic and commercial preparation, cooking, and dispensing of food and from the handling, storage, and sale of produce.

(q) "Grab sample." A sample that is taken from a waste stream on a one-time basis with no regard to the flow in the waste stream and without consideration of time.

(r) "Holding tank waste." Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and vacuum-pump tank trucks.

(s) "Indirect discharge." The discharge or the introduction of non-domestic pollutants from any source regulated under Section 307(b) or (c) of the Act (33 U.S.C. 1317), into the POTW (including holding tank waste discharged into the system.)

(t) "Industrial pretreatment." Any necessary treatment processes performed on the industrial wastes by the industrial user prior to discharge into the public sewers in accordance with federal, state, and local regulations.

(u) "Industrial user." Any individual, firm, company, association, society, corporation, or group involved in industrial manufacturing processes, trade, or business that discharges waste into the sanitary sewers.

(v) "Industrial wastes." The liquid wastes from industrial manufacturing processes, trade, or business as distinct from sanitary sewer.

(w) "Inhibition." Any pollutant that might impair, effectively reduce, or terminate the biological process and/or biological operation of the sewage treatment plant.

(x) "Interference." The inhibition or disruption of the POTW treatment processes or operations that contributes to a violation of any requirement of the town's NPDES permit. The term includes prevention of sewage sludge use or disposal by the POTW in accordance with 405 of the Act (33 U.S.C. 1345) or any criteria, guidelines, or regulations developed pursuant to the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, or more stringent state criteria (including those contained in any state sludge management plan prepared pursuant to title IV of SWDA) applicable to the method of disposal or use employed by the POTW.

(y) "Monitoring." Any method of sampling and analyzing of industrial waste, discharged into the sanitary sewer by industrial users, employed by the town to enforce industrial pretreatment regulations.

(z) "National categorical pretreatment standard or pretreatment standard." Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act (33 U.S.C. 1347) that applies to a specific category of industrial users.

(aa) "National pollution discharge elimination system or NPDES permit." A permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

(bb) "National prohibitive discharge standard or prohibitive discharge standard." Any regulation developed under the authority of 307 (b) of the Act and 40 CFR, Section 403.5.

(cc) "Natural outlet." Any outlet into a watercourse, pond, ditch, lake, or other body of surface or ground water.

(dd) "New source." Any source whose construction is commenced after the publication of proposed regulations prescribing a Section 307(c) (33 U.S.C. 1317) categorical pretreatment standard that will be applicable to such source, if such standard is thereafter published within 120 days of proposal in the Federal Register. Where the standard is promulgated later than 120 days after proposal, a new source means any source whose construction is commenced after the date of promulgation of the standard.

(ee) "Pass through." Any pollutant that enters the sewage works and is not totally removed before entering the receiving stream.

(ff) "Person." Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity or any other legal entity, or their legal representatives, agents, or assigns. The masculine gender shall include the feminine and the singular shall include the plural where indicated by the context.

(gg) "pH." The logarithm (base 10) of the reciprocal of the concentration of hydrogen ions expressed in grams per liter of solution.

(hh) "Pollutant." Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

(ii) "Pollution." The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

(jj) "POTW treatment plant." That portion of the POTW designed to provide treatment to wastewater.

(kk) "Pretreatment requirements." Any substantive or procedural requirement related to pretreatment, other than a national pretreatment standard imposed on an industrial user.

(ll) "Priority pollutants." Shall mean any of the one hundred twenty-nine (129) pollutants that affect stream quality or stream life in the receiving stream and its subsequent waters.

(mm) "Properly shredded garbage." The wastes from the preparation, cooking, and dispensing of foods which have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch (1.27 centimeters) in any dimension.

(nn) "Publicly owned treatment works (POTW)." A treatment works as defined by Section 212 of the Act (33 U.S.C. 1292) that is owned in this instance by the town. This definition includes any sewers that convey wastewater to the POTW treatment plant, but does not include pipes, sewers, or other conveyances not connected to a facility providing treatment. For the purposes of this chapter, "POTW" shall also include any sewers that convey wastewaters to the POTW from persons outside the town who are, by contract or agreement with the town, users of the town's POTW.

(oo) "Public sewer." A sewer in which all owners of abutting properties have equal rights and is controlled by public authority.

(pp) "Receiving stream." The natural stream or watercourse that accepts the discharge from the sewage treatment plant.

(qq) "Sanitary sewer." A sewer which carries sewage and to which storm, surface, and ground waters are not intentionally admitted.

(rr) "Sewage." A combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, and storm waters as may be present.

(ss) "Shall" is mandatory; "may" is permissive.

(tt) " Standard industrial classification (SIC)." A classification pursuant to the standard industrial classification manual issued by the Executive Office of the President, Office of Management and Budget, 1972.

(uu) "State." State of Tennessee.

(vv) "Storm water." Any flow occurring during or following any form of natural precipitation and resulting therefrom.

(ww) "City manager." The person designated by the town to supervise the operation of the POTW and who is charged with certain duties and responsibilities by this chapter, or his duly authorized representatives.

(xx) "Suspended solids." The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquids and that is removable by laboratory filtering.

(yy) "Town." The Town of Ashland City, Tennessee, the mayor, the city manager, the wastewater treatment plant city manager, the pump station city manager, or their duly authorized representative.

(zz) "Toxic pollutant." Any pollutant or combination of pollutants listed as toxic in regulations published by the Administrator

of the Environmental Protection Agency under the provision of CWA 307(a) or other acts.

(aaa) "User." Any person who contributes, causes, or permits the contribution of wastewater into town's POTW.

(bbb) "Wastewater." The liquid- and water-carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any ground water, surface water, and storm water that may be present, whether treated or untreated that is contributed into or permitted to enter the POTW.

(ccc) "Wastewater contribution permit." As set forth in § 18-207 (10) of this chapter.

(ddd) "Waters of the state." All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquafiers, irrigation systems, drainage systems, and other bodies of accumulation of water, surface or underground, natural or artificial, public or private, that are contained within, flow through, or border upon the state or any portion thereof.

(2) Abbreviations. The following abbreviations shall have the designated meanings:

BOD	-	Biochemical oxygen demand
CFR	-	Code of Federal Regulations
COD	-	Chemical oxygen demand
EPA	-	Environmental Protection Agency
l	-	Liter
mg	-	Milligrams
mg/l	-	Milligrams per liter
NPDES	-	National Pollutants Discharge Elimination System
POTW	-	Publicly owned treatment works
SIC	-	Standard Industrial Classification
SWDA	-	Solid Waste Disposal Act, 42 U.S.C. 6901, et seq.
TSS	-	Total suspended solids
USC	-	United States Code

(1973 Code, § 13-202)

18-203. Use of public sewers required. (1) It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the boundaries of the town, or in any area under the jurisdiction of the town, any human or animal excrement, garbage, or other objectionable waste if public sewer is available.

(2) It shall be unlawful to discharge to any natural outlet within the boundaries of the town or in any area under the jurisdiction of the town any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this chapter.

(3) Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, or other facility intended or used for the disposal of sewage if public sewer is available.

(4) The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the town and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary or combined sewer of the town, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper public sewer in accordance with the provisions of this policy, within ninety (90) days after date of official notice to do so, provided that said public sewer is within one hundred (100) feet (30.5 meters) of the property line. If the property is a single family dwelling, the council may in its discretion waive this requirement as long as the residence or proposed site of the residence is further than five hundred (500) feet from the sewer line. (1973 Code, § 13-203, as amended by Ord. #278, Aug. 2003)

18-204. Private sewage disposal. The disposal of sewage by means other than the use of the available sanitary sewage system shall be in accordance with local, county, and state law. The disposal of sewage by private disposal systems shall be permissible only in those instances where service from the available sanitary sewage system is not available. (1973 Code, § 13-204)

18-205. Building sewers and connections. (1) No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the city manager.

(2) There shall be two (2) classes of building permits:

(a) for residential and commercial service, and

(b) for service to establishments producing industrial wastes. In either case the owner or his agent shall make application on a special form furnished by the town. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the city manager. A permit and inspection fee of three dollars ($3.00) for a residential, commercial, or industrial building sewer permit shall be paid to the town at the time the application is filed.

(3) All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the town from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(4) A separate and independent building sewer shall be provided for every building, except that when one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, the building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.

(5) Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the city manager, to meet all requirements of this policy.

(6) The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench shall all conform to the requirements of the building and plumbing code and other applicable rules and regulations of the town. In the absence of code provisions or in amplification thereof, the materials set forth in the appropriate ASTM specifications and the procedures set forth in the WPCF Manual of Practice No. 9 shall apply.

(7) Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

(8) No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or ground water to a building sewer or building drain that in turn is connected directly or indirectly to a public sanitary sewer.

(9) The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code and other applicable rules and regulations of the town, or to the materials requirements set forth in the appropriate ASTM specifications and the procedures set forth in the WPCF Manual of Practice No. 9. set forth in appropriate specifications of the ASCE and the WPCF Manual of Practice No. 9. All such connections shall be made gastight and watertight. Any deviation from the prescribed procedures and materials must be approved by the city manager before installation.

(10) The applicant for the building sewer permit shall notify the city manager or his authorized representative when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the city manager or his representative.

(11) All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the town. (1973 Code, § 13-205)

18-206. Use of the public sewers. (1) No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer.

(2) Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers or to a natural outlet approved by the Tennessee Stream Pollution Control Board. Industrial

cooling water or unpolluted process waters may be discharged, on approval of the Tennessee Stream Pollution Board, to a storm sewer or natural outlet.

(3) No person shall discharge or cause to be discharged any of the following described pollutants to any public sewer:

(a) Any liquids, solids, or gases that by reason of their nature or quantity, may be sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any way to the POTW or to the operation of the POTW. At no time shall two successive readings on any explosion hazard meter, at any point of the discharge into the system (or at any point in the system) be more than five percent (5%) nor any single reading over ten percent (10%) of the lower explosive limit (LEL) of the meter. Prohibited materials include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldeydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides, and any other substances that the town, the state, or EPA has notified the user is a fire hazard or a hazard to the system.

(b) Pollutants that cause corrosive structural damage to the system; in no case discharges with a pH lower than 6.0 or higher than 9.0, nor can the pH be increased more than 1.0 per hour.

(c) Solid or viscous substances that may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as, but not limited to, grease, garbage with particles greater than one-half inch (1/2") in any dimension, paunch manure, bones, hair, hides, or flesh, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, wastepaper, wood, plastics, gas, tar, asphalt residues from refining or processing of fuel or lubricating oil, mud, or glass grinding or polishing wastes.

(d) Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge of such a volume or strength as to cause interference to the system.

(e) Heat in amounts which will inhibit biological activity in the system resulting in interference, but in no case heat in such quantities that the temperature at treatment plant influent exceeds 40° C (104° F).

(f) Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of three-fourths (3/4) horsepower (0.76 HP metric) or larger shall be subject to the review and approval of the city manager.

(g) Radioactive wastes or isotopes of such half-life or concentration that they do not comply with regulations or orders issued by the appropriate authority having control over their use and that will

or may cause damage or hazards to the sewerage facilities or personnel operating the system.

(4) No person, firm, association, or corporation shall clean out, drain, or flush any septic tank or any other type of wastewater or excreted disposal system into the POTW unless such person, firm, association, or corporation obtains a permit from the city manager to perform such acts or service. Any person, firm, association, or corporation desiring a permit to perform such services shall complete and file with the town an application on the form prescribed by the town. Upon any such application, said permit shall be issued by the city manager when the conditions of this chapter have been met, providing the city manager is satisfied the applicant has adequate and proper equipment to perform the services contemplated in a safe and competent manner. An annual service charge, payable to the Town of Ashland City, may be included as a provision to the permit. The city manager shall designate approved locations for the emptying and cleansing of all equipment used on the performance of the services rendered under the permit herein provided for, and it shall be a violation hereof for any person, firm, association, or corporation to empty or clean such equipment at any place other than a place so designated.

(5) Any person determined an industrial user shall not only be regulated by regulations set forth in this section but shall also be required to adhere to all provisions established in § 18-207. (1973 Code, § 13-206)

18-207. Use of the sewers by industrial users. (1) This section establishes limitations and prohibitions on the quantity and quality of wastewater that may be lawfully discharged to the POTW. The specific limitations set forth in subsequent sections are subject to change as necessary to enable the town to provide efficient wastewater treatment, to protect the public health and the environment, and to enable the town to meet requirements contained in its National Pollution Discharge Elimination System (NPDES) permit.

(2) The wastewater of every industrial user shall be evaluated upon the following criteria:

(a) Wastewater containing any element or compound that is not adequately removed by the treatment works which is known to be an environmental hazard;

(b) Wastewater causing a discoloration or any other condition in the quality of the town's POTW treatment plant effluent such that receiving water quality requirements established by laws cannot be met;

(c) Wastewater containing any element or compound known to act as a lacrimator, known to cause nausea, or known to cause odors constituting a public nuisance;

(d) Wastewater causing interference with the effluent or any other product of the treatment process, residues, sludge, or scums causing them to be unsuitable for reclamation process; and

(e) Wastewater having constituents and concentrations in excess of those listed in subsection (3) hereafter.

When the city manager determines that a user or users are contributing to the POTW any of the above enumerated substances in such amounts as to interfere with the operation of the POTW, the city manager shall (i) advise the user(s) of the impact of the contribution on the POTW and (ii) develop effluent limitations(s) for such user(s) to correct the interference with the POTW.

Upon the promulgation of the federal categorical pretreatment standards for a particular industrial subcategory, the federal standard, if more stringent than limitations imposed under this chapter for sources in that subcategory, shall immediately supersede the limitations imposed under this chapter. The city manager shall notify all affected users of the applicable requirements under 40 CFR, Section 403.12.

(3) The city manager shall monitor the treatment works influent for each parameter in the following table. Each industrial user shall be responsible for monitoring and reporting these requirements. In the event that the influent at the treatment works reaches or exceeds the levels established by said table, the city manager shall initiate technical studies to determine the cause of the influent violation and shall recommend to the town administrator such remedial measures as are necessary, including but not limited to, recommending the establishment of new or revised pretreatment levels for these parameters. The city manger shall also recommend changes to any of these criteria in the event the POTW effluent standards are changed or in the event that there are changes in any applicable law or regulation affecting same or in the event changes are needed for more effective operation of the POTW.

TABLE I

INFLUENT LIMITATIONS FOR THE
ASHLAND CITY WASTEWATER TREATMENT PLANT

Pollutant	Maximum Daily Average Concentration (mg/l)	Maximum Instantaneous Concentration (mg/l)
5-Day BOD	275	500
TSS	260	500
Arsenic	0.10	0.20
Barium	5.0	10.0
Cadmium	0.01	0.02
Chromium (Hexavalent)	1.0	1.5
Chromium (Total)	3.0	5.0
Copper	1.0	2.0
Cyanide	0.05	0.10
Iron	10.0	15.0
Lead	0.10	0.20
Mercury	0.05	0.10
Nickel	1.0	2.0
Selenium	0.03	0.06
Silver	1.0	2.0
Zinc	0.20	0.50

Modification of federal categorical pretreatment standards: Where the town's wastewater treatment system achieves consistent removal of pollutants limited by federal pretreatment standards, the town may apply to the approval authority for modification of specific limits in the federal pretreatment standards. "Consistent removal" (as defined hereinafter) shall mean reduction in the amount of a pollutant or alteration of the nature of the pollutant by the wastewater treatment system to a less toxic or harmless state in the effluent that is achieved by the system when 95 percent (95%) of the samples taken

measured according to the procedures set forth in Section 403.7(c)(2) of Title 40 of the Code of Federal Regulations, Part 402, "General Pretreatment Regulations for Existing and New Sources of Pollution," promulgated pursuant to the act. The town may then modify pollutant discharge limits in the federal pretreatment standards if the requirements contained in 40 CFR, Part 403, Section 403.7 are fulfilled and prior approval from the approval authority is obtained.

TABLE II

LIMITATIONS OF POLLUTANTS

Listed below are the pollutants which are to be regulated by the Town of Ashland City for the purpose of maintaining proper operations of their POTW. The influent cannot contain any more micrograms per liter than is listed below.

Copper	119 ug/l	Carbon Tetrachloride	15 ug/l
Chromium (Hexavalent)	375 ug/l	Chloroform	21 ug/l
Chromium (Trevalent)	375 ug/l	Tetrachloroethylene	138 ug/l
Nickel	272 ug/l	Trichloroethyle	100 ug/l
Cadmium	33 ug/l	1, 2 Transdichloroethylene	7.5 ug/l
Lead	25 ug/l	Methylene Chloride	104 ug/l
Mercury	6 ug/l	Phenol	27 ug/l
Silver	29 ug/l	Naphthalene	12.5 ug/l
Zinc	1052 ug/l	Bis (2-ethyl hexyl phathalate)	
Cyanide	605 ug/l	Butyl benzyl phthalate	
Toluene	214 ug/l		
Benzene	13 ug/l		
1,1,1-Trichloroethane	250 ug/l	Di-n-butyl phthalate	
Ethylbenzene	40 ug/l	Diethyl phthalate	305 ugl

(4) Industrial users shall be required to perform any industrial pretreatment whenever necessary to reduce or modify the user's wastewater constituency to achieve compliance with the limitations set forth in subsection

(3) above to meet applicable national pretreatment standards, or to meet any other wastewater condition or limitation contained in the users wastewater discharge permit.

(5) State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those in this chapter.

(6) The town reserves the right to establish by ordinance more stringent limitations or requirements on discharges to the wastewater disposal system if deemed necessary to comply with the objectives presented in § 18-201 of this chapter.

(7) No user shall ever increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in the federal categorical pretreatment standards, or in any other pollutant-specific limitation developed by the town or state.

(8) Each user shall provide protection from accidental discharge of prohibited materials or other substances regulated by this chapter. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner or user's own cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the town for review and shall be approved by the town before construction of the facility. All existing users shall be submitted to the town for review and shall be approved by the town before construction of the facility. All existing users shall complete such a plan by January 1, 1983. No user who commences contribution to the POTW after the effective date of this chapter shall be permitted to introduce pollutants into the system until accidental discharge procedures have been approved by the town. Review and approval of such plans and operating procedures shall not relieve the industrial user from the responsibility to modify the user's facility as necessary to meet the requirements of this chapter. In the case of an accidental discharge, it is the responsibility of the user immediately to telephone and notify the POTW of the incident. The notification shall include location of discharge, type of waste, concentration and volume, and corrective actions. The POTW shall keep a log on such events.

Written notice: Within five (5) days following an accidental discharge, the user shall submit to the city manager a detailed written report describing the cause of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability that may be incurred as a result of damage to the POTW, fish kills, or any other damage to person or property; nor shall such notification relieve the user of any fines, civil penalties, or other liability that may be imposed by this section or other applicable law.

Notice to employees: A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees whom to call in the

event of a dangerous discharge. Employers shall ensure that all employees who may cause or suffer such a dangerous discharge to occur are advised of the emergency notification procedure.

(9) The town may adopt charges and fees that may include:

(a) Fees for reimbursement of costs of setting up and operating in the town's pretreatment program;

(b) Fees for monitoring, inspections, and surveillance procedures;

(c) Fees for reviewing accidental discharge procedures and construction;

(d) Fees for permit application;

(e) Fees for filing appeals;

(f) Fees for consistent removal (by the town) of pollutants otherwise subject to federal pretreatment standards; and

(g) Other fees as the town may deem necessary to carry out the requirements contained herein.

These fees relate solely to the matters covered by this chapter and are separate from all other fees chargeable by the town.

(10) All industrial users proposing to connect to or to contribute to the POTW shall obtain a wastewater discharge permit before connecting to or contributing to the POTW. All existing industrial users connected to or contributing to the POTW shall obtain a wastewater contribution permit within 180 days after the effective date of this chapter.

(11) Users required to obtain a wastewater contribution permit shall complete and file with the town an application in the form prescribed by the town and accompanied by a fee of three dollars ($3.00). Existing users shall apply for a wastewater contribution permit within 30 days after the effective date of this chapter, and proposed new users shall apply at least 90 days prior to connecting to or contributing to the POTW. In support of the application, the user shall submit, in units and terms appropriate for evaluation, the following information:

(a) Name, address, and location (if different from the address);

(b) SIC number according to the Standard Industrial Classification Manual, Bureau of the Budget, 1972, as amended;

(c) Wastewater constituents and characteristics, including but not limited to those mentioned in § 18-206(3), and § 18-207(2) and (3), as determined by a reliable analytical laboratory; sampling and analysis shall be performed in accordance with procedures established by the EPA pursuant to Section 304(g) of the Act and contained in 40 CFR, Part 136, as amended;

(d) Time and duration of contribution;

(e) Average daily and 3 minute peak wastewater flow rates, including daily, monthly, and seasonal variations, if any;

(f) Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, sewer connections, and appurtenances by the size, location, and elevation;

(g) Description of activities, facilities, and plant processes on the premises, including all materials that are or could be discharged;

(h) Where known, the nature and concentration of any pollutants in the discharge that are limited by any town, state, or federal pretreatment standards, and a statement regarding whether or not the pretreatment standards are being met on a consistent basis and, if not, whether additional operation and maintenance (O&M) and/or additional pretreatment is required for the user to meet applicable pretreatment standards;

(i) If additional pretreatment and/or O&M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard;

The following conditions shall apply to this schedule:

(i) The schedule shall contain increments of progress in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (e.g., hiring an engineer, completing preliminary plans, completing final plans, executing contract for major components, commencing construction, completing construction, etc.).

(ii) No increment referred to in subsection (i) above shall exceed 9 months.

(iii) Not later than 14 days following each date in the schedule and the final date for compliance, the user shall submit a progress report to the city manager including, as a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay and the steps being taken by the user to return the construction to the schedule established. In no event shall more than 9 months elapse between such progress reports to the city manager.

(j) Each product produced by type, amount, process or processes, and rate of production;

(k) Type and amount of raw materials processed (average and maximum per day);

(l) Number and type of employees and hours of operation of plant and proposed or actual hours or operation of pretreatment system; and

(m) Any other information as may be deemed by the town to be necessary to evaluate the permit application.

The town will evaluate the data furnished by the user and may require additional information. After evaluation and acceptance of the data furnished, the town may issue a wastewater contribution permit subject to terms and conditions provided herein.

(12) Within 9 months of the promulgation of a national categorical pretreatment standard, the wastewater contribution permit of users subject to such standards shall be revised to require compliance with such standard within the time frame prescribed by such standard. Where a user subject to a national categorical pretreatment standard has not previously submitted an application for a wastewater contribution permit as required by § 18-207(11), the user shall apply for a wastewater contribution permit within 180 days after the promulgation of the applicable national categorical pretreatment standard. In addition, the user with an existing wastewater contribution permit shall submit to the city manager within 180 days after the promulgation of an applicable federal categorical pretreatment standard the information required by subsections (h) and (i) of § 18-207(11).

(13) Wastewater discharge permits shall be expressly subject to all provisions of this chapter and all other applicable regulations, user charges, and fees established by the town. Permits may contain the following:

(a) The unit charge or schedule of user charges and fees for the wastewater to be discharged to a community sewer;

(b) Limits on the average and maximum wastewater constituents and characteristics;

(c) Limits on average and maximum rate and time of discharge or requirements for flow regulations and equalization;

(d) Requirements for installation and maintenance of inspection and sampling facilities;

(e) Specifications for monitoring programs, which may include sampling locations, frequency of sampling, reporting schedule, and number, types, and standards for tests;

(f) Compliance schedules;

(g) Requirements for submission of technical reports or discharge reports;

(h) Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the town, and affording the town access thereto;

(i) Requirements for notification of the town of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the wastewater treatment system;

(j) Requirements for notification of slug discharges in accordance with § 18-207(2); and

(k) Other conditions as deemed appropriate by the town to ensure compliance with this chapter.

(14) Permits shall be issued for a specified time period not to exceed five (5) years. A permit may be issued for a period of less than a year or may be stated to expire on a specific date. The user shall apply for permit reissuance a minimum of 180 days prior to the expiration of the user's existing permit. The terms and conditions of the permit may be subject to modifications by the town during the term of the permit as limitations or requirements identified in § 18-207(5) are modified or if some other just cause exists. The user shall be informed of any proposed changes in his permit at least 30 days prior to the effective date of change. Any changes or new conditions in the permit shall include a reasonable time schedule for compliance.

(15) Wastewater discharge permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without the approval of the town. Any succeeding owner or user shall also comply with the terms and conditions of the existing permit.

(16) Within 90 days following the date for final compliance with applicable pretreatment standards or, in the case of a new source, following commencement of the introduction of wastewater into the POTW, any user subject to pretreatment standards and requirements shall submit to the city manager a report indicating the nature and concentration of all pollutants in the discharge from the regulated process that are limited by pretreatment standards and requirements and the average and maximum daily flow for these process units in the user's facility that are limited by such pretreatment standards or requirements. The report shall state whether the applicable pretreatment standards or requirements are being met on a consistent basis and, if not, what additional O&M and/or pretreatment is necessary to bring the user into compliance with the applicable pretreatment standards or requirements. This statement shall be signed by an authorized representative of the industrial user and certified by a qualified professional.

(a) Any user subject to a pretreatment standard shall, after the compliance date of such pretreatment standard or, in the case of a new source, after commencement of the discharge into the POTW, submit to the city manager during the months of June and December, unless required more frequently in the pretreatment standard or by the city manager, a report indicating the nature and concentration of pollutants in the effluent that are limited by such pretreatment standards. In addition, this report shall include a record of all daily flows that, during the reporting period, exceeded the average daily flows reported in § 18-207(11)(e). At the discretion of the city manager and in consideration of such factors as local high or low flow rates, holidays, budget cycles, etc., the city manager may agree to alter the months during which the above reports are to be submitted.

(b) The city manager may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements or in other cases where the imposition of mass limitations are appropriate. In such cases, the report required by subparagraph (a) above shall indicate the mass of pollutants regulated by pretreatment standards in the effluent of the user. These reports shall contain the results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where requested by the city manager, of pollutants contained therein that are limited by the applicable pretreatment standards. The frequency of monitoring shall be prescribed in the applicable pretreatment standard. All analysis shall be performed in accordance with procedures established by the administrator pursuant to Section 304(g) of the Act and contained in 40 CFR, Part 136, and amendments thereto, or with any other test procedures approved by the administrator. Sampling shall be performed in accordance with the techniques approved by the administrator. (Comment: Where 40 CFR, Part 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analysis shall be performed in accordance with the procedures set forth in the EPA publication "Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants," April 1977, and amendments thereto, or with any other sampling and analytical procedures approved by the administrator.)

(17) When required by the city manager, the owner of any property, serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located and shall be constructed in accordance with plans approved by the city manager. The manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

(18) All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this policy shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," published by the American Public Health Association, and shall be determined based on suitable samples at the control manhole provided. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb, and property. (The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally,

but not always, BOD and suspended solids analyses are obtained from 24-hour composites of all outfalls whereas pH's are determined from periodic grab samples.)

(19) No statement contained in this section shall be construed as preventing any special agreement or arrangement between the town and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the town for treatment, subject to payment therefor by the industrial concern. In no case shall any exception or variance or special agreement be granted that will violate the protection criteria. Before any exception, exemption, variance, or special agreement is granted, the industry must demonstrate good management practices. Good management practices include, but are not limited to, preveritative operating and maintenance procedures, schedule of activities, process changes, prohibiting of activities, and other management practices to reduce the quality or quantity of effluent discharge and to control plant site runoff, spillage, leaks, and drainage from raw material storage. (1973 Code, § 13-207)

18-208. Protection from damage. No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment that is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct. (1973 Code, § 13-208)

18-209. Powers and authority of inspection. (1) The city manager and other duly authorized employees of the town bearing proper credentials and identification shall be permitted to enter all properties for the purpose of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this policy. The city manager or his representatives shall have no authority to inquire into any processes, including metallurgical, chemical, oil, refining, ceramic, paper, or other industrial processes beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for waste treatment.

(2) While performing the necessary work on private properties referred to in subsection (1) above, the city manager or duly authorized employees of the town shall observe all safety rules applicable to the premises established by the company. The company shall be held harmless for injury or death to the town employees, and the town shall indemnify the company against loss or damage to its property by town
employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in § 18-207(17).

(3) The city manager and other duly authorized employees of the town holds a duly negotiated easement for the purpose of, but not limited to,

inspection, observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement. All entry and subsequent work, if any, on said easement shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved. (1973 Code, § 13-209)

18-210. Penalties. (1) Any person found to be violating any provision of this chapter except § 18-208 shall be served by the town with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

(2) Any person who shall continue any violation beyond the time limit provided for in subsection (1) above shall be guilty of a misdemeanor and, on conviction therefor, shall be fined in an amount not exceeding fifty dollars ($50.00) for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

(3) Any person violating any of the provisions of this policy shall become liable to the town for any expense, loss, or damage occasioned the town by reason of such violation.

(4) The town shall be empowered with the right to disconnect any person in violation of any provision of this policy if corrective action is not taken upon the initiation of the fifty dollars ($50.00) per day fine from sanitary sewer services in accordance with the national pretreatment regulations.

(5) The town shall annually publish in the local newspaper a list of the users that were not in compliance with any pretreatment requirements or standards at least once during the 12 previous months. The notification shall also summarize any enforcement actions taken against the user(s) during the same 12 months.

All records relating to compliance with pretreatment standards shall be made available to officials of the EPA or approval authority upon request. (1973 Code, § 13-210)

18-211. Validity. (1) All policies or part of policies in conflict herein are hereby repealed.

(2) The invalidity of any section, clause, sentence, or provision of this policy shall not affect the validity of any other part of this policy which can be given effect without such invalid part or parts. (1973 Code, § 13-211)

18-212. Policy in force. This policy shall be in force and effect from and after its passage, approval, recording, the public welfare requiring it. (1973 Code, § 13-212)

CHAPTER 3

SEWAGE AND HUMAN EXCRETA DISPOSAL

SECTION
18-301. Definitions.
18-302. Places required to have sanitary disposal methods.
18-303. When a connection to the public sewer is required.
18-304. When a septic tank shall be used.
18-305. Registration and records of septic tank cleaners, etc.
18-306. Use of pit privy or other method of disposal.
18-307. Approval and permit required for septic tanks, privies, etc.
18-308. Owner to provide disposal facilities.
18-309. Occupant to maintain disposal facilities.
18-310. Only specified methods of disposal to be used.
18-311. Discharge into watercourses restricted.
18-312. Pollution of ground water prohibited.
18-313. Enforcement of chapter.
18-314. Carnivals, circuses, etc.
18-315. Violations.

18-301. Definitions. The following definitions shall apply in the interpretation of this chapter:

(1) "Accessible sewer." A public sanitary sewer located in a street or alley abutting on the property in question or otherwise within two hundred (200) feet of any boundary of said property measured along the shortest available right-of-way.

(2) "Health officer." The person duly appointed to such position having jurisdiction, or any person or persons authorized to act as his agent.

(3) "Human excrete." The bowel and kidney discharges of human being.

(4) "Sewage." All water-carried human and household wastes from residences, buildings, or industrial establishments.

(5) "Approved septic tank system." A watertight covered receptacle of monolithic concrete, either precast or cast in place, constructed according to plans approved by the health officer. Such tanks shall have a capacity of not less than 750 gallons and in the case of homes with more than two (2) bedrooms the capacity of the tank shall be in accordance with the recommendations of the Tennessee Department of Health and Environment as provided for in its 1967 bulletin entitled "Recommended Guide for Location, Design, and Construction of Septic Tanks and Disposal Fields." A minimum liquid depth of four (4) feet should be provided with a minimum depth of air space above the liquid of one (1) foot. The septic tank dimensions should be such that the length from inlet to outlet is at least twice but not more than three (3) times the width. The liquid

depth should not exceed five (5) feet. The discharge from the septic tank shall be disposed of in such a manner that it may not create a nuisance on the surface of the ground or pollute the underground water supply, and such disposal shall be in accordance with recommendations of the health officer as determined by acceptable soil percolation data.

(6) "Sanitary pit privy." A privy having a fly-tight floor and seat over an excavation in earth, located and constructed in such a manner that flies and animals will be excluded, surface water may not enter the pit, and danger of pollution of the surface of the ground or the underground water supply will be prevented.

(7) "Other approved method of sewage disposal." Any privy, chemical toilet, or other toilet device (other than a sanitary sewer, septic tank, or sanitary pit privy as described above) the type, location, and construction of which have been approved by the health officer.

(8) "Watercourse." Any natural or artificial drain which conveys water either continuously or intermittently. (1973 Code, § 8-201)

18-302. Places required to have sanitary disposal methods. Every residence, building, or place where human beings reside, assemble, or are employed within the corporate limits shall be required to have a sanitary method for disposal of sewage and human excrete. (1973 Code, § 8-202)

18-303. When a connection to the public sewer is required. Wherever an accessible sewer exists and water under pressure is available, approved plumbing facilities shall be provided and the wastes from such facilities shall be discharged through a connection to said sewer made in compliance with the requirements of the official responsible for the public sewerage system. On any lot or premise accessible to the sewer no other method of sewage disposal shall be employed. (1973 Code, § 8-203)

18-304. When a septic tank shall be used. Wherever water-carried sewage facilities are installed and their use is permitted by the health officer, and an accessible sewer does not exist, the wastes from such facilities shall be discharged into an approved septic tank system.

No septic tank or other water-carried sewage disposal system except a connection to a public sewer shall be installed without the approval of the health officer or his duly appointed representative. The design, layout, and construction of such systems shall be in accordance with specifications approved by the health officer and the installation shall be under the general supervision of the department of health and environment. (1973 Code, § 8-204)

18-305. Registration and records of septic tank cleaners, etc. Every person, firm, or corporation who operates equipment for the purpose of removing digested sludge from septic tanks, cesspools, privies, and other sewage disposal

installations on private or public property must register with the health officer and furnish such records of work done within the corporate limits as may be deemed necessary by the health officer. (1973 Code, § 8-205)

18-306. Use of pit privy or other method of disposal. Wherever a sanitary method of human excreta disposal is required under § 18-102 and water-carried sewage facilities are not used, a sanitary pit privy or other approved method of disposal shall be provided. (1973 Code, § 8-206)

18-307. Approval and permit required for septic tanks, privies, etc. Any person, firm, or corporation proposing to construct a septic tank system, privy, or other sewage disposal facility, requiring the approval of the health officer under this chapter, shall before the initiation of construction obtain the approval of the health officer for the design and location of the system and secure a permit from the health officer for such system. (1973 Code, § 8-207)

18-308. Owner to provide disposal facilities. It shall be the duty of the owner of any property upon which facilities for sanitary sewage or human excreta disposal are required by § 18-102, or the agent of the owner to provide such facilities. (1973 Code, § 8-208)

18-309. Occupant to maintain disposal facilities. It shall be the duty of the occupant, tenant, lessee, or other person in charge to maintain the facilities for sewage disposal in a clean and sanitary condition at all times, and no refuse or other material which may unduly fill up, clog, or otherwise interfere with the operation of such facilities shall be deposited therein. (1973 Code, § 8-209)

18-310. Only specified methods of disposal to be used. No sewage or human excreta shall be thrown out, deposited, buried, or otherwise disposed of, except by a sanitary method of disposal as specified in this chapter. (1973 Code, § 8-210)

18-311. Discharge into watercourses restricted. No sewage or excreta shall be discharged or deposited into any lake or watercourse except under conditions specified by the health officer and specifically authorized by the Tennessee Stream Pollution Control Board. (1973 Code, § 8-211)

18-312. Pollution of ground water prohibited. No sewage, effluent from a septic tank, sewage treatment plant, or discharges from any plumbing facility shall empty into any well, either abandoned or constructed for this purpose, cistern, sinkhole, crevice, ditch, or other opening either natural or artificial, in any formation which may permit the pollution of ground water. (1973 Code, § 8-212)

18-313. Enforcement of chapter. It shall be the duty of the health officer to make an inspection of the methods of disposal of sewage and human excreta as often as is considered necessary to insure full compliance with the terms of this chapter. Written notification of any violation shall be given by the health officer to the person or persons responsible for the correction of the condition, and correction shall be made within forty-five (45) days after notification. If the health officer shall advise any person that the method by which human excreta and sewage is being disposed of constitutes an immediate and serious menace to health such person shall at once take steps to remove the menace. Failure to remove such menace immediately shall be punishable under the general penalty clause for this code. However, such person shall be allowed the number of days herein provided within which to make permanent correction. (1973 Code, § 8-213)

18-314. Carnivals, circuses, etc. Whenever carnivals, circuses, or other transient groups of persons come within the corporate limits such groups of transients shall provide a sanitary method for disposal of sewage and human excreta. Failure of a carnival, circus, or other transient group to provide such sanitary method of disposal and to make all reasonable changes and corrections proposed by the health officer shall constitute a violation of this section. In these cases the violator shall not be entitled to the notice of forty-five (45) days provided for in the preceding section. (1973 Code, § 8-214)

18-315. Violations. Any person, persons, firm, association, or corporation or agent thereof, who shall fail, neglect, or refuse to comply with the provisions of this chapter shall be deemed guilty of a misdemeanor and shall be punishable under the general penalty clause for this code. (1973 Code, § 8-215)

CHAPTER 4

CROSS-CONNECTIONS, AUXILIARY INTAKES, ETC.[1]

SECTION
18-401. Definitions.
18-402. Standards.
18-403. Construction, operation, and supervision.
18-404. Statement required.
18-405. Inspections required.
18-406. Right of entry for inspections.
18-407. Correction of violations.
18-408. Use of protective devices.
18-409. Unpotable water to be labeled.
18-410. Violations.
18-411. Applicability.
18-412. Approved backflow prevention assemblies.
18-413. Backflow prevention assembly installation requirements.
18-414. Existing backflow prevention assemblies.
18-415. Assembly performance evaluations and testing.
18-416. Conflicting provisions.
18-417. Responsibility for water system.
18-418. Inspection and testing fees.
18-419. Thermal expansion control.
18-420. Safety standards-duplicate equipment in parallel required.

18-401. Definitions. The following definitions and terms shall apply in the interpretation and enforcement of this chapter.

(1) "Air gap." A physical separation between the free flowing discharge end of a potable water supply line and an open or non-pressurized receiving vessel.

(2) "Approved air gap." An air gap separation with a minimum distance of at least twice the diameter of the supply line when measured vertically above the overflow rim of the vessel, but in no case less than one inch (1").

(3) "Approved." Any condition, method, device, procedure accepted by the Tennessee Department of Environment and Conservation, Division of Water Supply, and water provider.

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[1]Municipal code references
Water and sewer system administration: title 18.
Wastewater treatment: title 18.

(4) "Auxiliary intake." Any piping connection or other device whereby water may be secured from any sources other than from the public water system.

(5) "Auxiliary water supply." Any water supply on or available to the premises other than water supplied by the public water system.

(6) "Backflow." The reversal of the intended direction of flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of a potable water system from any source.

(7) "Backpressure." A pressure in the downstream piping that is higher than the supply pressure.

(8) "Back-siphonage." Negative or sub-atmospheric pressure in the supply piping.

(9) "Backflow prevention assembly." An approved assembly designed to prevent backflow.

(10) "Bypass." Any system of piping or other arrangement whereby water may be diverted around a backflow prevention assembly, meter, or any other public water system controlled device.

(11) "Contamination." The introduction or admission of any foreign substances that causes illness or death.

(12) "Contaminant." Any substance introduced into the public water system that will cause illness or death.

(13) "Cross-connection." Any physical arrangement whereby public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture or other device which contains, or may contain, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality which may be capable of contaminating the public water supply as result of backflow caused by the manipulation of valves, because of ineffective check valves or backpressure valves or because of any other arrangement.

(14) Cross-connection control coordinator/manager." The person who is vested with the authority and responsibility for the implementation of the cross-connection control program and for the provision of this ordinance/policy.

(15) "Customer." Any natural or artificial person, business, industry, or governmental entity that obtains water, by purchase or without charge, from the water provider.

(16) "Direct cross-connection." An actual or potential cross-connection subject to back-siphonage and backpressure.

(17) "Double check detector assembly." A specially designed assembly composed of line size approved double check valve assembly, with a bypass containing a water meter and approved double check valve assembly specifically designed for such application. The meter shall register accurately for very low rates of flow up to three (3) gallons per minute and shall show a registration for all rates of flow. This assembly shall only be used to protect against non-health hazards and is designed primarily for use on fire sprinkler systems.

(18) "Double check valve assembly." An assembly of two (2) internally loaded check valves, either spring loaded or internally weighted, installed as a unit between tightly closing resilient seated shutoff valves and fitted with properly located resilient seated test cocks. This type of device shall only be used to protect against non-health hazard pollutants.

(19) "Failed." The status of a backflow prevention assembly determined by a performance evaluation based on the failure to meet all minimums set forth by the approved testing procedure.

(20) "Fire system classifications protection." The classes of fire protection systems, as designated by the American Water Works Association "M14" for cross-connection control purposes based on water supply source and the arrangement of supplies, are as follows:

Class 1: Direct connection to the public water main only; non pumps, tanks, or reservoirs; no physical connection from other water supplies; no antifreeze or other additives of any kind; all sprinkler drains discharging to the atmosphere, dry well or other safe outlets.

Class 2: Same as Class 1, except booster pumps may be installed in connection from the street mains.

Class 3: Direct connection to public water supply mains in addition to any one (1) or more of the following: elevated storage tanks; fire pumps taking suction from above ground covered reservoirs or tanks; and pressure tanks.

Class 4: Directly supplied from public water supply mains, similar to Class 1 and Class 2, with and auxiliary water supply dedicated to fire department use and available to premises, such as an auxiliary supply located within one thousand seven hundred feet (1,700') of the pumper connection.

Class 5: Directly supplied from public water supply mains and interconnection with auxiliary supplies such as pumps taking suction from reservoirs exposed to contamination, or from rivers, ponds, wells or industrial water systems; where antifreeze or other additives are used.

Class 6: Combined industrial and fire protection systems supplied from the public water mains only, with or without gravity storage or pump suction tanks.

(21) "Hazard, degree of." A term derived from evaluation of the potential risk to public health and the adverse effect of the hazard upon the public water system.

(22) "Hazard, health." A cross-connection or potential cross-connection involving any substance that could, if introduced in the public water supply, caused death, illness, and spread disease also known as a high hazard.

(23) "Hazard, plumbing." A cross-connection in a customer's potable water system plumbing that is not properly protected by an approved air gap or backflow prevention assembly.

(24) "Hazard, non-health." A cross-connection or potential cross-connection involving any substance that would not be a health hazard but would constitute a nuisance or be aesthetically objectionable if introduced into the public water supply also known as low hazard.

(25) "Indirect cross-connection." An actual or potential cross-connection subject to back-siphonage only.

(26) "Industrial fluid." Any fluid or solution that may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration that could constitute a health, system, pollution, or plumbing hazard if introduced into the public water supply. This shall include, but is not limited to: polluted or contaminated water; all type of process water or used water originating from the public water system and that may have deteriorated in sanitary quality; chemicals; plating acids and alkalis; circulating cooling water connected to an open cooling tower; cooling towers that are chemically or biologically treated or stabilized with toxic substance; contaminated natural water systems; oil, gases, glycerin, paraffin, caustic, and acid solutions, and other liquids or gases used in industrial processes, or for fire purposes.

(27) "Inspection." An on-site evaluation of an establishment to determine if backflow prevention assemblies are needed by the customer to protect the public water system from actual or potential cross-connections.

(28) "Interconnection." Any system of piping or other arrangement whereby a public water supply is connected directly with a sewer, drain, conduit, or other device, which does, or may carry sewage or not.

(29) "Passed." The status of a backflow prevention assembly determined by a performance evaluation in which the assembly meets all minimums set forth by the approved testing procedure.

(30) "Performance evaluation." An evaluation of an approved double check valve assembly or reduced pressure principle assembly (including approved detector assemblies) using the latest approved testing procedures in determining the status of the assembly.

(31) "Pollutant." A substance in the public water system that would constitute a non-health hazard and would be aesthetically objectionable if introduced into the public water supply.

(32) "Pollution." The presence of a pollutant or substance in the public water system that degrades its quality so as to constitute a non-health hazard.

(33) "Potable water." Water that is safe for human consumption as prescribed by Tennessee Department of Environment and Conservation, Division of Water Supply.

(34) "Public water supply." An entity that furnishes potable water for general use and which is recognized as the public water supply by Tennessee Department of Environment and Conservation, Division of Water Supply.

(35) "Pressure vacuum breaker assembly." An assembly consisting of one (1) or two (2) independently operating spring loaded check valve(s) and an independently operating spring loaded air inlet valve located on the discharge side of the check valve(s), with tightly closing shutoff valve(s) on each side of the check valves and properly located test cocks for testing valves. This assembly is approved for internal use only and is not approved for premise isolation by the State of Tennessee.

(36) "Public water system." A water system furnishing water to the public for general use which is recognized as a public water supply by the State of Tennessee.

(37) "Reduced pressure principle assembly." An assembly consisting of two independently acting approved check valves together with hydraulically operating, mechanically independent, pressure differential relief valve located between the check valves and below the first check valve. These units shall be located between two tightly closing resilient seated shutoff valves as an assembly and equipped with properly located resilient seated test cocks.

(38) "Reduced pressure principle detector assembly." A specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a bypass containing a water meter and approved reduced pressure principle backflow prevention assembly specifically designed for such application. The meter shall register accurately for very low flow rates of flows up to three (3) gallons per minute and shall show registration for all flow rates. This assembly shall be used to protect against non-health and health hazards and used for internal protection.

(39) "Service connection." The point of delivery to the customer's water system; the terminal end of a service connection from the public water system where the water department loses jurisdiction and control over the water. "Service connection" shall include connections to fire hydrants and all other temporary or emergency water service connections made to the public water system.

(40) "State." The State of Tennessee, Tennessee Department of Environment and Conservation, Division of Water Supply.

(41) "Survey." An evaluation of a premise by a water system performed for the determination of actual or potential cross-connection hazards and the appropriate backflow prevention needed.

(42) "Water system." The water system operated, whether located inside or outside, the corporate limits thereof, shall be considered as made up of two (2) parts, the utility system and the customer system.

(a) The utility system shall consist of the facilities for the production, treatment, storage, and distribution of water, and shall include all those facilities of the water system under the complete control

of the water department, up to the point where the customer's system begins (i.e. downstream of the water meter);

(b) The customer system shall include those parts of the facilities beyond the termination of the water department distribution system that are utilized in conveying water to the point of use. (1973 Code, § 8-301, as replaced by Ord. #445, April 2016)

18-402. Standards. The public water system is to comply with Tennessee Code Annotated, § 68-221-711, as well as the rules of public water systems, legally adopted in accordance with this policy/ordinance, which pertain to intakes, bypasses, and interconnections, and establish an effective, ongoing program to control these undesirable water uses. (1973 Code, § 8-302, as replaced by Ord. #445, April 2016)

18-403. Construction, operation, and supervision. No person shall cause a cross-connection, auxiliary intake, bypass, or interconnection to be made, or allow one to exist for any purpose whatsoever unless the construction and operation of same has been approved by the Tennessee Department of Environment and Conservation and the operation of such cross-connections, auxiliary intake, bypass, or interconnection is at all times under the direct supervision of the cross-connection control coordinator of the public water system. (1973 Code, § 8-302, as replaced by Ord. #445, April 2016)

18-404. Statement required. That any person whose premises are supplied with water from public water system, and who also has on the same premises a separate source of water in an uncovered or unsanitary storage reservoir from which the water stored therein is circulated through a piping system, shall file with the Town of Ashland City Water Department a statement of the nonexistence of unapproved or unauthorized cross-connections, auxiliary intakes, bypasses, or interconnection. Such statement shall also contain an agreement that no cross-connection, auxiliary intake, bypass, or interconnection will be permitted upon the premises. (1973 Code, § 8-304, as replaced by Ord. #445, April 2016)

18-405. Inspections required. The cross-connection coordinator shall inspect all properties served by the public water supply where cross-connections with the public water supply are deemed possible. The frequency of inspections and re-inspections based on potential health hazards involved shall be established by the cross-connection coordinator in accordance with guidelines acceptable to the division of water supply. (1973 Code, § 8-305, as replaced by Ord. #445, April 2016)

18-406. Right of entry for inspections. The cross-connection coordinator or designee shall have the right to enter at any reasonable time any property

served by a connection to the Town of Ashland City Water Department for the purpose of inspecting the piping system therein for cross-connections, auxiliary intakes, bypasses, or interconnections. On request, the owner, lessee, or occupant or any property so served shall furnish any pertinent information regarding the piping system on the property. The refusal of such information or refusal of access, when requested, shall be deemed as evidence of the presence of connections. (1973 Code, § 8-306, as replaced by Ord. #445, April 2016)

18-407. Correction of violations. (1) Any customer having cross-connections, auxiliary intakes, bypasses, or interconnection(s) in violation of this ordinance shall, after a thorough investigation of existing conditions and an appraisal of the time required, complete the work within the time designated by the cross-connection control coordinator or designee, but in no case shall the time for correction exceed ninety (90) days for high and low hazards or fourteen (14) days for high risk high hazards.

(2) Failure to comply with any order of the cross-connection control coordinator or designee within the time set out there in shall result in the termination of water service.

(3) Where cross-connections, auxiliary intakes, bypasses, or interconnections are found to constitute a high risk high hazard, the public water supply , the cross-connection control coordinator or designee shall require prompt corrective action (within fourteen (14) days) to be taken to eliminate the threat. Expeditious steps shall be taken to disconnect the public water system from the customer's piping systems unless the extreme hazard is corrected immediately.

(4) Failure to correct conditions threatening the safety of the public water system as prohibited by this ordinance or Tennessee Code Annotated, § 68-221-711 within the time limits set by the cross-connection control coordinator or designee or this ordinance, shall be cause for denial or termination of water service. If proper protection is not provided after times set forth in this ordinance, the cross-connection control coordinator or designee shall give the customer written notification that water service is to be discontinued, and thereafter physically separate the public water system from the customer's system in such a manner that the two systems cannot be connected by an unauthorized person.

(5) In the event that a backflow prevention assembly is deemed failed (initial or annual performance evaluation), failure to install backflow prevention assemblies as requested by the water system, or there are deficiencies in the installation from failure to conform to the installation criteria specified in this ordinance, or from deterioration, then the cross-connection control coordinator or designee shall issue a written notice of failure or deficiency (within three (3) days). The time limit is dependent on risk of contamination and may not be greater than ninety (90) days. (1973 Code, § 8-307, as replaced by Ord. #445, April 2016)

18-408. Use of protective devices. An approved backflow prevention assembly shall be installed on each service line to a customer's premises and in all cases, before the first branch line leading off the service line, if it is impractical or easily altered to provide an effective air gap separation, when any of the following conditions exist:

(1) All premises listed as high risk high hazard including industrial fluids, sewage, or any other non-potable substances are handled in such a manner as to create actual or potential health hazard to the water system.

(2) All premises listed with actual or potential cross-connections listed in approved plan criteria list.

(3) Premises having auxiliary water supply, including but not limited to a well, cistern, spring, pond, river, or creek that is not, or may not be, of safe bacteriological or chemical quality and that is not acceptable as an additional source by the cross-connection control coordinator or designee.

(4) The plumbing from a private well or other water supply entering the building served by the public water supply, or is connected, directly or indirectly, to the public water supply.

(5) The owner or occupant of the premises cannot, or is not willing to demonstrate that the water use and protective features of the plumbing are such that frequent alterations are made to the plumbing.

(6) The nature and mode of operation within the premises is such that frequent alterations are made to the plumbing.

(7) The nature of the premises is such that the use of the structure may change to a use wherein backflow prevention is required.

(8) There is likelihood that protective measures may be subverted, altered, or disconnected.

(9) Any premises having service and fire flow connections, most commercial and educational buildings, construction sites, all industrial and medical facilities, lawn irrigation systems, public or private swimming pools, private fire hydrant connections used by any fire department in combating fires, photographic laboratories, standing ponds or other bodies of water, auxiliary water supplies, and wastewater treatment plants.

(10) Any premises having fountains, water softeners or other point of use treatment systems hot tubs or spas, or other type(s) of water using equipment.

(11) Premises otherwise determined by the cross-connection control coordinator or designee to create an actual or potential hazard to the public water system.

(12) In the case of any premises where there is any material dangerous to health that is handled in such a fashion as may create an actual or potential health hazard to public water system, the public water system shall be protected by an air gap separation (at the discretion of water provider to allow) or a reduced pressure principle backflow prevention assembly. The following premises, where such conditions may exist, include but are not limited to:

sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries, funeral homes, and metal plating operations.

(13) In the case of any premises where, because of security requirements or other prohibitions or restriction it is impossible or impractical to make a complete cross-connection survey, the public water system shall be protected against backflow from the premises by either an air gap separation (at the discretion of the water provider) or reduced pressure principle assembly on each service line to the premises.

(14) A backflow prevention assembly shall be installed on each fire service line at the property line or immediately inside the building being served, but in all cases, before the first branch line leading off the service line wherever any of the following conditions exist:

(a) Class 1, 2, and 3 fire protection systems shall require at minimum a double check valve (detector) assembly; provided however, that a reduced pressure principle (detector) shall be required:

(i) Underground fire sprinkler pipelines are parallel to and within ten feet (10') horizontally of pipelines carrying waste water or significantly toxic wastes; or

(ii) Premises having unusually complex piping systems;

(iii) The pumpers connecting to the system have corrosion inhibitors or other chemical added to the tanks of the fire trucks;

(iv) The piping system(s) has corrosion inhibitors or other chemical added to prevent freezing;

(v) An auxiliary water supply exists with one thousand seven hundred feet (1,700') of any likely pumper connection.

(b) Class 4, Class 5, Class 6 fire protection systems shall require an air gap, or a reduced pressure principle assembly (detector) as determined by the cross-connection control manager/coordinator or designee.

(c) Where a fire sprinkler system is installed on the premises, a minimum of a double check valve assembly (detector) shall be required.

(d) Where a fire sprinkler system uses chemicals, such as liquid foam, to enhance fire suppression a reduced pressure principle detector assembly shall be required.

(e) The cross-connection control manager/coordinator may require internal or additional backflow prevention devices where it is deemed necessary to protect potable water supplies within the premises.

(15) In the case of any premises with an auxiliary water supply as set out in § 18-414, and not subject to any of the following rules, the public water system shall be protected by an air gap separation or a reduced pressure principle assembly.

(16) Double check valve assemblies (and detectors) may only be used for Class 1-3 fire protection systems (at the discretion of water provider to even allow).

(17) In the case of any premises where there is any material dangerous to health that is handled in such a fashion as may create an actual or potential hazard to public water system, the public water system shall be protected by a reduced pressure principle backflow prevention assembly. The following premises, where such conditions may exist, include but are not limited to: sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries, funeral homes, and metal plating operations.

(18) In the case of any premises where there are uncontrolled cross-connections, either actual or potential, the public water system shall be protected by a reduced pressure principle assembly (detector) or air gap separation (at the discretion of water provider) assembly on each service line to the premises.

(19) In the case of any premises where, because of security requirements or other prohibitions or restriction it is impossible or impractical to make a complete cross-connection survey, the public water system shall be protected against backflow from the premises by either an air gap separation (at the discretion of the water provider) or reduced pressure principle assembly on each service line to the premises.

(20) In the case of any premises where toxic substances are present that could pose an undue health hazard, the cross-connection control coordinator or designee may require an air gap separation or reduced pressure principle assembly at the service connection to protect the public water system. In making this determination, the cross-connection control coordinator or his designee shall consider the degree of hazard based on criteria list in approved plan. (1973 Code, § 8-308, as replaced by Ord. #445, April 2016)

18-409. Unpotable water to be labeled. (1) Any water outlet connected to auxiliary water sources, industrial fluid systems, or other piping containing non-potable liquids or gases, which could be used for potable or domestic purposes, shall be labeled in a conspicuous manner as:

WATER UNSAFE FOR DRINKING

(2) The minimum acceptable sign shall have black letters at least one inch (1") high on red background.

(3) Color coding of piping in accordance with Occupational Safety and Health Act guidelines may be required in locations where, in the judgment of the inspector, such color coding is necessary to identify and protect the potable water supply. (1973 Code, § 8-309, as replaced by Ord. #445, April 2016)

18-410. Violations. Any person who neglects or refuses to comply with any of the provisions of this chapter shall be deemed guilty of a misdemeanor and, upon conviction therefor, shall be fined under the general penalty clause for this municipal code of ordinances. In addition to the foregoing fines and penalties, the cross-connection control coordinator or designee shall discontinue the public water service at any premises upon connection and service shall not be restored until such cross-connection, auxiliary intake, bypass, or interconnection has been discontinued.

Independent of and in addition to fines penalties imposed, the cross-connection control coordinator may discontinue the public water supply service to any premises upon which there is found to be a cross-connection, auxiliary intake, bypass, or interconnection; and service shall not be restored until such cross-connection, auxiliary intake, bypass, or interconnection has been eliminated. (1973 Code, § 8-310, as replaced by Ord. #445, April 2016)

18-411. Applicability. The requirements contained herein shall apply to all customers and premises of the Town of Ashland City Water Department, and is hereby made a condition required to be met before water service is provided to any customer. This ordinance shall be strictly enforced since it is essential for the protection of the public water supply against contamination and pollution. (as added by Ord. #445, April 2016)

18-412. Approved backflow prevention assemblies and methods. (1) All backflow prevention assemblies shall be fully approved and listed as acceptable by the State of Tennessee as to manufacture, model, size, application, orientation, and alterations. The assembly must have a status of passed determined by performance evaluations to suffice as an approved backflow prevention assembly. The method of installation of backflow prevention devices shall comply with installation criteria set forth by this ordinance and the State of Tennessee. Installation shall be at the sole expense of the owner of the owner or occupant of the premises.

(2) The type of protective assembly required by this ordinance shall depend on the degree of hazard that exists. Reduced pressure principle assemblies (detector) may be used for health hazards and non-health hazards. Double check valve assemblies (detector) may only be used for non-health hazards and is limited to Class 1-3 fire systems only.

(3) Pressure vacuum breakers, spill-resistant vacuum breakers, and atmospheric vacuum breaker are not allowed for premise isolation and will not satisfy the requirements of this ordinance for adequate backflow prevention due in part to the inability to protect against backpressure. (as added by Ord. #445, April 2016)

18-413. Backflow prevention assembly installation requirements. Minimum acceptable criteria for installation of backflow prevention assemblies shall include the following (installation criteria listed in approved plan):

(1) All backflow prevention assemblies shall be installed at minimum in the approved orientation as indicated by the latest approved list.

(2) All new assemblies installed must be on the approved assemblies list maintained by the division of water supply and existing assemblies must have status of approved.

(3) Installation of assemblies shall be performed by person granted authority by the water provider. All backflow prevention assemblies installed fire protection systems must be performed by persons possessing a fire sprinkler contractor license. Evidence of current certifications/license must be on file with the cross-connection control coordinator before any installation or testing of the devices can be performed.

(4) All assemblies shall be installed in accordance with the manufacturer installation instructions and by the State of Tennessee installation guide, from the state manual or policies on cross-connection control, unless such instructions are in conflict with this policy, in which case the ordinance shall control, and shall possess all test cocks and fittings required for testing the assembly. All test cocks will be fitted with adapters and all fittings shall permit direct connection to test kits used by the department.

(5) The entire assembly including test cocks and valves shall be easily accessible for testing and repair and shall meet all confined space requirements of OSHA/TOSHA.

(6) Reduced pressure backflow prevention assemblies shall be located so that the relief valve discharge port is a minimum of twelve inches (12"), plus nominal diameter of the supply line, above the floor surface. The maximum height above the floor surface shall not exceed sixty inches (60").

(7) Clearance of devices from wall surfaces or other obstructions shall be a minimum of six inches (6"); or if a person must enter the enclosure for repair or testing, the minimum distance shall be twenty-four inches (24").

(8) Devices shall be protected from freezing, vandalism, mechanical abuse, and from any corrosive, sticky, greasy, abrasive, or other damaging substance.

(9) Devices shall be positioned where discharge from a relief port will not create undesirable conditions. An approved air gap shall separate the relief port from any drainage system. Such air-gap shall not be altered without the specific approval of the department.

(10) Devices shall be located in an area free from submergence or flood potential and cannot be placed in a pit.

(11) All devices shall be adequately supported to prevent sagging.

(12) An approved strainer, fitted with a test cock, shall be installed immediately upstream of all backflow prevention assemblies or shut-off valve,

except on fire lines, using only non-corrosive fittings (e.g. brass or bronze) in the device assembly.

(13) Gravity drainage is required on all installations. Below ground installations shall not be permitted for reduced pressure principle assemblies (detectors).

(14) Fire hydrants drains shall not be connected to the sanitary sewer, and fire hydrants shall not be installed in such manner that backsiphonage or backflow through the drain may occur.

(15) Where jockey (low volume-high pressure) pumps are utilized to maintain elevated pressure, as in fire protection system, the discharge of the pump shall be on the downstream side of any check valve or backflow prevention assembly. Where the supply for the jockey pump is taken from the upstream supply side of the check valve or backflow prevention assembly, a backflow prevention assembly of the same type(s) required on the main line shall be installed on the supply line.

(16) Fixed position, high volume fire pumps shall be equipped with suction limiting control to modulate the pump if the residual line pressure reaches twenty (20) psi. If line pressure drops below twenty (20) psi, the pump will shut off to protect the distribution system. This shut off system must be tested annually for proper operation and report of the test must be sent to the office of cross-connection control. (as added by Ord. #445, April 2016)

18-414. Existing backflow prevention assemblies. (1) All presently installed backflow prevention assemblies which were previously acceptable to the State of Tennessee that complies with installation, testing, and maintenance requirements of this ordinance and in the sole discretion of the cross-connection control coordinator or designee adequately protect the public water system from backflow and that were approved assemblies for the purpose described herein at the time of installation may be retained in service.

(2) Location or space requirements shall not be cause for re-location or replacement of any backflow prevention assembly that is presently installed in a vertical run of pipe shall be replaced, reinstalled, in an approved manner in a horizontal run of pipe.

(3) Wherever an existing assembly is moved from the present location, or when the inspector finds that the conditions of the assembly constitutes a health hazard, the unit shall be replaced by the backflow prevention assembly meeting the requirements of this ordinance. (as added by Ord. #445, April 2016)

18-415. Assembly performance evaluations and testing. (1) All assemblies used to protect the public water system must be tested every twelve (12) months. In those instances where the cross-connection coordinator deems the hazard to be great enough (listed in the approved plan), performance evaluation may be required at more frequent intervals.

(2) Any assembly not tested with twelve (12) month period will be deemed not approved and have a status of failed. The customer will be sent notification of that the assembly is not in compliance with this ordinance

(3) All assemblies must be deemed passed for each initial and subsequent annual performance evaluations to satisfy as approved backflow prevention assembly.

(4) All assemblies will be tested by backflow prevention assembly tester possessing a valid (see definition) certificate of competency in testing and evaluation backflow prevention assemblies issued by the State of Tennessee.

(5) All performance evaluation must be performed with an annually certified test kit.

(6) Certifications for test kits are valid for one year after certification is performed. If the test kit is not recertified after one (1) year, it is deemed expired.

(7) Test kits must be certified annually and the backflow prevention assembly tester must show proof of certification from manufacturer-approved entities. No performance evaluations will be accepted from a backflow prevention assembly tester with an expired test kit certification.

(8) Proof of annual test kit certification and certificate of competency must be kept on file for each tester by water provider.

(9) Backflow prevention assembly testers must test and evaluate according to the latest division of water supply's latest approved procedures for reduced pressure principle assembly and the double check valve assembly.

(10) If any test does not meet the minimum requirements set forth in the approved testing procedure, the assembly is deemed failed and does not suffice as an approved backflow prevention device. If conditions around the assembly do not allow the assembly to be tested, the assembly fails the assembly performance evaluation and is marked failed on test report. (Examples would include assembly is submerged, test cocks missing or plugged, relief valve continually discharging).

(11) Backflow prevention assemblies are deemed passed if all parts of the performance evaluation meet the minimum requirements in the approved testing procedure.

(12) Each location requiring an assembly will have a documented backflow prevention assembly, if the assembly at the address cannot be identified or is not the same, the water provider will be notified and a determination of which is assembly is used for protection of the water system. (All areas that need protection will be listed by address and location along with the serial no. of device.)

(13) Test reports must be completely and accurately documented and the appropriate evaluation (passed or failed) determined from testing procedure. Any test report that is not recorded completely in the sections pertinent to the results of the performance evaluation tests will not be accepted by the Town of Ashland City Water Department.

(14) All performance evaluations on file will be recorded on an (state and water system) approved test report.

(15) Assemblies must be tested when installed and after every repair. Backflow prevention assemblies on lawn irrigation systems must be tested when assemblies are placed in service after winterization (to prevent testing just prior to winterization). If lawn irrigation backflow assemblies are taken removed to winterize the system, upon startup of the system, the assemblies must be retested.

(16) Failure to maintain a backflow prevention assembly that is deemed passed shall be grounds for discontinuance of water service. The removal, bypassing, or altering of a protective device or installation, without the approval of the cross-connection control coordinator or designee, thereof so as to render a device ineffective shall constitute grounds for discontinuance of water service. Water service to such premises shall not be restored until the customer has corrected or eliminated such conditions or defects to the satisfaction this ordinance and the cross-connection control coordinator or designee.

(17) The water system shall require the occupant of the premises to keep the backflow prevention assembly working properly and a status of passed. Repairs shall be made by qualified personnel acceptable to the water system within the time limits set forth by this policy. Expense of such repairs shall be borne by the owner or occupant of the premises. The failure to maintain a backflow prevention assembly in proper working order and a status of passed shall be grounds for discontinuance of water service.

(18) The backflow prevention assembly must be tested after every repair and have a status of passed to be in compliance with this policy/ordinance.

(19) Cross-connection control coordinator or designee shall have the right to inspect and test any assemblies whenever it is deemed necessary. Water service shall not be disrupted to the assembly without the knowledge of the occupant of the premises.

(20) Those with fire sprinkler license will also be required to have a valid certificate of competency and all other requirements set forth by this ordinance.

(21) Any backflow prevention assembly tester found by the water system to be negligent in performing testing procedures or falsifying documentation in regards to a backflow prevention assembly will not be allowed continued approval to submit test reports. The water system may allow the backflow prevention assembly tester to perform testing at a later date, at the discretion of the cross-connection control coordinator or designee.

(22) All performance evaluations, tests, and repairs shall be at the expense of the customer and shall be performed by backflow prevention assembly testers that satisfy all requirements of this ordinance.

(23) Original records of evaluations and repairs shall be supplied to the cross-connection control coordinator.

(24) Where any class of fire protection backflow assembly exists it shall be the responsibility of the customers to have it inspected. This inspection shall be due on or before the fifteenth of the month of the devices yearly schedule. The Town of Ashland City will only test the domestic service back flow prevention assembly. (as added by Ord. #445, April 2016, and amended by Ord. #517, Feb. 2019 ***Ch12_6-11-19***)

18-416. Conflicting provisions. If any provision of this ordinance is found to conflict with any provision of any other ordinance, then the provision of this ordinance shall control. That should any part, or parts of this ordinance be declared invalid for any reason, no other part, or parts, of this ordinance shall be affected thereby. (as added by Ord. #445, April 2016)

18-417. Responsibility for water system. (1) Notwithstanding any provisions of a plumbing code adopted by units of local government having jurisdiction, the cross-connection control coordinator or designee shall be responsible for protecting the water system from contamination or pollution due to implementation and enforcement of this ordinance. Such authority shall extend beyond service connection to whatever extent is necessary to meet the requirements of this ordinance.

(2) The authority to terminate water service for violation of any provision of this ordinance shall rest solely with the cross-connection control coordinator, the assistant or designee shall have authority to take action to protect public health and safety.

(3) This section shall not be construed to prevent other officers or employees of the Town of Ashland City Water Department from terminating water service for failure to pay for water service, or for violation any other provision of the Town of Ashland City ordinance. (as added by Ord. #445, April 2016)

18-418. Inspection and testing fees. Fees for initial or annual certification of a backflow prevention assembly may be published by the office of the Town of Ashland City Water Department based on the recommendation of the cross-connection control coordinator to reflect the cost of processing such certification.

(1) Fees. (a) All residential devices that are not on a fire protection system will be charged an annual fee of fifteen dollars ($15.00).

(b) All commercial, non-residential, and industrial devices that are not on a fire protection system will be charged an annual fee of thirty-five dollars ($35.00).

(c) The customer will be allowed one follow up visit at no charge, any visit thereafter, will have a charge of twenty-five dollars ($25.00).

(d) All failed tests after the initial failed test will be charged twenty-five dollars ($25.00).

(e) In cases where the water service has been disconnected due to non-compliance, there will be a fee of seventy-five dollars ($75.00) to have the water service reinstated. Water service will not be allowed to the establishment until all corrections have been made and all conditions of the policy have been satisfied.

(2) Fines and penalties. (a) Any person who neglects to comply with the terms of this cross-connection control plan shall be charged with a misdemeanor and subject to a fine of up to fifty dollars ($50.00). Each day of continued violation after conviction shall constitute as a separate offense.

(b) Independent of and in addition to any fines or penalties imposed, the director shall discontinue the public water supply service to any premises upon which there is found to be a cross-connection, auxiliary intake, bypass, or interconnection; and service shall not be restored until such has been eliminated.

(3) In the event that a backflow prevention assembly is deemed failed after the initial and annual performance evaluations, or there are deficiencies in the installation either from failure to conform to the installation criteria specified in this ordinance, or from deterioration, then the cross-connection control coordinator or designee shall issue a written notice of failure or deficiency. (as added by Ord. #445, April 2016)

18-419. Thermal expansion control. A device for the control of thermal expansion shall be installed on the customer's water system where the thermal expansion of the water in the system will cause the water pressure to exceed the pressure setting of the pressure relief valve of the water heater. The thermal expansion device shall control the water pressure to prevent the pressure relief valve of the water heater from discharging. (as added by Ord. #445, April 2016)

18-420. Safety standards-duplicate equipment in parallel required. Where the use of water is critical to the continuation of normal operations or protection of life, property, or equipment, duplicate units shall be provided to avoid the necessity of discontinuing water service to test or repair a backflow prevention assembly. Until such time as a parallel unit has been installed where the continuance of service is critical, the cross-connection control coordinator or designee shall notify the occupant of the premises, in writing, of plans to interrupt water service and arrange for a mutually acceptable time to test or repair the assembly. (as added by Ord. #445, April 2016)

CHAPTER 5

MOBILE HOMES

SECTION

18-501. Mobile homes used as residences required to have water and sewer connections.
18-502. Permits required for mobile homes used as residences; exceptions.
18-503. Separate water meter required for each mobile home generally; exceptions.
18-504. Chapter not applicable to certain mobile homes.

18-501. Mobile homes used as residences required to have water and sewer connections. The parking, placing, or locating, and the use and occupancy as a place of residence, by any person or persons, within the corporate limits of Ashland City, Tennessee, or the permitting, letting, or making of any lease in connection therewith, of any house trailer or other movable structure of any kind used or to be used as a place of residence, is hereby prohibited and declared to be unlawful unless water and sewerage facilities are available and said utilities are properly connected with such house trailer or other movable structure, with all connection and service charges to be paid by such customers or consumers. (1973 Code, § 8-401)

18-502. Permits required for mobile homes used as residences; exception. Before any person or persons shall park, place, or locate, or use and occupy, any house trailer or other movable structure as a place of residence within the corporate limits, he or they shall first be required to obtain from the city clerk a permit therefor. Provided, that this section shall not apply to any house trailer, or other movable structure used or occupied as a place of residence, located within any duly licensed house trailer court or parking lot. (1973 Code, § 8-402)

18-503. Separate water meter required for each mobile home generally; exceptions. Each and every house trailer, or other movable structure used as a place of residence, shall be deemed and considered as a separate dwelling or place of abode and shall be serviced by a separate water meter except that duly licensed trailer courts or parking lots may operate either by obtaining a single or separate water meter for each trailer or movable residence structure therein, or by one master water meter under the multiple use service provisions of another ordinance of the town. Provided, that any person or persons owning any lot or parcel of land upon which he resides and makes his home within the corporate limits of Ashland City, Tennessee, (or outside corporate limits if on city water line) and having a house trailer or other such movable structure located on said land that is intended to be used, and/or absolutely and solely

may or shall be used as an adjunct, appurtenance, or supplement to the residential building on said land for the accommodation of members of such land owner's family, by affinity or consanguinity, consisting of none others than grandfather, grandmother, father, mother, father-in-law, mother-in-law, child, grandchild, brother, sister, husband, or wife of the land owner, and where none of such relatives pay any rental, emolument, or other service or thing of value for the privileges of so living in said house trailer and/or other such movable structure; then, upon full compliance with the foregoing provisions, said residential land owner shall be entitled to have said trailer and/or such movable structure connected, at the land owner's cost and expense, to a water and/or sewerage line or lines already and at the time serving the land owner's residence, subject to the approval of the superintendent of waterworks and sewerage department, first obtained, with only one water meter being required for said entire water service to said land owner's residence and said trailer and/or such other movable structure that is to be used for residential purposes under the provisions and authority of this chapter.

Provided further, that in the event any rentals, emoluments, or other services or things of value are charged or collected or received by the owner of said land, directly or indirectly, either from a relative as herein designated, or any other person, for the use of such house trailer and/or such other movable structure as described hereinabove, as a place of residence, or if any such house trailer and/or such other movable structure receiving water and/or sewerage service under this chapter should be so used or occupied by any person or persons other than the land owner's relatives within the degrees hereinabove stated then, in either event, all of the rights and privileges herein granted shall immediately cease and terminate, and said water and/or said sewer line or lines serving said house trailer and/or other movable structure shall be immediately cut off and disconnected by the superintendent of the waterworks and sewerage department of the town or any authorized employee of the department.

Provided further, that the superintendent of the waterworks and sewerage department, or any other authorized employee of said department, shall have and is hereby given full, absolute, and unrestricted authority to enter upon the land upon which said land owner's residence and house trailer and/ or other movable structure may be located, at any time, for the purpose of inspecting and testing any water and/or sewerage line or lines, making requirements for any changes in said water and/or sewer lines that may be deemed advisable by the town, to ascertain what person or persons may be using and/or occupying such house trailer and/or other such structure, and to cut off and/or disconnect the water line or lines serving any such house trailer and/or other such movable structure; all of which rights and privileges in favor of the Town of Ashland City, Tennessee, are not only expressly reserved and granted herein by this chapter, but all such rights and privileges are expressly agreed and consented to by any land owner who may now or hereafter act under, or be

subject to, all of the provisions of this chapter, and all without notice of any kind being further required.

Provided further, that the words or term "land owner," appearing in this chapter, shall include both the masculine and feminine gender, and that the word or term "land," also appearing herein, shall include a lot or parcel of land of any size or area. (1973 Code, § 8-403)

18-504. Chapter not applicable to certain mobile homes. Where any house trailer used as a place of residence has been parked, placed, or located within the corporate boundaries for a period of more than six months prior to the date that this chapter goes into effect, and where water and sewerage facilities or either of said utilities are not available, this chapter shall not apply. (1973 Code, § 8-404)

CHAPTER 6

STORMWATER MANAGEMENT

SECTION
18-601. Introduction.
18-602. Stormwater management policy.
18-603. Administration.
18-604. Permitting procedures.
18-605. Flood plain requirements.
18-606. Technical guidelines and criteria.
18-607. Checklist.
18-608. Definitions

18-601. Introduction. (1) Authorization and title. As authorized by ordinance no. 119 and approved by the mayor, the provisions of this document establish the regulations and technical guidelines developed by the Town Engineer and the Director of the Town of Ashland City Department of Public Works (ACDPW) to enforce the terms of that ordinance. This manual shall be cited as the "Town of Ashland City Stormwater Management Manual".

(2) Scope. The provisions of this manual shall replace any previous regulations and shall apply to all surface alteration and construction within the boundary of Town of Ashland City.

(3) Language. (a) Rules. The following rules of construction shall apply to the text of these volumes:

(i) The particular shall control the general.

(ii) In the case of any difference in meaning or implication between the text of these regulations and the text of the ordinances, the text of the ordinance shall control.

(iii) The words "shall" and "should" are always mandatory and not discretionary. The word "may" is permissive.

(iv) The word "permitted" or words "permitted as of right" mean permitted without meeting the requirements of these regulations.

(v) Words used in the present tense include the future tense. The singular includes the plural, unless the context clearly indicates the contrary.

(vi) All public officials, bodies, and agencies to which reference is made are those of the Town of Ashland City, Tennessee, unless otherwise indicated.

(vii) The term "Ashland City" shall mean the area of jurisdiction of the Town of Ashland City.

(viii) Reference to "ordinance" is to ordinance 119 unless otherwise specified.

(b) Definitions. In general, all words used in these regulations shall have their common dictionary definitions. Definitions or certain specific terms as applied to these regulations may be found in section 18-608 of this chapter.

(4) Legal considerations. (a) Caveat. This manual neither replaces the need for professional engineering judgement nor precludes the use of information not presented in the manual. The user assumes full responsibility for determining the appropriateness of applying the information presented herein. Careful consideration should be given to site-specific conditions, project requirements, and engineering experience to ensure that criteria and procedures are properly applied wad adapted.

(b) Disclaimer of liability. The degree of flood protection intended to be provided by these regulations is considered reasonable for regulatory purposes, and is based on engineering and scientific methods of study Larger floods may occur on occasion, or the flood height may be increased by man-made or natural causes, such as bridge openings restricted by debris. These ordinances and regulations do not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. These regulations or ordinances shall not create a liability on the part of, or a cause of action against, the Town of Ashland City or any officer or employee thereof for any flood damages that result from reliance on these regulations or ordinances, or any administrative decision lawfully made thereunder.

(c) Severability. If any section, subsection, sentence, clause, phrase, or portion of these regulations is for any, reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding, shall not affect the validity of the remaining portions of these regulations.

(d) Compatibility. If any provisions of these regulations and any other provisions of law impose overlapping or contradictory requirements, or contain any restrictions covering any of the same subject matter, that provision which is more restrictive or imposes higher standards or requirements shall govern. These regulations do not relieve the applicant from adhering to provisions of any other applicable codes, ordinances or regulations not explicitly repealed by these regulations.

(e) Saving provision. These regulations do not abate any action now pending under prior existing regulations unless as expressly, provided herein. (Ord. #119, Oct 1994)

18-602. Stormwater management policy. (1) Objectives. The objectives of these regulations are:

(a) To protect human life and health.

(b) To minimize expenditure of public money for costly flood control projects.

(c) To minimize the need for rescue and relief efforts associated with flooding.

(d) To help maintain a stable tax base by providing for the sound use and development of the flood-prone areas in such a manner as to maximize beneficial use without increasing flood hazard potential.

(e) To ensure that potential home buyers (and property owners) are notified that property is in flood area and generally increase the public awareness of flooding potential.

(f) To minimize prolonged business interruptions.

(g) To minimize damage to public facilities and utilities such as; water and gas mains, electric, telephone, and sewer lines, and streets and bridges located in flood plains.

(h) To ensure a functional drainage system that will not result in excessive maintenance costs.

(i) To encourage the use of natural and aesthetically pleasing design.

(j) To guide the construction of drainage and flood plain management facilities by performing comprehensive master drainage planning.

(2) Policy statements. To implement the objectives presented above, the following general policy statements shall apply:

(a) The Town of Ashland City Stormwater Management Program is intended to establish guidelines, criteria, and procedures for stormwater management activities within the Town of Ashland City.

(b) If available, each individual project shall be evaluated for consistency with the master stormwater management plan for the major watershed or watersheds within which the project site is located.

(c) In the absence of such a master plan, a system of uniform requirements shall be applied to each individual project site. In general, these uniform requirements will be based on the criterion that post-development stormwater peak runoff and water quality must not differ significantly from pre-development conditions.

(d) No construction, whether by private or public action, shall be performed in such a manner as to materially increase the degree of flooding in its vicinity or in other areas whether by flow restrictions, increased runoff, or by diminishing channel or overbank storage capacity.

(e) New construction may not aggravate upstream or downstream flooding. Existing downstream or upstream problems may be required to be corrected in conjunction with new development.

(f) Unwarranted acceleration of erosion due to various land development activities must be controlled.

(g) An adverse accumulation of eroded soil particles in the major stormwater management system must be avoided.

(h) The minimum diameter for all storm drains shall be 15 inches. Cross-drains shall be a minimum of 18 inches.

(i) Development within flood plain shall be prohibited.

(3) Drainage systems. For the purposes of these regulations, drainage systems are considered to comprise two parts, the major and minor systems. A brief description of these two parts is presented below.

(a) Minor systems. The minor system of a drainage network is sometimes termed the "initial system" and may consist of a variety of drainage appurtenances ranging from inlets, manholes, street gutters, roadside ditches, and swales to small channels or pipes. This system collects the initial stormwater runoff and conveys it to a proper outfall within the major system.

(b) Major systems. The major system primarily consists of natural waterways, large storm sewers, and large water impoundments, but it can also include less obvious drainageways such is overland relief swales and infrequent temporary ponding at storm sewer inlets. The major system includes not only the trunk line drain that receives the water from the minor system, but also the natural flow path that functions in case of overflow from or failure of the minor system. Properly designed overflow relief will not flood or damage homes, businesses, or other property. It must always be remembered that the major system will function whether or not it has been planned and designed, and whether or not development is situated wisely with respect to it.

(4) Stormwater detention. Development with the Town of Ashland City can cause radical changes to the topography, ground cover, and minor drainage systems within each drainage basin. These changes may have adverse effects on the environment, primarily through the subsequent increase in stormwater runoff. In some areas, the combination of increased runoff and the location of property near a stream can result in more frequent flooding. In these areas, upstream control of frequent as well as large flows may not provide adequate flood protection for residents and property downstream.

To minimize adverse effects, onsite detention of stormwater is mandatory for all developments subject to review by the ACDPW. Because detention in downstream areas of a large watershed can cause increased peak flows in downstream channels, the ACDPW reserves the right to alter the detention criteria and to prohibit it where it is not in the best interests of the town. This decision shall be based on sound engineering judgement and/or studies. The ACDPW may also require or allow some type of in-stream mitigation measure in lieu of detention, where it can be shown that such measures are of equal or greater benefit. Nevertheless, in all cases where detention facilities are

required, the location and design must comply with any master drainage plans that may have been adopted.

Although this policy is primarily concerned with maintaining post-development peak outflow at the level of the pre-development condition, it may be applied under certain conditions for the purpose of maintaining adequate capacity of an existing outfall. When used for this purpose, a detention facility may also aid in meeting the requirement for adequate drainage.

(5) Flood plains. {A choice needs to made as to the level of floodplain development that will be allowed.}

Development of property located within the flood plain must comply with guidelines established in Ordinance No. 119. Wise use of the flood plain is encouraged to minimize adverse effects or flood heights and velocities. Areas of the flood plain available for development must be protected through the use of compacted fill, elevated, structures, ditches, or flood walls. Any use of the measures must be in accordance with the requirements in section 18-605 of this chapter. Other floodproofing measures are subject to the approval of the ACDPW.

Development of property located within the flood plain is prohibited.

(6) Erosion and sediment control. Any development shall be conducted in a manner which minimizes soil erosion and resulting sedimentation. Site-specific variables such as topography, soil erodibility, drainage features, and vegetation shall be considered when developing an erosion control plan. The exposed area of any disturbed land shall be limited to the smallest practical area for the shortest possible period of time. (Ord. #119, Oct 1994)

18-603. Administration. (1) Overview. The division of responsibilities for administering stormwater management activities among public agencies is summarized. The requirements for permitting and activities exempted from permit review by the department of public works, the building inspector and the town engineer are delineated both for building and grading. Procedures are established for enforcement of stormwater regulations and inspection of affected sites. Requirements for as-built certifications are also addressed.

(2) Organization. Administration of stormwater management activities is carried out by the department of public works (ACDPW), the town engineer and the planning commission. An applicant may appeal an adverse decision of these agencies to the board of zoning appeals. Specific stormwater management responsibilities of these entities are briefly discussed below.

(a) Town engineer. The town engineer reviews building and grading permit applications referred to it by the building inspector. Applications are reviewed for completeness and for technical compliance with the requirements of these stormwater management regulations and other pertinent laws and ordinances. A recommendation for approval or denial is submitted to the building inspector.

The town engineer also reviews subdivision plats and planned unit development (PUD) plans at the request of the planning commission. In addition, the ACDPW is responsible for enforcement and inspection activities, and for obtaining as-built certifications.

(b) Department of public works (ACDPW). In order to carry out the duties set forth in these regulations, the director of ACDPW has the authority to initiate the following actions:

(i) Authorize designated employees of the ACDPW to act in his behalf in carrying out the duties set forth in ordinance no. 119 and these regulations.

(ii) Establish and amend written regulations and technical guidelines to enforce the terms of ordinance no. 119 (approval of the mayor required).

(iii) Inspect private drainage systems and order corrective actions as necessary to properly maintain drainage systems.

(iv) Prepare or have prepared master plans for drainage basins and such details as may be needed to implement the master plans.

(c) Building inspector. The building inspector receives building and grading permit applications and refers them to the town engineer and the department of public works for approval before issuance. Except for exempted structures (see section 18-603(5)), a building permit cannot be issued until grading, drainage, and erosion control plans are approved by the town engineer and the ACDPW.

The director of the department of public works, with the approval of the mayor, has the authority to establish written regulations and technical guidelines as may be necessary to enforce the terms of ordinance no. 119.

(d) Planning commission. The planning commission is responsible for receiving and referring subdivision plats and PUD plans to the ACDPW. Subdivision plats or PUD plans must be approved prior to applying for building or grading permits.

All preliminary concept plans for PUDs and major subdivisions submitted to the planning commission shall include a statement that no grading, excavating, stripping, filling, or other disturbance of the natural ground cover shall take place prior to the approval of a grading, drainage, and erosion control plan, as appropriate. Depending on the potential impact of the proposed project, the planning commission may require that certain requirements of these regulations be included on the preliminary plan for review by the ACDPW and the town engineer (see section 18-604(2)(b)).

(e) Board of stormwater appeals. If an applicant desires to appeal an adverse decision related to compliance with the stormwater

management regulations, the Ashland City Board of Stormwater Appeals has been established for that purpose.

Appeals for consideration by the board must be filed on a form provided by the ACDPW and will be handled in accordance with variance procedures of section 18-603(6) and the internal operating rules and regulations of the committee.

(3) Permit requirements. Stormwater management activities associated with development projects require either building or grading permits or both. Building and grading permits can be issued separately and at different times in the sequence of a project, or they can be issued jointly. Additional permits may be required by state or federal agencies.

Except for exempted activities (see section 18-603(5)), a building permit cannot be issued until grading, drainage, and erosion control plans are approved by the town engineer and the ACDPW. When grading, stripping, excavating, filling, or any disturbance to the natural ground cover is planned for non-exempted activities not requiring a building permit (see section 18-603(4) for exemptions), then a grading permit is required. Any development activity within a designated flood plain is prohibited unless it is an accepted agricultural land management practice. Even when development is exempt from obtaining a grading permit (see section 18-603(4)) or ACDPW approval for a building permit (see section 18-603(5)), the ACDPW retains the authority to remove such exemption should development be found in violation of exemption criteria.

In addition, none of the following documents shall be issued or granted under applicable zoning regulations or other laws unless and until a grading, drainage, and erosion control plan has been approved by the ACDPW.

(i) Final approval for a proposed major subdivision.
(ii) Final approval for a proposed PUD.
(iii) Building permit.
(iv) Final approval for a site plan.

Any of the above should be applied for or submitted at the same time as the grading permit application. "Conditional final approval" does not constitute "final approval" under this section.

All grading permit applications shall include a grading, drainage, and erosion control plan prepared by a professional engineer or landscape architect, as appropriate.

(4) Grading permit exemptions. Specific activities that are exempt from obtaining a grading permit are identified in sections 18-603(4)(a) through 18-603(4)(f). These exemptions shall not be construed as exempting the identified activities from onsite drainage improvements that may be required to conform to adopted building and construction codes, or from compliance with flood plain requirements presented in section 18-605 of this chapter.

In addition, the property owner or developer whose activities have been exempted from the requirements for permits and approvals enumerated in this

manual shall nevertheless be responsible for complying with the intent and provisions of these regulations.

(a) Exemption for approved subdivision or PUD grading plans. No grading permit shall be required for any structure within a major subdivision or PUD for which there exists an approved grading, drainage, and erosion control plan. However, any alteration to the original grading, drainage, and erosion control plan may require submittal of an additional grading, drainage, and erosion control plan.

Any person disturbing the natural ground cover in an area for which there is an approved grading, drainage, and erosion control plan shall conform to the requirements of such plan without exception. In addition, subsequent development activities shall not impair existing drainage, constitute a potential erosion hazard, or act as a source of sedimentation to any adjacent land or watercourse.

(b) Exemption for finish grading. No grading permit shall be required for finish grading or excavation below finished grade for the following structures:

(i) Basements and footings of a single family or duplex residential structure.

(ii) Retaining walls.

(iii) Swimming pools.

(iv) Human or animal cemeteries.

(v) Accessory structures related to single family residences or duplex structures authorized by a valid building permit, provided the disturbed material or fill is handled in such a manner as to conform to the approved erosion control plan for the area or, where no such erosion control plan is in effect, that such work is done in a manner which presents no significant erosion hazard.

(c) Exemption for excavation or fill. No grading permit shall be required for an excavation or fill that satisfies all of the following criteria:

(i) Is less than five (5) feet in vertical depth at its deepest point as measured from the natural ground.

(ii) Does not result in a total quantity of more than 100 cubic yards of material being removed from, deposited on, or disturbed on any lot, parcel, or subdivision thereof.

(iii) Does not impair existing surface drainage, constitute a potential erosion hazard, or act as a source of sedimentation to any adjacent land or watercourse.

(iv) Has no fill placed on a surface having a slope steeper than five (5) feet horizontal to one (1) foot vertical (steeper slopes can be allowed if justified by calculations for appropriate stabilization measures).

(v) Has no final slopes steeper than one (1) foot vertical to three (3) feet horizontal (steeper slopes can be allowed if justified by calculations for appropriate stabilization measures).

(vi) Has proper vegetative cover re-established as soon as possible on all disturbed areas.

(vii) Does not contain hazardous substances.

(viii) Is not partially or totally in a drainage basin with primary outlet to a sinkhole or drainage well.

(d) Exemption for agricultural practices. No grading permit shall be required for accepted agricultural land management practices such as plowing; cultivation; construction of agricultural structures; nursery operations such as the removal of or transplanting of cultivated sod and trees; tree cuttings at or above existing ground level; and logging operations leaving the stump, ground cover, and root mat intact.

(e) Exemption for maintenance grading. No grading permit shall be required for grading as a maintenance measure, or for landscaping on existing developed lots or parcels, provided all of the following criteria are met:

(i) The aggregate area affected or stripped at any one time does not exceed 10,000 square feet, and is not within a natural drainageway (e.g., designated flood plain).

(ii) The grade change does not exceed eighteen (18) inches at any point and does not alter the direction of the drainage flow path.

(iii) Proper vegetative cover is re-established as soon as possible on all disturbed areas.

(iv) The grading does not involve a quantity of material in excess of 100 cubic yards.

(f) Exemption for public utilities. No grading permit shall be required for installation of lateral sewer lines, telephone lines, electricity lines, gas lines, or other public service facilities. Although exempt, public agencies are required to submit documents to the ACDPW for consistency reviews and to allow coordination with other activities.

(5) Exemptions from ACDPW building permit review. When making building permit application referrals to the ACDPW, the building inspector shall exempt or exclude certain residential, commercial, or industrial activities as identified below.

(a) Residential exemptions. Grading plan exemptions shall be given for single to two family individual residential dwellings in any given area that do not alter a drainage channel and do not alter the landscape by excavation or fill, provided the project meets all of the criteria presented in section 18-603(4)(c) for grading permit exemptions for excavation or fill.

(b) Commercial or industrial exemptions. Grading plan exemptions shall be given for commercial or industrial development provided such development adds less than 10,000 square feet of impervious surface and all of the criteria presented in section 18-603(4)(c) for grading permit exemptions for excavation or fill are met.

(6) Variance procedures. The board of zoning appeals shall hear and decide appeals and requests for variances from the requirements of these regulations. Appeals and requests for variances must be filed with the board and will be handled in accordance with the variance considerations and internal operating rules and regulations of the board. Proper justification is required for specific variances such as lower elevations or compensating storage criteria.

(7) Enforcement. (a) Right of entry. The director of ACDPW, the town engineer, or any of their duly authorized representatives may enter upon the premises of any land within the Town of Ashland City for the purposes of inspecting the site before, during, and after construction to determine compliance with these regulations.

(b) Revocation. The director of ACDPW may revoke any approval or permit issued under the provisions of these regulations when informed of any false statement or misrepresentation of facts in the application or plans on which the permit or approval was based.

(c) Corrective measures. Any non-permitted drainage system or construction or fill located within a flood plain shall, upon written notice from the director of ACDPW, be removed at the property owner's expense.

(d) Stop work order. Upon notice from the director of ACDPW or the building inspector, work being performed on any site within the Town of Ashland City contrary to the provisions of these regulations shall be immediately stopped. Such notice shall be in writing and shall be given to the owner of the property or to the person doing the work, and shall state the conditions under which the work may be resumed.

(e) Penalties and injunctions. Any violation of these regulations shall be punishable by a fine of not more than fifty ($50.00) dollars for each and every violation. Each day that a violation is not corrected shall be a separate offense.

In addition to all other remedies provided by law, the Town of Ashland City shall have the right to injunctive relief for any violation of these regulations.

(8) Inspections. The ACDPW may make or cause to be made the inspections required by this section. Reports by inspectors employed by recognized inspection services may be accepted provided that, after investigation, their qualifications and reliability prove satisfactory. No certificate called for by any provision of these regulations shall be based on such reports unless the same are in writing and certified by a responsible officer of such service.

(a) Permitting. Before the building inspector issues a building permit, the ACDPW may examine or cause to be examined any tract of land for which an application has been received. The ACDPW may also examine or cause to be examined any tract of land for which a grading permit application has been received.

(b) Construction. The ACDPW shall inspect or cause to be inspected at various intervals all construction or grading for which a building permit or grading permit has been issued, and a final inspection or waiver thereof shall be made of the tract of land upon completion.

Upon notification from the permittee or his agent, inspections of the tract of land shall be performed at the following times, as well as such other inspections as may be necessary:

(i) Prior to the initiation of the project.

(ii) After the completion of the rough grading, after installation of drainage structures, and after erosion and sediment control practices have been instituted.

(iii) Upon completion of the project.

The ACDPW shall either approve that portion of the construction or grading as completed or shall notify the permittee or his agent where violations are noted.

Work shall not be done on any part of the tract of land beyond the point indicated in each successive inspection without first obtaining written approval from the ACDPW.

(9) As-built certifications. Prior to the issuance of a use and occupancy permit for any structure in a development (unless exempted by sections 18-603(4) and 18-603(5)), a registered engineer shall submit to the ACDPW a certificate that the drainage system (both public and private) and the public road system is complete and functional in accordance with the plans approved by the ACDPW. To insure the adequacy of detention facilities, this certification shall include as-built drawings showing final topographic features of all these facilities.

Prior to the issuance of a use and occupancy permit for any new or substantially improved structure subject to minimum floor elevation requirements, a registered engineer and/or registered land surveyor shall submit to the ACDPW certification of the elevation (in relation to mean sea level) of the lowest floor (including basement); or if the structure has been floodproofed, the elevation (in relation to mean sea level) to which the structure was floodproofed. (Ord. #119, Oct 1994)

18-604. Permitting procedures. (1) Overview. The procedure for applying for permits for building or grading and the process by which the ACDPW reviews permits is explained. Responsibilities of the applicant for posting permits, maintaining compliance with regulations, meeting time limits, and obtaining other required federal and state permits are also discussed.

(2) Application preparation. (a) Preapplication conference. All applicants may schedule a preapplication conference with the ACDPW and/or the town engineer to discuss their proposed project. While not mandatory, a preapplication conference is strongly encouraged to assure timely permit application preparation and review. This conference should be used to determine if a proposed project qualifies for exemption and to determine how technical guidelines and criteria should be applied.

(b) Required information and checklist. Each application for a grading permit or a building permit referred to the ACDPW shall contain site preparation plans sealed by a registered engineer, landscape architect, or land surveyor, as appropriate. Developer shall indicate whether or not the tract will be developed in stages and timing schedules shall be included when appropriate. Site preparation plans shall include grading, drainage, and erosion control plans with appropriate plan and profile sheets for proposed streets or roads.

To assist the applicant to prepare a complete application package and thereby ensure a timely review, an application checklist is provided in section 18-607. The applicant is encouraged to attach a signed copy of the checklist with the application to certify that a complete package is being submitted

Some requirements of the checklist will not be applicable to all projects, depending on the permit being requested. Omission of any required items shall render the plans incomplete, and they shall be returned to the applicant, or his engineer, for additional information.

(c) Grading, drainage, and erosion control plans. The grading, drainage, and erosion control plans shall be of quality suitable for reproduction by microfilm, and shall include as a minimum all of the following:

(i) A complete plan of the proposed development at a scale no less than 1" (one inch) = 100' (one hundred feet). This plan is to include existing and proposed contours at intervals no greater than 2' (two feet) (NGVD to be used exclusively). Contours shall extend to the centerline of all roads bordering the site. Where drainage ultimately enters the groundwater via a sinkhole or drainage well, the drainage area tributary to the sinkhole or drainage well shall be delineated.

(ii) Existing and proposed buildings on the property.

(iii) Existing and proposed impervious surfaces.

(iv) Proposed and existing drainage structures, including inlets, catch basins, junction boxes, drive pipes, culverts, cross drains, headwalls, and outlet facilities, with size, type, slope, invert elevations, and quantity indicated.

(v) Hydrologic and hydraulic calculations for appropriate design conditions and facilities.

(vi) Detention pond control structure details. If the pond is overtopped by the 100-year storm, include the emergency overflow.

(vii) Any proposed swale ditches, channel changes, or improvements, with typical section and length of change indicated.

(viii) Any high water or flood lines, either calculated or observed in the vicinity of the proposed development, and the source of said line or elevation indicated.

(ix) All fill areas indicated as such, with the limits and elevation indicated.

(x) At least one benchmark located, with the proper elevation indicated (NGVD to be used exclusively).

(xi) The location and size of the two drainage structures immediately downstream of the proposed development. This may be shown on a vicinity map with a scale no less than 1" (one inch) = 2000' (two thousand feet).

(xii) Drainage arrows indicating the existing and proposed direction of runoff throughout the plan

(xiii) Invert and top of grate elevations on all catch basins and inlets in addition to flow line elevations, stations, and percent grades of all cross drains and pipe between inlets and catch basins.

(xiv) Flood plain areas require the following information: existing and proposed flood plain and floodway boundaries along with flood plain elevations. Hydraulic calculations should be submitted, as appropriate.

(xv) Temporary erosion and sediment control measures to be implemented during construction (straw bales, silt fence, etc.).

(xvi) Final stabilization measures proposed for all disturbed areas on the property. Areas with slopes 2:1 or greater shall be stabilized with riprap or by other methods approved by the ACDPW. Show stabilization for each ditch.

(xvii) Where special structures such as box culverts, bridges, or junction boxes are proposed, detail plans showing dimensions, reinforcement, spacing, sections, elevations, and other pertinent information shall be submitted.

(xviii) Plans and calculations shall be signed and sealed by a registered engineer, landscape architect, and/or land surveyor, if application is for a grading permit. If application is for a building permit, they shall be signed and sealed by a registered engineer. All plans requiring engineering calculations (e.g., subsurface drainage design) shall be signed and sealed by a registered engineer.

Omission of any of the above requirements for detailed plans and calculations shall render the application incomplete, and it will be returned to the applicant, or his engineer, for additional information.

(d) Street plan and profile sheets. Street plan and profile sheets submitted for subdivisions shall include as a minimum all of the following:

(i) Detail plans plotted on plan and profile sheets to a minimum scale of 1" (one inch) = 100' (one hundred feet) horizontal, and 1" (one inch) = 10' (ten feet) vertical.

(ii) Plan section including the street and right of way plotted to the proper scale with stationing shown, which should match that of the profile section as nearly as possible.

(iii) Where conventional sections are used, the stabilization required for the roadside ditches, including the linear extent and type of stabilization required.

(iv) Typical roadway sections, as appropriate.

(v) Profile section plotted to the same scale as identified above and including the proposed centerline finish grade profile, in addition to the existing centerline profile.

(vi) Existing ground profiles at 25' (twenty-five feet) left and right of centerline, including the centerline, in accordance with Ashland City Subdivision Regulations.

(vii) All vertical control points on or pertaining to the proposed centerline profile such as P.V.C., P.V.I., and P.V.T.; all low points and street intersections as to station and elevation.

(viii) All percent grades and vertical curve data, both balanced and unbalanced.

(ix) Centerline finished grade elevations every 50' (fifty feet) to the nearest hundredth of a foot, at the bottom of the profile sheet.

(x) Plan and profile sheets shall be signed and sealed by a registered engineer.

(e) Sinkhole and drainage well information. Because of the many drainage problems commonly associated with sinkholes and drainage wells, the applicant must provide the following information prior to the alteration of the natural drainage for watersheds discharging to such features:

(i) Proposed onsite and offsite drainage channels that are tributary to a sinkhole throat or drainage well inlet shall be delineated, along with appropriate hydraulic calculations to define the existing and altered (if appropriate) 100-year flood plain and to confirm that offsite flooding will not be increased. Such drainage plans and hydraulic calculations are to be certified by a registered engineer.

(ii) Detailed contours are to be shown for all sinkholes that are to receive stormwater runoff from the site. These contours are to have a maximum interval of 2 feet and are to be verified by field surveys.

(iii) A geologic investigation of all sinkholes receiving, stormwater runoff from the site shall be performed. The report from this investigation shall be certified by a registered engineer experienced in geology and groundwater hydrology and shall contain the following:

(A) Location and nature of underground aquifers.

(B) Direction of flow for the subsurface drainage associated with the sinkhole or drainage well.

(C) Estimated safe discharge from sinkhole to aquifers. Include information on method of sinkhole discharge estimation.

(D) Potential for siltation problems.

(E) Foundation problems that may be expected around sinkhole.

(F) Details of drainage structures to be built in sinkholes.

(G) Any other factors relevant to the design of drainage from sinkholes.

(H) Plans showing the current and altered (if appropriate) 100-year flood plain.

(I) Details of plan for grading and clearing of vegetation within the 100-year flood plain established for the sinkhole or drainage well. The regulations prohibiting construction in flood plains shall apply to this flood plain also.

(iv) Compliance with any and all conditions that may be required by the federal government or the State of Tennessee shall be documented. The Tennessee Department of Environment and Conservation Division of Ground Water Protection is the primary regulatory agency for drainage wells. Drainage into a sinkhole may require a permit for a Class V well under rules for Underground Injection Control (UIC).

(v) Demonstration that development will not occur within the area flooded by the 100-year flood. The 100-year elevation may be lowered by construction of a drainage well or detention pond. Calculations that document a lowering of the 100-year flood elevation shall be based on the 100-year, 24-hour storm using an appropriate safety factor for discharge into the sinkhole.

Multiple residential developments must be designed assuming total sinkhole or drainage well blockage. A surface outlet may be provided to prevent

stormwater from rising above the 100-year flood elevation. No development will be allowed within the drainage basin of a sinkhole if such development will lead to any additional increase in flood levels within that or adjacent basins. Special care will be required during construction to prevent eroded soil or debris from being washed into the sinkhole.

(3) Application processing. Applications for grading/building permits are made to the department of public works. Each major component of this review process is briefly described below.

(a) Initial receipt. When referred to ACDPW, permit applications are logged in by date.

(b) Review. The town engineer first conducts a sufficiency review of the permit application to determine if all basic information has been included. A sufficiency review checklist similar to the application checklist presented in section 18-607 will be used for this purpose. Should the permit application be determined to be incomplete, the application will be returned to the applicant along with a written request for any additional information.

When all basic information has been supplied, the town engineer will conduct a technical evaluation of the permit application. This technical evaluation will be based on the technical criteria outlined in section 18-606.

(c) Town engineer recommendation. If in the opinion of the town engineer, the work described in the permit application, including drawings, conforms to the requirements of these regulations and other pertinent laws and ordinances, a grading permit shall be issued and a recommendation for approval shall be given to the building inspector who may then issue a building permit.

However, if in the opinion of the town engineer, the application, including the drawings, describes work that does not conform to the required requirements of these regulations or other pertinent laws or ordinances, the town engineer shall disapprove the application. The denial shall be accompanied by written reasons and returned to the applicant. The opinion of the town engineer shall be based on the results of the sufficiency review and the technical evaluation.

(d) Revisions to approved plans. Should prior to or during construction, changes be anticipated that would constitute a revision of the plans already approved by the town engineer, the approved plans shall be revised and resubmitted in triplicate by a registered engineer, along with a letter stating why such changes are believed necessary. The town engineer reserves the right to waive this requirement or to re-review the entire set of plans in the light of requested changes.

(4) Construction procedures. A person firm, or corporation required to obtain a grading permit from the ACDPW in compliance with these regulations must do so prior to commencing any work pertaining to the permit.

Corrective measures including but not limited to stop work orders, penalties, and injunctions may be taken as required to enforce the terms of this requirement.

(a) Posting of permit. Work requiring a grading permit shall not be commenced until the permit holder or his agent shall have posted the grading permit card in a conspicuous place on the front of the premises. The permit shall be protected from the weather and be placed to allow easy access for recording entries. The permit card shall remain posted by the permit holder until the certificate of occupancy has been issued by the department of codes administration.

(b) Effect of permit. A grading permit issued pursuant to this section shall be construed to be a license to proceed with the work and shall not be construed as authority to violate, cancel, alter, or set aside any of the provisions of these regulations, nor shall issuance of a permit prevent the ACDPW from thereafter requiring a correction of errors in plans or in construction or of violations of these regulations.

(c) Time limits on permit. Unless the work authorized by a grading permit is commenced within six (6) months after the date the permit was issued, the grading permit shall become invalid and a new permit shall be required. If the work authorized by such permit is not completed in accordance with approved timing schedules, the permit shall be invalid; however, for just and reasonable cause, one or more extensions for periods not exceeding thirty (30) days each may be allowed. Requests for such extensions shall be submitted in writing to the ACDPW. Authorization shall also be in writing.

(5) Federal and state permits. Approval by the Town of Ashland City does not relieve the applicant of responsibility for obtaining any permits required by the U.S. Army Corps of Engineers, Tennessee Division of Water Management, Tennessee Department of Ground Water, Region IV of the U.S. Environmental Protection Agency, or by any other federal or state agencies.

Regulatory programs of the Corps of Engineers and requirements for Department of the Army (DA) permits are summarized below.

Section 10 of the Rivers and Harbors Act of 1899 prohibits the unauthorized obstruction or alteration of any navigable water of the United States unless the work has been previously authorized by a DA permit. The construction of outfalls, drainage outlets, or other structures below ordinary high water of any navigable water will require a DA permit prior to construction.

Section 301 of the Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States unless the work has been previously authorized by a permit pursuant to Section 404 of the same Act. Placement of dredged or fill material below ordinary high water of any water in conjunction with drainage improvements (e.g., channel realignments, concrete slope paving) will require a DA permit prior to construction.

If a permit is required, approximately 60 days would normally be required for permit processing. Depending on the nature and location of the work, it is possible that the work has been previously approved under authority of the nationwide permit and individual processing would not be required.

Details related to permitting requirements can be obtained from the Corps of Engineers. (Ord. #119, Oct 1994)

18-605. Flood plain requirements. (1) Zoning Ordinance. Uses permitted within the flood plain shall be in accordance with Articles 4 and 5 of the Zoning Ordinance of Ashland City, Tennessee and as summarized in sections 18-605(2) and 18-605(3) of this manual. The regulations and controls set forth shall be applied within the areas designated on the zoning map that are made a part of the zoning ordinance and may be viewed upon request at the town hall. However, nothing contained herein shall prohibit the application of the Article 4 regulations to lands that can be demonstrated by competent engineering survey, using the adopted profiles from which the flood protection elevation is derived, to lie within any flood plain. Conversely, any lands that can be demonstrated by competent engineering to lie beyond the flood plain shall not be subject to the Article 4 regulations. Any lands within the areas designated as flood plain on the zoning map or special overlays shall be subject to the regulations on controls pertaining to flood plains as set forth in this manual.

(2) Base flood and floodway data. All applications for proposed projects within areas of special flood hazard shall provide base flood elevations and floodway data to establish flood plain easements. Areas of special flood hazard along with base flood elevation and floodway data for many streams in the county are available from the Flood Insurance Rate Map (FIRM), ACDPW map revision files, and any work to develop master plans for selected watersheds. All proposed developments near streams included in these studies must be designed in accordance with the provisions of these regulations.

If a project is located in an unnumbered A zone, the applicant shall provide base flood elevation and floodway data as documented in a flood plain report when the project is greater than the lesser of 50 lots or 5 acres. In addition, a flood plain report shall be required for areas outside unnumbered A zones, when the stream has a drainage area of one square mile or greater. Approximate methods for flood level determination may be used if prior approval is granted by ACDPW.

The flood plain report shall consist of plan and profile data and water surface elevation calculations. The plan view shall show the flood plain water surface limits, flood plain easement lines, base line, cross section stations, and adjacent boundaries. The profile should show stream invert, cross section stations, and computed water surface elevations. The report should also show the drainage divides on the plan and the ultimate zoning categories used.

Base flood elevation and floodway data submitted by the applicant for areas previously without such data or for areas not studied by FEMA, shall be reviewed by ACDPW and if acceptable, shall be processed for adoption as part of the official flood plain management data for these regulations. When the base flood elevation and floodway data submitted by the applicant results in a deviation from the data developed by FEMA, such deviations shall become official following review and approval by both ACDPW and FEMA. All costs for FEMA review and engineering studies shall be borne by the applicant.

[These are the regulations adopted by Nashville, allowing development in the flood plains]

(3) General standards. In all areas of special flood hazard, the following, provisions are required:

(a) New construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(b) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces.

(c) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(d) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

(e) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(f) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

(g) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.

(h) On site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

(i) Any alteration, repair, reconstruction, or improvements to a structure that is in compliance with the provisions of these regulations shall meet the requirements of "new construction" as contained in these regulations.

(4) Specific standards. In all areas of special flood hazard where base flood elevation data have been provided, the provisions detailed below are required. It is the intent of ACDPW that all construction, whether within or adjacent to delineated flood plains, shall be subject to the provisions of these regulations. As an example, all residential construction shall be elevated such that the lowest floor is no lower than 4 feet above the base flood elevation. Exceptions to this standard may be granted on appeal to the board of zoning appeals based on a demonstration that the regulatory elevation is so conservative as to place an unreasonable burden upon developers or property owners.

(a) Residential construction. New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated no lower than 4 feet above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards.

(b) Non-residential construction. New construction or substantial improvement of any commercial, industrial, or non-residential structure shall have the lowest floor, including basement, at least one foot above the level of the base flood elevation. Structures located in all A zones may be floodproofed in lieu of being elevated, provided that all areas of the structure below the required elevation are watertight, with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered engineer or architect shall certify that these standards are satisfied.

(c) Elevated buildings. New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space. Design shall also allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls. Designs for complying with this requirement must either be certified by a registered engineer or architect, or meet the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch shall be provided for every square foot of enclosed area subject to flooding.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.

Electrical, plumbing, and other utility connections are prohibited below the base flood elevation. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(d) Floodways. Areas designated as floodways are located within areas of special flood hazard. The floodway is an extremely hazardous area because of the velocity of floodwaters, which can carry debris and potential projectiles and have erosion potential. Thus, the following provisions shall apply:

(i) Encroachments, including fill, new construction, substantial improvements, and other developments, are prohibited unless certification (with supporting technical data) by a registered engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.

(ii) If item (i) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of these regulations.

The open space uses listed below shall be permitted within the floodway to the extent that they are not prohibited in a particular area by any base zoning ordinance and all applicable flood hazard reduction provisions of these regulations are met.

(i) Agricultural uses such as general farming, pasture, truck farming, forestry, sod farming, and wild crop harvesting.

(ii) Public and private recreational uses not requiring "permanent or temporary structures" designed for human habitation; some examples are parks, swimming areas, golf courses, driving ranges, picnic grounds, wildlife and nature preserves, game and skeet ranges, and hunting, fishing, and hiking areas. Temporary structures are placed on a site for less than 180 consecutive days and are not intended to be improved property.

(iii) Utility facilities such as flowage areas, transmission lines, pipelines, water monitoring devices, roadways, and bridges.

(e) Flood plain alterations. All flood plain alterations that result in the filling or elimination of flood plain storage shall provide compensating storage capacity by dredging out an equal amount of volume as occupied by fill. All dredged or cut materials shall be removed from the site before fill materials can be delivered, unless all fill material is generated onsite. Every effort shall be made to preserve natural flow

lines and to avoid situations which would encourage the disposition of sediment in slack, water areas.

All dredged or cut areas shall be stabilized immediately to prevent excessive erosion. Areas to be filled must be cleared of standing trees, stumps, brush, downtimber, and all objects including structures on and above the ground surface. Topsoil shall be removed and stockpiled, while all other spoil materials must be disposed of offsite. Fill material obtained offsite shall not be stockpiled onsite before grading cuts are completed. Fill material shall be placed in compacted layers and the minimum distance from the perimeter of any proposed building to the top of the slope shall be either 25 feet or twice the depth of fill at that point, whichever is greater. The fill material must not have slopes equal to or greater than 2:1 unless stabilization measures approved by the ACDPW are installed. All slopes shall be stabilized.

No alterations can be made to flood plain land and drainage channels without the written approval of the Director of ACDPW. All applicable requirements of and, in addition, the following specific conditions must be met before such approval will be granted:

(i) The construction of a levee, earth fill, building, or other structure that alters a flood plain area shall only be permitted based on a plan prepared by a registered engineer, showing existing and proposed elevations, existing and proposed drainage channels, and existing and proposed structures. The plan shall be approved by the Director of the ACDPW certifying that the alteration and construction as proposed are in compliance with all applicable flood hazard reduction provisions of these regulations.

(ii) The proposed excavation, filling, or change of alignment of any existing channel under the jurisdiction of the U.S. Corps of Engineers shall be approved by same.

(iii) The plan shall be approved by the Metropolitan Planning Commission. Any duly approved alteration of the flood plain shall be so noted on the official zoning map as a matter of information. This notation will be made upon certification by the Director of the ACDPW to the Planning Commission that such alteration has been completed in accordance with the approved plan.

(f) Floodproofing. Floodproofing measures such as those identified below are acceptable provided they are certified by a registered engineer or architect as being consistent with the base flood conditions for the particular area, and that floodproofing criteria for non-residential construction in section 18-605(4)(b) are met.

(i) Anchorage to resist flotation and lateral movement.

(ii) Installation of watertight doors, bulkheads, and shutters.

(iii) Reinforcement of walls to resist water pressures.

(iv) Use of paints, membranes, or mortars to reduce seepage of water through walls.

(v) Addition of mass or weight to structures to resist flotation.

(vi) Installation of pumps to lower water levels in structures.

(vii) Construction of water supply and waste treatment systems to prevent the entrance of flood waters.

(viii) Building facilities for subsurface drainage systems for buildings to relieve external foundation wall and basement floor pressures.

(ix) Construction to resist rupture or collapse caused by water pressure or flotation debris.

(x) Cutoff valves on sewer lines or the elimination of gravity flow basement drains.

(5) Standards for streams without established base flood elevations and/or floodways. It is the intent of ACDPW that all construction whether within or adjacent to delineated flood plains, shall be subject to the provisions of these regulations. As an example, all residential construction shall be elevated such that the lowest floor is no lower than 4 feet above the base flood elevation. Exceptions to this standard may be granted on appeal to the board of zoning appeals based on a demonstration that the regulatory elevation is so conservative as to place an unreasonable burden upon developers or property owners.

For proposed developments located near small streams but where no base flood data or floodways have been provided or required under the Federal Flood Insurance Program or by section 18-605(2) of these regulations, the following provisions apply:

(a) No encroachments, including fill material and structures, shall be located within a minimum distance of 25 feet from the top of the stream bank on each side or 30 feet from the centerline of a stream channel, whichever is greater, unless certification by a registered engineer is provided demonstrating that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(b) New construction or substantial improvements of residential structures shall have the lowest floor, including basement, elevated at least four (4) feet above the base flood elevation as determined by an appropriate approximate method.

(c) New construction and substantial improvements of non-residential structures shall have the lowest floor, including basement, elevated at least 2 feet above the highest adjacent grade; or, together with attendant utility and sanitary facilities, be completely

floodproofed to or above that level so that any space below that level is watertight, with walls substantially impermeable to the passage of water, and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.

(6) Subdivision standards. All subdivision projects shall meet the following provisions:

(a) Design shall be consistent with the need to minimize flood damage.

(b) Public utilities and facilities such as sewer, gas, electrical, and water systems shall be located and constructed to minimize flood damage.

(c) Drainage facilities shall be provided to reduce exposure to flood hazards.

(d) Base flood elevation and floodway data shall be provided as required in section 18-604(2).

(7) Standards for areas of shallow flooding (AO zones). Designated shallow flooding areas are located within the areas of special flood hazard. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. Thus, the following provisions apply:

(a) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to a depth number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least 2 feet above the highest adjacent grade.

(b) All new construction and substantial improvements of non-residential structures shall:

(i) Have the lowest floor, including basement, elevated to a depth number specified on the Flood Insurance Rate Map, in feet, above the highest adjacent grades. If no depth number is specified, the lowest floor, including basement, shall be elevated at least 2 feet above the highest adjacent grade, or

(ii) Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level, so that any space below that level is watertight, with walls substantially impermeable to the passage of water, and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(8) Nonconforming uses. The existing lawful use of a structure or premise that is not in conformity with the flood plain requirements of this manual may be continued subject to the following conditions:

(a) No such use shall be expanded or enlarged except in conformity with the provisions of this manual.

(b) No structural alterations, additions to, or repairs to any nonconforming structure over the life of the structure shall exceed 50 percent of its assessed value at the time of its becoming a nonconforming use unless permanently changed.

(c) If such use is discontinued for 12 consecutive months, any future use of the building and premises shall conform to the provisions of this manual.

(d) Uses or adjuncts thereof which are nuisances shall not be permitted to continue as nonconforming uses.

(e) Any alteration, addition to, or repair to any nonconforming structure permitted shall be protected by floodproofing measures pursuant to section 18-605(4)(f).

(9) Dikes and floodwalls. The design of dikes and floodwalls for flood protection purposes should consider several factors, including alternate compensating storage, possible surcharge in flood heights, overtopping, and failure.

Dikes are generally earth embankments that can extend around sections of a building. Fill material used in their construction should be dredged from the flood plain to aid in providing compensating storage. The fill material shall be placed on cleared ground, compacted in layers, and protected from seepage. Buildings shall have a minimum setback from the base of the dike of 20 feet or twice the height of the embankment, whichever is greater.

Floodwalls are preferred for locations with limited space and can be constructed as cantilever I-type steel piles, cellular walls, buttress walls, or gravity walls. They shall be well founded with cutoffs installed to prevent seepage. Areas located behind a dike or floodwall should be drained by conduits installed with automatic flap gates to prevent backflow, or by manually operated valves that are closed during flooding, or by a combination of these methods. (Ord. #119, Oct 1994)

18-606. Technical guidelines and criteria. (1) Adequate drainage. Adequate drainage systems shall have the hydraulic capacity to accommodate the maximum expected stormwater discharge for a specified tributary drainage area and precipitation duration and intensity.

Adequate drainage systems shall be designed to accomplish the following:

-- Account for both offsite and onsite stormwater.

-- Maintain natural drainage divides.

-- Convey stormwater to a stream, channel, natural drainageway, or other existing facility.

-- Discharge stormwater into the natural drainageway by connecting the drainageway at natural elevations, or by discharging the

stormwater into an existing facility of sufficient capacity to receive it, or by discharging into an approved drainage well.

Determination of the size and capacity of an adequate drainage system shall take into account the future development in the watershed or affected portions thereof. The design must not adversely affect adjacent or neighboring properties.

It is the responsibility of the developer or property owner to pick up or acceptably handle the runoff as it flows onto his property from the watershed above, and conduct it through his property to an adequate outfall at his lower property line or beyond. The outfall must be sufficient to receive the runoff without deterioration of the downstream drainageway.

(a) Minor systems. The design of the minor storm drainage system shall be based on a storm frequency of 10 years. This criterion shall be applied to both closed conduit and open channel systems. However, if the 10-year design flow for an open channel system is greater than 100 cubic feet per second (cfs), then the open or closed system shall be capable of passing the 100-year design flow within the drainage easement. Systems relying on sinkholes or drainage wells for discharge shall be capable of passing the 100-year design flow within the drainage easement.

In residential subdivision developments where the average lot size is less than 20,000 square feet, the following general guidelines shall be observed in the design of the minor system:

(i) Design surface runoff across lots shall not have erosive velocities.

(ii) Quantities of surface runoff greater than 4 cfs that flow through lots shall be collected and conveyed in a system of open channels, closed conduits, or a combination of both.

(iii) Lots should generally be graded in such a manner that surface runoff does not cross more than three lots before it is collected in a system of open channels, closed conduits, or a combination of both.

(b) Major systems. Wherever possible, natural waterways serving the major system should remain undisturbed, with proposed development situated wisely accordingly. However, due to the insufficient capacity of most natural drains, improvements to the channel may be necessary to properly utilize the adjacent property. Improvements to natural open channels that are to function primarily as the major system shall be designed to pass the 100-year design flow without damage to the channel. Man-made channels designed to function as the major system (trunk line system) shall be capable of carrying a 100-year design flow. Where man-made channels are necessary, the channels should be located as far away from buildings or structures as possible and preferably in established greenbelts.

The onsite major storm drainage system for most developments is the natural backup system and consists of the less obvious drainageways. Ideally, this major system should provide drainage relief such that no building will be flooded with a 100-year design flow even if the minor system capacity is exceeded. The 100-year frequency storm shall be used to compute runoff for the design of the onsite major drainage system. This system shall be designed to provide relief for flow in excess of the 10-year design flow.

The following guidelines pertain to design of the onsite major drainage system:

(i) Areas should be graded in such a manner or buildings located or constructed in such a manner that if the capacity of the minor system is exceeded, no building will be flooded by the design flow.

(ii) Critical areas to consider are sumps, relatively flat areas, and areas where buildings are located below streets or parking lots.

(iii) The 100-year frequency storm shall be used to compute runoff for the major drainage system.

(iv) For the first trial, the same time of concentration values shall be used that were used in designing the minor drainage system and the minor system assumed to be completely inoperable. If no building will be flooded based on these assumptions, then the analysis can be considered complete.

(v) If buildings will be flooded based on the assumptions used in the preceding item, more precise hydrologic and hydraulic computations are required. The minor system, overland relief swales, or surface storage should be designed so that no building will be damaged by flooding.

(vi) In general, the minor storm drainage system should not be oversized as a basis for providing major system capacity. The major drainage system should be in the form of area grading or the location and construction of buildings in such a manner that overland relief swales or surface storage will provide adequate flood protection.

The major drainage system should be evident on the drainage plan, including overland relief swales and areas that may be affected by surface storage for a 100-year design storm. Calculations performed for major system design should be submitted with the drainage plan.

(2) Open channels. (a) Channel capacity. Open channel capacity shall be determined by Manning's equation. Appropriate Manning's n values as presented in Volume 2 shall be utilized for design and are subject to approval from the town engineer.

(b) Lined channels. Open channels may be designed as lined channels. Acceptable lining materials must be placed in accordance with applicable subdivision regulations. Approval of lining materials is subject to review by the town engineer.

Channel lining shall be required when the design velocity exceeds the allowable, non-erosive velocity for a given channel reach and no other erosion control measures provide adequate protection.

(c) Grassed channels. The design of grassed channels shall consider the variable degree of retardance generated by different types of cover.

Temporary erosion control shall be utilized during non-growing seasons and during grass cover establishment. The engineer shall note on the drawings or in the specifications that "All grassed channels must be in a well-stabilized condition and show no sign of erosion at the time of final acceptance by the maintaining authority."

(d) Easement width. All open channels shall be located within the right-of-way of a drainage easement. Minimum easement width shall be determined from Table 6-1.

Table 6-1

MINIMUM EASEMENT WIDTH FOR OPEN CHANNELS

Top Width of Channel	Easement Width
Less than 5 feet	10 feet
5 - 20 feet	10 feet greater than top width of channel, with minimum of 5 feet on one side
Greater than 20 feet	15 feet greater than top width of channel, with minimum of 5 feet on one side

(3) Storm drains. (a) Conduit capacity. Closed conduits shall be designed for the total flow intercepted by the inlets during the design storm event.

(b) Pressure flow. Storm drain systems should generally be designed as non-pressure systems. However, pressure flow systems if coordinated with the ACDPW during the preliminary design phase, may be allowed. The hydraulic gradient for pressure flow systems shall not exceed the following criteria:

(i) An elevation greater than one foot below the established ground surface, or

(ii) More than five feet above the crown of the conduit.

(c) Easement width. Minimum allowable easement width for storm drains shall be determined from Table 6-2.

Table 6-2

MINIMUM EASEMENT WIDTH FOR STORM DRAINS

Conduit Size	Easement Width
15 - 18 inches	10 feet
21 - 33 inches	15 feet
36 - 48 inches	20 feet
54 - 72 inches	25 feet

(4) Inlets. Since curb and gutter inlets shall not be used as components of a major drainage system, the 100-year frequency storm shall not be considered.

(5) Culverts. The design flow for culverts shall be based on the following return frequencies:

(a) 100-year for residential collector and commercial road crossings.

(b) 10-year for residential roads and crossings.

In addition, building elevations shall be checked for flooding caused by the 100-year, 24-hour storm.

(6) Outlet protection. The design discharge at the outlet of drainage systems shall not result in velocities that equal or exceed the erosive velocity of the receiving channel, unless energy dissipation and erosion protection measures are placed at the outlet. Energy dissipation and erosion control devices shall have no overfall at the terminal end and shall discharge onto a stable section. The terminal section shall be considered stable if the terminal section design velocity is less than the erosive velocity.

(7) Bridges. All bridges with spans of 20 feet or greater shall be deigned for the 100-year, 24-hour storm event. The design flow shall consider runoff from the total tributary area and will require steam channel routing, as appropriate.

(8) Stormwater detention/retention. (a) Release rate. The release rate from any detention facility should approximate that of the developed site prior to the proposed development for the 2-year through 10-year storms, with emergency overflow capable of handling the 100-year discharge except where waived or altered by the ACDPW. Adequate alternate drainage must be provided to accommodate major storm flows. Detention systems must be constructed during the first phase of major developments to eliminate damage to adjacent properties during

construction. If siltation has occurred, detention systems must be restored to their design dimensions after construction is complete and certified as part of the as-built submittal (see section 18-603(9).

(b) Detention volume. The required detention volume shall be that volume necessary to attenuate the post-development peak discharge to a level not to exceed the pre-development peak discharge. This volume may be minimized by careful attention to outlet structure design.

(c) Drawdown. Detention storage volume shall be drained within 72 hours. This requirement includes that volume above permanent pool in retention systems. Drawdown may be accomplished by a small orifice or notched weir. Other methods may be approved subject to ACDPW review.

(d) Maintenance. Care must be taken to ensure that any required detention facilities do not become nuisances or health hazards. Detention facilities should be designed to require minimal maintenance, and maintenance responsibility must be clearly stated on the plans. Where dual purpose facilities are provided, or where flat grades or poorly draining soils encountered, provisions for adequate low flow drainage may be required. Where the retention/detention facility is planned to be used as a lake or pond with a permanent pool, water budget calculations shall be performed to demonstrate that an adequate pool is expected during dry summer months.

All detention facilities located in residential developments, excluding condominium developments and single family PUDs, shall be within storm drainage easements and shall be maintained by the ACDPW. Detention facilities located in industrial, commercial, or institutional developments, apartment developments, and rental townhouses must be maintained by the property owner, and a maintenance agreement must be executed before the development plan is approved.

(9) Sinkholes and drainage wells. All drainage systems discharging to sinkholes or drainage wells shall be designed using the 100-year storm for the critical duration of the watershed tributary to the sinkhole or drainage well. A geologic investigation and report as described in section 18-604(2)(e) is required, along with a demonstration that development will not occur within the area flooded by the 100-year storm and that all state and federal permitting requirements are complied with.

(10) Erosion control plans. An erosion control plan shall identify the erosion control practices and sediment trapping facilities which are appropriate for the site conditions in question. In addition, the appropriate schedule of implementation shall be identified. Particular attention is required for concentrated stormwater flows. Either concentrated stormwater flows shall be avoided or the conveyance system shall be protected sufficiently to prevent significant erosion. Sediment trapping devices are generally required at all

points where stormwater leaves a site laden with sediment. The plan shall identify permanent stormwater conveyance structures, final stabilized conditions of the site, provision for removing temporary control measures, stabilization of the site where temporary measures are removed, and maintenance requirements for any permanent measures.

(a) Stabilization of denuded areas and soil stockpiles. Permanent or temporary soil stabilization shall be applied to denuded areas within 15 days after final grade is reached on any portion of the site. Soil stabilization shall also be applied within 15 days to denuded areas which may not be at final grade, but will remain dormant (undisturbed) for longer than 60 days.

Soil stabilization refers to measures that protect soil from the erosive forces of raindrop impact and flowing water. Applicable practices include vegetative establishment, mulching, and the early application of gravel base on areas to be paved. Selected soil stabilization measures should be appropriate for the time of year, site conditions, and estimated duration of use.

Soil stockpiles shall be stabilized or protected with sediment trapping measures to prevent soil loss.

(b) Establishment of permanent vegetation. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved which, in the opinion of the ACDPW, is mature enough to control soil erosion satisfactorily and to survive severe weather conditions.

(c) Protection of adjacent properties. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance; by installing perimeter controls such as sediment barriers, filters or dikes, or sediment basins; or by a combination of such measures.

Vegetated buffer strips may be used alone only where runoff in sheet flow is expected. Buffer strips should be at least 20 feet in width. If at any time it is found that a vegetated buffer strip alone is ineffective in stopping sediment movement onto adjacent property, additional perimeter controls shall be provided.

(d) Timing and stabilization of sediment trapping measures. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment onsite shall be constructed as a first step in grading, and be made functional before upslope land disturbance takes place. Earthen structures such as dams, dikes, and diversions shall be seeded and mulched within 15 days of installation.

(e) Sediment basins. Stormwater runoff from drainage areas with 5 acres or greater disturbed area shall pass through a sediment basin or other suitable sediment trapping facility.

(f) Cut and fill slopes. Cut and fill slopes shall be designed and constructed in a manner which will minimize erosion. Consideration must be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions, and other applicable factors. As a minimum, all slopes at 2 to 1 or greater shall be stabilized with rock riprap, or other method approved by the town engineer.

(g) Construction exits. A stabilized stone pad shall be placed at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk, or parking lot. Stone pads shall contain ASTM-1 stone, six (6) inches thick and be a minimum of one-hundred (100) feet long. (Ord. #119, Oct. 1994)

18-607. Checklist.

(1) Property map and parcel number (obtain from tax assessors office). _____

(2) Three (3) copies of grading, drainage, and erosion control plans as described in section 18-604(2)(c). _____

(3) Three (3) copies of street plan and profile sheets as described in section 18-604(2)(d). _____

(4) Three (3) copies of sinkhole and drainage well information, if applicable to the site conditions (see section 18-604(2)(e)). _____

(5) All plans and calculations submitted shall be signed and sealed by a registered engineer or landscape architect, if application is for a grading permit. If application is for a building permit, they shall be signed and sealed by a registered engineer. (Ord. #119, Oct. 1994) _____

18-608. Definitions. The following definitions shall apply in the interpretation and enforcement of the provisions of these regulations in addition to those terms defined in the ordinance, unless specifically stated otherwise:

"Addition (to an existing building)" - Any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common

load-bearing wall other than a fire wall. All walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

"Appeal" - A request for a review of the ACDPW's or the town engineer's interpretation of any provision of these regulations or a request for a variance.

"Area of shallow flooding" - A designated AO Zone on the Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

"Area of special flood hazard" - The land in the flood plain subject to a one percent or greater chance of flooding in any given year.

"Base flood" - The flood having a one percent chance of being equaled or exceeded in any given year.

"Basement" - That portion of a building having its floor subgrade (below ground level) on all sides.

"Building" - Any structure built for support, shelter, or enclosure for any occupancy or storage.

"Building permit" - Permit required under the Ashland City Building Code.

"Certification" - Written verification received by the Director of the ACDPW from a registered engineer that all work performed was done in compliance with any approvals or permits previously granted.

"Channel" - A natural or artificial watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing water. Channel flow is that water which is flowing within the limits of the defined channel.

"Critical area" - A site subject to erosion or sedimentation as a result of cutting, filling, grading, or other disturbance of the soil; a site difficult to stabilize due to exposed subsoil, steep slope, extent of exposure, and other conditions.

"Cut" - Portion of land surface or area from which earth has been removed or will be removed by excavation; the depth below original ground surface to the excavated surface.

"Detention" - The temporary delay of storm runoff prior to discharge into receiving waters.

"Developer" - Any individual, firm, corporation, association, partnership, or trust involved in commencing proceedings to effect development of land for himself or others.

"Development" - Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials.

"Drainage basin" - A part of the surface of the earth that is occupied by and provides surface water runoff into a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

"Drainage well" - A bored, drilled, driven, dug, or naturally occurring shaft or hole with a depth greater than the largest surface dimension; used to drain surface fluid, primarily storm runoff, into a subsurface formation.

"Elevated building" - A non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

"Erosion" - The disintegration or wearing away of soil by the action of water.

"Excavation" - See cut.

"Existing grade" - The slope or elevation of existing ground surface prior to cutting or filling.

"Fill" - Portion of land surface or area to which soil, rock, or other materials have been or will be added; height above original ground surface after the material has been or will be added.

"Finished grade" - The final slope or elevation of the ground surface, after cutting or filling.

"Flood or flooding" - Water from a river, stream, watercourse, lake, or other body of standing water that temporarily overflows and inundates adjacent lands and which may affect other lands and activities through increased surface water levels and/or increased groundwater level.

"Flood Insurance Rate Map (FIRM)" - An official map for the Town of Ashland City, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the Town of Ashland City.

"Flood insurance study" - The official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary Floodway Map and the water surface elevation of the base flood.

"Flood plain" - The relatively flat or lowland area adjoining a river, stream, watercourse, lake, or other body of standing water which has been or may be covered temporarily by floodwater. For administrative purposes, the flood plain is defined as the area that would be inundated by high water at the flood profile from which the flood protection elevation is established.

"Floodway" - That portion of the stream channel and adjacent flood plain required for the passage or conveyance of a 100-year flood discharge. The floodway boundaries are placed to limit encroachment in the flood plain so that a 100-year flood discharge can be conveyed through the flood plain without materially increasing (less than one foot) the water surface elevation at any point and without producing hazardous velocities or conditions. This is the area of significant depths and velocities and due consideration should be given to effects of fill, loss of cross sectional flow area, and resulting increased water surface elevations.

"Floodway fringe" - That portion of the flood plain lying outside the floodway. This is the area of the flood plain that may be developed or encroached upon as long as the water surface elevation of the 100-year flood is not increased by more than one foot at any point. Compensating storage is required when fill is placed in this area.

"Floor" - The top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

"Functionally dependent facility" - A facility that cannot be used for its intended purpose unless it is located or carried out in proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or fish processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

"Highest adjacent grade" - The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

"Grading" - Any operation or occurrence by which the existing site elevations are changed; or where any ground cover, natural, or man-made, is removed; or any watercourse or body of water, either natural or man-made, is relocated on any site, thereby creating an unprotected area. This includes stripping, cutting, filling, stockpiling, or any combination thereof, and shall apply to the land in its cut or filled condition.

"Grading permit" - A permit issued to authorize excavation or fill to be performed under the provisions of this manual.

"Impervious surface" - A term applied to any ground or structural surface that water cannot penetrate or through which water penetrates with great difficulty.

"Lowest floor" - The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage and in an area other than the basement area, is not considered a building's lowest floor, provided that such an enclosure is not built so as to render the structure in violation of the non-elevation design requirements of these regulations.

"ACDPW" - Town of Ashland City Department of Public Works.

"Major drainage system" - Storm drainage system that carries the runoff from a 100-year frequency storm. Although damage may occur, runoff will be carried by the major system whether or not it has been planned and designed, and whether or not improvements are situated wisely in respect to it.

The major system usually includes features such as streets, gulches, and major drainage channels. Storm sewer systems may reduce the flow in many parts of the major system by storing and transporting water underground. Good planning and designing of a major system should eliminate major damage and loss of life from storms having a one percent chance of occurring in any given year.

"Manufactured home" - A structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

"Minor drainage system" - Storm drainage system that is frequently used for collecting, transporting, and disposing of snowmelt, miscellaneous minor flows, and storm runoff up to the capacity of the system. The capacity should be equal

to the maximum rate of runoff to be expected from the initial design storm, which has statistical frequency of occurrence of once in ten years.

The minor system is sometimes termed the "convenience system," "initial system," or the "storm sewer system", and may include features ranging from curbs and gutters to storm sewer pipes and open drainageways.

"National Geodetic Vertical Datum (NGVD)" - As corrected in 1929, a vertical control used as a reference for establishing varying elevations within the flood plain.

"Natural ground surface" - The ground surface in its original state before any grading, excavating, or filling.

"New construction" - Structures for which the "start of construction" commenced on or after the effective date of these regulations.

"One hundred-year flood" - One that has an average frequency of occurrence of once in one hundred (100) years, determined from an analysis of floods on a particular watercourse and other watercourses in the same general region. Statistically, it has a one percent chance of occurring in any given year.

"Permittee" - Any person, firm, or any other legal entity to whom a grading or building permit is issued in accordance with these regulations.

"Planning commission" - Town of Ashland City Municipal Planning Commission.

"PUD" - Planned unit development, as defined in the Town of Ashland City Zoning Ordinance.

"Registered engineer" - An engineer duly registered or otherwise authorized by the State of Tennessee to practice in the field of civil engineering.

"Registered architect" - An architect duly registered or otherwise authorized by the State of Tennessee to practice in the field of building architecture.

"Registered landscape architect" - A landscape architect duly registered or otherwise authorized by the State of Tennessee to practice in the field of landscape architecture.

"Registered land surveyor" - A land surveyor duly registered or otherwise authorized by the State of Tennessee to practice in the field of land surveying.

"Registered grading" - Any grading performed with the approval of and in accordance with criteria established by the ACDPW.

"Retention" - The prevention of storm runoff from direct discharge into receiving waters. Examples include systems which discharge through percolation, exfiltration, filtered bleed-down and evaporation processes.

"Sediment" - Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, or gravity as a product of erosion.

"Site" - A contiguous land and bodies of water in one ownership, graded or proposed for grading or development as a unit, although not necessarily at one time.

"Slope" - Degree of deviation of a surface from the horizontal, usually expressed in percent or ratio.

"Soil" - All unconsolidated mineral and organic material of any origin that overlies bedrock and that can be readily excavated.

"Soil engineer" - A professional engineer who is qualified by education and experience to practice applied soil mechanics and foundation engineering.

"Start of construction" - Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds, not occupied as dwelling units or not part of the main structure.

"Stripping" - Any activity that removes or significantly disturbs the vegetative surface cover, including clearing and grubbing operations.

"Structure" - Anything constructed or erected, the use of which requires a more or less permanent location on or in the ground. Such construction includes but

is not limited to objects such as buildings, towers, smokestacks, overhead transmission lines, carports, and walls.

"Structure, permanent" - A structure that is built of such materials and in such a way that it would commonly be expected to last and remain useful for a substantial period of time.

"Structure, temporary" - A structure that is built of such materials and in such a way that it would commonly be expected to have a relatively short useful life, or is built for a purpose that would commonly be expected to be relatively short-term.

"Substantial improvement" - Any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during the life of a structure, in which the cumulative cost equals or exceeds fifty percent of the market value of the structure. The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

"SWCD" - Cheatham County Soil and Water Conservation District.

"Temporary protection" - Short-term stabilization of erosive or sediment-producing areas.

"Variance" - A grant of relief from the requirements of these regulations which permits construction in a manner otherwise prohibited by these regulations where specific enforcement would result in unnecessary hardship.

"Vegetative protection" - Stabilization of erosive or sediment producing areas by covering the soil with any of the following materials:

(1) Permanent seeding for long-term vegetative cover
(2) Short-term seeding for temporary vegetative cover
(3) Sodding, producing areas covered with a turf of perennial sod-forming grass
(4) Tree planting
(5) Other planting

"Water budget" - A chronological accounting of water volume changes (including infiltration, exfiltration, evaporation, diversion, inflow, and outflows) to and from a point of storage such as an aquifer, retention pond, or other natural or man-made water system.

"Watercourse" - A channel, natural depression, slough, gulch, stream, creek, pond, reservoir, or lake in which storm runoff and floodwater flows either regularly or infrequently. This includes major drainageways for carrying urban storm runoff.

"Zoning permit" - Permit required under the Town of Ashland City Zoning Ordinance. (Ord. #119, Oct. 1994)

CHAPTER 7

ANIMAL AND VEGETABLE FATS, OILS AND GREASE, AND SOIL/SAND AND LINT TRAPS AND INTERCEPTORS

SECTION

18-701. Fat, Oil, and Grease (FOG), waste food, and sand interceptors.
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18-701. Fat, Oil, and Grease (FOG), waste food, and sand interceptors. FOG, waste food and sand interceptors shall be installed when, in the opinion of the director of public works, they are necessary for the proper handling of liquid wastes containing fats, oils, and grease, ground food waste, sand, soil, and solids, or other harmful ingredients in excessive amounts which impact the wastewater collection system. Such interceptors shall not be required for single-family residences, but may be required on multiple-family residences. Grease control equipment (grease interceptors or grease traps) is required to be installed at all restaurants, cafeterias, hotels, motels, hospitals, retirement/nursing homes, schools, grocery stores, convenience stores, markets, prisons, jails, churches, camps, caterers, manufacturing plants and any other commercial sewer users who prepare food and have the potential to discharge FOG waste. All interceptors shall be of a type and capacity approved by the public works director, and shall be located as to be readily and easily accessible for cleaning and inspection. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-702. Definitions. In the interpretation and application of this chapter the following words and phrases shall have the indicated meanings:

(1) "Authorized representative."
   (a) The owner;
   (b) General manager;
   (c) Manager; or

(d) Duly authorized representative of the individual designated in this definition if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.

(2) "Additives." Include, but are not limited to, products that contain solvents, emulsifiers, surfactants, caustics, acids, enzymes and bacteria.

(3) "Customer." A company or individual who is a user of the sanitary sewer system. Also, referred to in this chapter as "user".

(4) "Department." Ashland City Public Works Department

(5) "Director." Ashland City Public Works Department Director

(6) "Fats, Oils, and Grease (FOG)." Organic compounds derived from animal and/or plant sources. FOG may be referred to as "grease" or "greases" in this section.

(7) "Food Service Establishment (FSE)." Any establishment, business or facility engaged in preparing, serving or making food available for consumption. Single-family residences are not a FSE. Food service establishments will be classified as follows:

(a) Class 1: Deli - engaged in the sale of cold-cut and microwaved sandwiches/subs with no frying or grilling on site, ice cream shops and beverage bars as defined by North American Industry Classification System (NAICS) 722515 with the exception of doughnut shops with on premises baking (Class 2), day care facilities (minimum classification depending on menu, food preparation, and number of meals served) as defined by NAICS 624410, and mobile food vendors as defined by NAICS 722330.

(b) Class 2: Limited-service restaurants (i.e., fast food facilities, drive-in, carry-out) as defined by NAICS 722513, day care facilities (maximum classification depending on menu, food preparation, and number of meals served), as defined by NAICS 624410, caterers as defined by NAICS 722320.

(c) Class 3: Full service restaurants as defined by NAICS 722511.

(d) Class 4: Buffet and cafeteria facilities as defined by NAICS 722514.

(e) Class 5: Institutions (i.e., schools, hospitals, prisons, etc.) as defined by NAICS Classifications 611110, 611310, 623110, 623311, 623312, 722310, 813110, and 922140.

(8) "Grease (brown)." Fats, oils and grease that is discharged to the grease control equipment, or is from kitchen or food prep wastewater.

(9) "Grease (yellow)." Fats, oils and grease that has not been in contact or contaminated from other sources (water, wastewater, solid waste, etc.) and can be recycled.

(10) "Grease Control Equipment (GCE)." Devices for separating and retaining FSE wastewater FOG prior to entering the city sewer system. The GCE is constructed to separate and trap or hold fats, oils and grease substances

from entering the city sewer system. GCE should only receive kitchen wastewater. Devices include grease interceptors, grease traps, or other devices approved by the director.

(11) "Grease interceptor." GCE identified as a large multi-compartment tank, usually one thousand (1,000 gallons) to two thousand (2,000) gallon capacity with proper inlet and outlet T's, and other necessary components, that provides FOG control for a FSE. No sanitary wastewater (black water) line should be connected to the grease interceptor. Grease interceptors shall be located outside the FSE, unless special circumstances allow parking garage or other area that is approved by the director.

(12) "Grease trap." GCE identified as an "under the sink" trap, or "floor" trap with a container with baffles and required Plumbing and Drain Institute components. For a FSE approved to install a grease trap, the minimum size requirement is a twenty (20) gallon per minute/forty (40) pound capacity trap. Grease traps shall have a flow restrictor and a vent pipe installed. No dishwasher, or sanitary wastewater (black water), line shall be allowed to be connected to a "under the sink" or a "floor" grease trap.

(13) "Grease recycle container." A container or inside storage tank used for the storage of yellow grease.

(14) "Interceptor." A device designed and installed to separate and retain for removal, by automatic or manual means, deleterious, hazardous or undesirable matter from normal wastes, while permitting normal sewage or waste to discharge into the drainage system by gravity.

(15) "NAICS." North American Industry Classification System, using 2012 (or latest) classifications. The website is found at: http ://www.census.gov/epcd/www/naics.html).

(16) "Series." (Grease interceptors installed in series): Grease interceptor tanks installed one (1) after another in a row and connected by plumbing pipe.

(17) 'Tee" or "T." A T-shaped pipe extending from the ground surface below grade into the grease interceptor to a depth allowing recovery (discharge) of the water layer located under the layer of FOG. Influent and effluent Ts are to be made of PVC - schedule 40 or equivalent material. Influent Ts should extend two-thirds (2/3) of the grease interceptor water depth, and effluent Ts should extend to within twelve inches (12") of the bottom of the interceptor tank to prevent short-circuiting.

(18) "Water (black)." Wastewater containing human waste, from sanitary fixtures such as toilets and urinals.

(19) "Water (gray)." Wastewater other than black water as defined in this section. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-703. Fat, oil, grease, and food waste. (1) Construction and renovation. Upon construction, renovation, or a new FSE replacing an out of

business FSE, all restaurants, cafeterias, hotels, motels, hospitals, retirement/nursing homes, schools, grocery stores, markets, prisons, jails, churches, camps, caterers, manufacturing plants and any other commercial sewer users who have the potential to discharge FOG waste shall submit a FOG management plan to the department that will effectively control the discharge of FOG and food waste. Grease interceptors are required for customers that meet any of the following criteria:

- New construction.
- Remodels, additions, alterations or repairs valued at or greater than five thousand dollars ($5,000.00).
- Has caused or contributed to a grease related collection system blockage resulting in maintenance requirements and/or a sewage spill.

FSEs shall notify the public works director-department of environmental compliance at 615-441-5406 of any of the following:

- Sale, lease, or transfer of the operation for which the permit issued.
- Change of facility name.
- Changes to grease removal device(s).
- Remodel, addition, alterations or repairs valued at or greater than five thousand dollars ($5,000.00).

(a) The FOG management plan shall include the following:

(i) Submittal of a completed city grease control equipment inquiry form with all required contact information, identification of all cooking and food preparation equipment (e.g., sinks, grills, fryers, ovens, floor drains, dishwashers, etc.) and the number and drain size for each kitchen plumbing fixture.

(ii) Grease control equipment proposed type, size and location.

(iii) Copy of plumbing plans for the kitchen area only, with grease waste lines identified.

(iv) Copy of menu items or food to be served

(b) Process for grease control equipment approval

(i) The director will review GCE sizing information received from the submitted grease control inquiry form. The director will make a decision to approve, or require additional grease interceptor volume, based on the type of FSE, the number of fixture units, and additional calculations. See § 18-706 for GCE sizing and installation requirements.

(ii) All new FSEs and FSEs that have upgraded their facilities must contact the department for final approval of the grease control equipment. This will include onsite inspection of the grease control equipment by the department, or their authorized representative. In addition to the final inspection, rough-in inspections may be required in some cases. Failure of the FSE to

contact the department to conduct the inspection of the new GCE can result in enforcement action.

(c) Variance to grease interceptor installation. At the discretion of the director, a FSE may receive a variance from the required installation of a grease interceptor. Variances will be limited to existing FSEs that have unusual physical location circumstances that will prevent the installation of a grease interceptor.

(d) Alternative grease control equipment: at the discretion of the director, alternative grease control equipment may be considered and approved for installation at a FSE. The alternative grease control equipment must control FOG discharges from a FSE and be maintained as outlined in this FOG management policy.

(2) Existing structures. Any existing FSE shall be required to submit a plan for control of FOG and food waste, if and when the director of public works determines that FOG and food waste are causing excessive loading, plugging, damage or operational problems to structures or equipment in the public sewer system. The FOG management plan shall include the items listed in § 18-703(1)(a). Approval of grease control equipment will be as described in § 18-703(1)(b).

(3) Implementation of plan. After approval of the FOG management plan by the director of public works the sewer user must implement the plan within sixty (60) days; service and maintain the equipment in order to prevent adverse impact upon the sewer collection system and treatment facility. If, in the opinion of the director of public works, the user continues to impact the collection system and treatment plant, additional pretreatment measures may be required. The director of public works may at any time inspect the equipment to ensure that there is no adverse impact on the sewer collection system and treatment facility.

(4) New multi-unit (strip mall) facilities. New strip malls or strip centers must have two (2) separate sewer line connections at each unit within the strip mall or strip center. One (1) sewer line will be for sanitary wastewater and one sewer line will be for the kitchen area, or potential kitchen area, of each unit. The kitchen area, or potential kitchen area, sewer line will be connected to floor drains in the specified kitchen area, and will connect, or be able to connect, to other food service establishment kitchen fixtures, such as three (3) compartment sink, two (2) compartment sink, pre-rinse sink, mop sink and hand wash sink.

(a) New multi-unit facility, or new "strip mall" facility, owners shall contact the city prior to conducting private plumbing work at the multi-unit facility site. Multi-unit facility owners, or their designated contractor, shall have plans for separate private wastewater lines for kitchen and sanitary wastewater for each "individual" unit. In addition, the plans shall identify "stub-out" locations to accommodate a minimum one thousand (1,000) gallon grease interceptor for each unit of the

multi-unit facility, or provide a larger capacity grease interceptor that could be shared by multiple FSEs in the strip mall. Approval for multiple FSEs connected to one (1) grease interceptor or series of grease interceptors must be approved by the city prior to construction. New multi-unit facility, or new "strip mall" facility owners shall consider suitable physical property space and sewer gradient that will be conducive to the installation of an exterior, in-ground grease interceptor when determining the building location.

(b) FSEs located in a new multi-unit facility shall have a minimum of a one thousand (1,000) gallon grease interceptor installed, unless that FSE is identified as a Class 1 facility. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-704. Sand, soil, and oil interceptors. All car washes, truck washes, garages, service stations and other sources of sand, soil, and oil shall install effective sand, soil, and oil interceptors. These interceptors will be sized to effectively remove sand, soil, and oil at the expected flow rates. These interceptors will be cleaned on a regular basis to prevent impact upon the wastewater collection and treatment system. Owners whose interceptors are deemed to be ineffective by the director of public works may be asked to change the cleaning frequency or to increase the size of the interceptors. Owners or operators of washing facilities will prevent the inflow of rainwater into the sanitary sewers. (as added by Ord. #388, Nov. 2011)

18-705. Laundries. Commercial laundries shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the sewer system of solids one-half inch (1/2") or larger in size such as strings, rags, buttons, or other solids detrimental to the system. (as added by Ord. #388, Nov. 2011)

18-706. Control equipment sizing and installation requirements. The equipment or facilities installed to control FOG, food waste, sand and soil must be designed in accordance with plumbing code and Tennessee Department of Environment and Conservation engineering standards or applicable city guidelines. All grease traps and/or other interceptors shall be of a size which is consistent with the city's sizing formula calculations which consider Uniform Plumbing Code formula, kitchen fixture unit discharge formula, and seating/meals served formula. All systems shall have a poly lock filter. Underground equipment shall be tightly sealed to prevent inflow of rainwater and be easily accessible to allow regular maintenance. Control equipment shall be maintained by the owner or operator of the facility to prevent a blockage of the public sewer and the accumulation of FOG in the lines, pump stations and treatment plant. If the city is required to clean out the public sewer lines because of a blockage resulting from poorly maintained control equipment, or

lack thereof, the owner or operator shall be required to refund the labor, equipment, materials and overhead costs to the city. These costs shall be added to the customer's regular water and sewer bill. The applicable rules of water and sewer billing shall apply. Nothing in this section shall be construed to prohibit or restrict any other remedy the city has under this chapter or state or federal law.

The city, or their authorized representative, retains the right to inspect and approve installation of the control equipment and to enter upon customer's properties at any time and without prior notification for the purpose of inspection, observation measurement, sampling, testing or record review.

(1) All new grease interceptors shall be designed, constructed and installed in accordance with specifications of the Ashland City Water and Sewer Department, and have a sampling access point located downstream of the interceptor.

(2) Minimum acceptable size of grease control equipment for each FSE Classification will be as follows:

Class 1: Deli, ice cream shops, beverage bars, mobile food vendors- twenty (20) gallons per minute/forty (40) pound grease trap.

Class 2: Limited-service restaurants/caterers - one thousand (1,000) gallon grease interceptor.

Class 3: Full service restaurants- one thousand (1,000) gallon grease interceptor.

Class 4: Buffet and cafeteria facilities- one thousand five hundred (1,500) gallon grease interceptor.

Class 5: Institutions (schools, hospitals, prisons, etc.)- two thousand (2,000) gallon grease interceptor or two (2) one thousand (1,000) gallon grease interceptors installed in series.

A variance to the above minimum sizes may be granted by the director if proper justification is provided.

(3) To calculate the appropriate size GCE, the FSE's engineer, architect, licensed plumber, or contractor should use formulas that consider all cooking and food preparation equipment, all kitchen plumbing fixture units, the discharge plumbing pipe for each fixture unit, storage capacity, type of facility, and adequate retention time.

(4) Grease interceptor minimum size will be one thousand (1,000) gallon capacity, and maximum size will be two thousand (2,000) gallon capacity. If additional capacity is required, the FSE shall install multiple interceptors in series. Grease interceptors installed in series shall be installed in such a manner to ensure positive flow between the tanks at all times. Therefore, tanks shall be installed so that the inlet invert of each successive tank shall be a minimum of two inches (2") below the outlet invert of the preceding tank. Grease interceptors that are installed in series shall include adaptors, gaskets or transition couplings of minimum of schedule 40 PVC pipe.

(5) Each grease interceptor shall have an effluent filter installed on the outlet side of the tank. The filter size will be determined by the public works department pretreatment coordinator based upon a twelve (12) month consumption history for existing FSE's and projected flow forecasts for new facilities.

(6) Grease interceptor design and installation.

Piping design

1. The inlet and outlet piping shall have 2-way cleanout tees installed

2. The inlet piping shall enter the receiving chamber 2-1/2" above the invert of the outlet piping.

3. On the inlet pipe, inside the receiving chamber, a sanitary tee of the same size pipe in the vertical position with the top unplugged shall be provided as a turndown. To provide air circulation and to prevent "air lock", a pipe (nipple) installed in the top tee shall extend to a minimum of 6" clearance from the interceptor ceiling, but not less that the inlet pipe diameter. A pipe installed in the bottom of the tee shall extend to a point of 2/3 the depth of the tank. See Figure 1.

4. The outlet piping shall be no smaller than the inlet piping, but in no case smaller than 4" ID.

5. The outlet piping shall extend to 12" above the floor of the interceptor and shall be made of a non-collapsible material. The top of the outlet T pipe should be no less than 4" above the static water line.

6. The outlet piping shall contain a tee installed vertically with a pipe (nipple) installed in the top of the tee to extend to a minimum of 6" clearance from the interceptor ceiling, but not less that the pipe diameter, with the top open. See Figure 1.

Baffles

1. The inlet compartment shall be 2/3 of the total liquid capacity with the outlet compartment at 1/3 liquid capacity of the interceptor.

2. The grease interceptor shall have a non-flexing (i.e., concrete, steel, etc.) baffle the full width of the interceptor, sealed to the walls and the floor, and extend from the floor to within 6" of the ceiling. The baffle shall have an inverted 90 degree sweep fitting at least equal in diameter size to the inlet piping, but in no case less than 6" ID. The bottom of the sweep shall be placed

in the vertical position in the inlet compartment 12" above the floor. The sweep shall rise to the horizontal portion, which shall extend through the baffle into the outlet compartment. The baffle wall shall be sealed to the sweep. See Figure 1.

Access Openings (Manholes)

1. Access to grease interceptors shall be provided by a minimum of one (1) manhole per interceptor division (baffle chamber) and of 24-inch minimum dimensions terminating 1 inch above finished grade with cast iron frame and cover. An 8" thick concrete pad extending a minimum of twelve inches (12") beyond the outside dimension of the manhole frame shall be provided. One manhole shall be located above the inlet tee hatch and the other manhole shall be located above the outlet tee hatch, so as to provide a clear view of both the inlet and outlet T for inspection. A minimum of 24" of clear opening above each manhole access shall be maintained to facilitate maintenance, cleaning, pumping, and inspections.

2. Access openings shall be mechanically sealed and gas tight to contain odors and bacteria and to exclude vermin and ground water, in a manner that permits regular reuses.

3. The manholes are to be accessible for inspection. Manhole covers shall be secure, sturdy and able to withstand vehicle traffic and loading.

Leak testing

GIs shall comply with one of the following:

1. Water test - Seal the interceptor, fill with water raised to the flow-line of the outlet fitting, and let stand for a minimum of 1 hour. There shall be no visible leakage. Prefabricated concrete gravity grease Interceptors shall not be rejected for damp spots due to condensation on the exterior surface.

2. Air test - Air test procedure shall follow STI F 921 and PEI RP 100 Section 3.

Note: The regulated air supply test pressure used for this test is not to be less than 3 psig (21 kPa) nor more than 5 psig (35 kPa). Use only calibrated diaphragm type air pressure gauges with a zero to 10 psig dial span. Set pressure relief valve in test air supply line at 4.5 psig.

Temporarily plug, cap or seal of all tank openings to hold pressure. Install air supply piping to appropriate tank penetration with air supply piping, over

pressure relief device, air isolation valve and pressure gauge. Close air isolation valve to tank and turn on air supply. Slowly open air isolation valve to pressure primary tank. Pressure gauge should read minimum 3 psig to 5 psig maximum. Record the pressure reading. Close air isolation valve and disconnect air supply line to tank.

Note: A steady drop in pressure indicates there may be a leak in the primary tank.

Hold primary air test for 1 hour minimum. No leaks shall be allowed.

If the tank(s) fails to meet the testing described above, it shall be repeated with new samples. Test reports shall show total number of tanks tested, number passing, number failing, and reason for failure.

Location

1. GIs shall be located so as to be readily accessible for cleaning, maintenance, and inspections. GIs shall be located close to the fixture(s) discharging the greasy wastestream. GIs shall not be installed in "drive-thru" lanes or a parking area. GIs shall never be paved over.

2. GIs shall be installed at a minimum distance of 10 feet from sinks and dishwashers to allow adequate cooling of wastewater. The influent to GIs shall not exceed one hundred forty degrees Fahrenheit (140°F).

NOTE FOR FOOD GRINDERS and DISHWASHERS: Where food waste grinders and/or automatic dishwashers are installed, the GI size shall be increased by 30% of the sizing requirement. Automatic dishwashers' discharge is allowed to not to be connected to the grease interceptor. No other kitchen fixture unit may by-pass the grease interceptor, only the automatic dishwasher.

Construction material

1. GIs shall be constructed of sound durable materials, not subject to excessive corrosion or decay, and shall be water and gas tight. Each GI shall be structurally designed to withstand any anticipated load to be placed on the GI (i.e. vehicular traffic in parking or driving areas). Concrete is the standard material approved, however, the director will consider other materials, such as fiberglass or plastic grease interceptors, if a professional engineer provides calculations and evidence that the device will meet the requirements and not be a danger to the public or environment.

Note: Concrete materials and other grease interceptor materials shall meet the American National Standards Institute, Inc. (ANSI) and International Association of Plumbing and Mechanical Officials (IAPMO) standards.

ANSI and IAPMO Concrete Materials Requirements as per IAPMO/ANSI Z1001-2007 document are:

• Concrete: Material requirements shall comply with the "Materials and Manufacture" section of ASTM C 1613 and shall have a minimum compressive strength of 4000 psi (28 MPa) at 28 days of age and shall have a maximum water to cementitious ratio (w/c) of 0.45.

• Sealants: Flexible sealants employed in the manufacture or installation of tanks shall comply with ASTM C 990. Rigid (mortar) sealing or grout sealant of tank sections shall not be permitted.

• Lifting: Lifting devices, embedded or otherwise attached to the tank, shall comply with the requirements of ASTM C 890.

• Synthetic fiber-reinforced concrete tanks: Polypropylene or polyolefin fibers are only permitted as a secondary reinforcing material, at the manufacturer's option, in precast concrete septic tanks. For purposes of this standard, secondary reinforcing material is only used to resist temperature and shrinkage effects. Only fibers of Type HI conforming to the requirements of ASTM C 1116 shall be accepted.

• Steel fiber-reinforced concrete tanks: Steel fibers are only permitted as a secondary reinforcing material, at the manufacturer's option, in prefabricated septic tanks. For purpose of this standard, secondary reinforcing material is only used to resist temperature and shrinkage effects. Steel fibers shall meet the requirements of ASTM A 820.

• Fiberglass-reinforced polyester. Fiberglass reinforced polyester prefabricated gravity grease interceptors shall comply with the requirements for fiberglass - reinforced polyester septic tanks in paragraph 4.2 of IAPMO/ANSI Z1000.

• Gaskets: Gaskets shall be of a resilient material, resistant to attack by acids or alkalies that may be present in soils or sewage. The manufacturer shall specify the appropriate ASTM standards that the gasket material meets and the acids or alkalies that the material is resistant to.

• Polyethylene: Polyethylene prefabricated gravity grease interceptors shall comply with the requirements for polyethylene septic tanks in paragraph 4.3 of IAPMO/ANSI Z1000.

• Coated steel: Interior steel tank walls shall be coated with material complying with the requirements of UL 58 and UL 1746 and manufactured per the requirements of the Steel Tank Institute (STI).

Marking and Identification

1. Prefabricated gravity grease interceptors shall be permanently and legibly marked with the following:

• Manufacturer's name or trademark, or both

• Model number

• Capacity

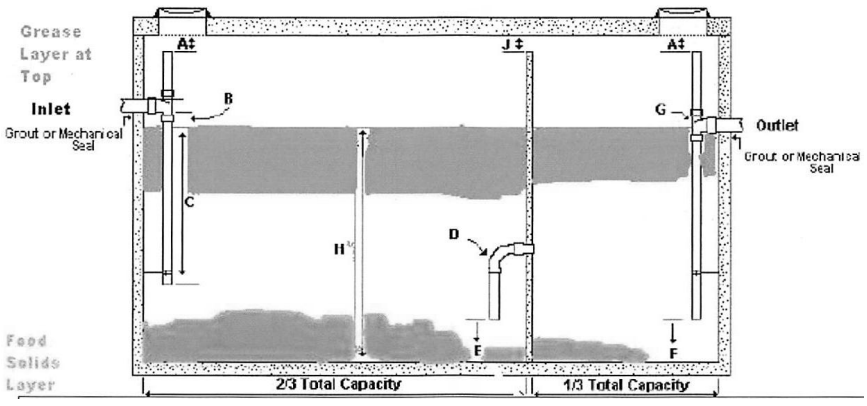
• Month and year of manufacture

• Load limits and maximum recommended depth of earth cover in feet; and Inlet and outlet.

2. Marking shall appear on a plate that has been permanently attached, molded, cast, or wet set onto the interceptor, located either on the left hand side of the inlet or on top of the interceptor near the inlet. Permanent markings shall be adequately protected from corrosion so as to remain permanent and readable over the life of the interceptor.

3. Each interceptor shall be accompanied by manufacturer's installation instructions.

FIGURE 1 - Grease Interceptor Diagram



A: Minimum six inches (6"), but not less than pipe diameter.

B: Inlet pipe invert to be 2 1/2" above liquid surface.

C: Inlet pipe to terminate 2/3 depth of water level.

D: 90 degree sweep, minimum size 6".

E: 12" from floor to end of sweep

F: 12" from floor to end of outlet pipe.

G: Outlet pipe no smaller than inlet pipe, minimum of 4".

H: Minimum depth of liquid capacity - 42".

J: Maximum distance from ceiling - 6".

(7) Grease trap design and installation. (a) Grease traps must have the Plumbing Drainage Institute certification. The minimum acceptable size is rated at twenty (20) gallons per minute/forty (40) pounds capacity. All grease traps shall be installed as per manufacturer's specifications, which include the flow restrictor and venting prior to the discharge entering the grease trap.

(b) All grease traps shall have flow restrictor and vent pipe installed.

(c) No dishwasher shall be connected to an under-the-sink grease trap or floor grease trap. Dishwashers will cause hydraulic overload of the grease trap.

(d) No automatic drip or feed system for additives is allowed prior to entering the grease trap without written approval from the city.

(e) Grease traps must be approved by the department prior to installation. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-707. Grease interceptor and trap maintenance, and certification requirements. (1) Grease interceptor cleaning and pumping.

(a) Maintenance of grease interceptors shall include the complete removal of all contents, including floating material, wastewater, and bottom sludge and solids. Partial pump of interceptor contents, or on-site pump and treatment of interceptor contents, decanting or discharging of removed waste back into the interceptor from which the waste was removed or any other grease interceptor, for the purpose of

reducing the volume to be disposed, is prohibited. All grease waste haulers and procedures for pumping grease interceptors shall be in compliance with this chapter.

(b) Grease interceptors must be pumped out completely a minimum of once every ninety (90) days, or when the accumulation of FOG and/or food solids exceeds twenty-five percent (25%) of the grease interceptor capacity, the interceptor must be pumped/cleaned of complete contents. This is known as the "twenty-five percent (25%) rule" for grease interceptor cleaning frequency requirement. The measurement location for twenty-five percent (25%) rule compliance will be the first chamber of the grease interceptor. If the FSE can demonstrate that the grease interceptor pumping frequency of ninety (90) days can be extended and there are no FOG impacts to the city sewer, then the following protocol will be used:

The FSE has documented evidence for at least a six (6) month period that the grease interceptor pumping frequency can be reduced. The documented evidence for reduced pumping frequency will be submitted to the director for review. The director may approve or deny the reduced frequency request based on the information provided. The maximum time frame between grease interceptor pump frequency will be six (6) months to prevent acid and hydrogen sulfide problems.

(c) Grease interceptor waste must be hauled offsite from the FSE and disposed at a state or city approved disposal location. All disposal of grease interceptor waste must meet the requirements of city ordinances, state and EPA regulations. In no way shall the pumpage be returned to any private or public portion of the sanitary sewer collection system or storm water collection system.

(d) Recordkeeping: FSEs shall maintain records onsite at the FSE facility of all pumping/cleaning and maintenance of the grease control equipment for a period of three (3) years. The grease waste hauler manifest is to be the official record for grease control equipment maintenance records and will include, at a minimum, the following information:

(i) FSE name and physical address

(ii) Grease waste hauler company and company technician/driver name, or person conducting the pumping/cleaning or any other maintenance

(iii) Date and time pumped/cleaned, or date of any other maintenance

(iv) Volume (in gallons) of the FOG wastewater removed

(v) Final disposal location of the FOG wastewater removed

(e) The grease interceptor's influent-T and effluent-T will be inspected during cleaning and maintenance and the condition noted by

the grease waste hauler's company or individual conducting the maintenance. Influent and effluent-Ts that are loose, defective, or not attached must be repaired or replaced immediately. Grease waste haulers or individuals conducting any maintenance or pumping will use caution to not damage or dislodge Ts, or cause other grease interceptor component damage. Any repairs to the grease interceptor should be documented and kept on file at the FSE.

(f) FSEs shall use city approved grease waste haulers for grease interceptor cleaning/pumping.

(g) Grease interceptors must be "certified" annually by a city approved grease waste hauler or plumber. A city grease interceptor certification (Form A)[1] must be completed and submitted to the city annually.

(h) The city may require the FSE to require the grease waste hauler to contact the city by telephone at least twenty-four (24) hours prior to any cleaning, pumping, maintenance, inspection, or certification of the grease interceptor. The city has the right to be present to inspect all maintenance.

(2) Grease trap cleaning and maintenance. (a) The user at the user's expense shall maintain all grease traps and interceptors. Maintenance of "under the sink" grease traps or "floor" grease traps shall include the removal of all fats, oil, and grease and food solids from the detention compartment of the trap.

(b) Grease traps will be pumped/cleaned at a minimum of every two (2) weeks. If the grease trap FOG and solids layers combined are greater than twenty-five percent (25%) of the trap container capacity then the frequency of cleaning shall be increased.

(c) A Grease trap's minimum size requirement is twenty (20) gallon-per-minute/forty (40) pound capacity. Drainage time of particular kitchen fixtures, such as a three (3) compartment sink, should be considered when selecting the grease trap size.

(d) Grease traps must be "certified" annually by a City approved grease waste hauler or plumber. A city grease interceptor certification (Form B)[2] must be completed and submitted to the city annually.

(e) Recordkeeping: FSEs shall keep a grease trap cleaning record onsite at the FSE facility for a period of three (3) years. Trap cleaning records shall have the date trap was cleaned, individual's name that cleaned the trap, if applicable the grease waste hauler company or plumbing company name, estimated volume of waste removed, and final disposal location for the waste.

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[1]Form A may be found in the office of the recorder.

[2]Form B may be found in the office of the recorder

(f) Grease trap waste shall not be mixed with yellow grease in the grease recycle container.

(g) Grease trap waste shall be sealed or placed in a container to prevent leachate from leaking, and then disposed in an approved container, or hauled offsite by a grease waste hauler or plumber to an approved disposal location. At no time shall the pumped material be returned to any private or public portion of the sanitary sewer collection system or storm water collection system.

(3) Grease control equipment certification requirement. All food service establishments with grease control equipment must have their grease interceptor or grease trap inspected and certified at least annually, defined as period from January 1 through December 31, by a city "certified" grease waste hauler or licensed plumber. Any FSE that does not provide an annual grease control certification by December 31 of each year will be considered to be in noncompliance. If a grease interceptor or grease trap "passes" the certification requirement, no further action is required. If a grease interceptor or grease trap "fails" the certification requirement, a corrective action response is required from the FSE owner or authorized representative to the city within thirty (30) days. Completed certification forms grease interceptor certification (Form A) or grease trap certification (Form B) must be completed and signed by the city "certified" grease waste hauler or licensed plumber, signed by the FSE owner or authorized representative, and submitted to the city.

Acceptable grease interceptor or grease trap certification forms to the city must include:

(a) All information is completed on form and signed by a city "GCE certified" grease waste hauler or plumber;

(b) Signed by the FSE owner or authorized representative; and

(c) Original, completed certification form is submitted to the following address:

Ashland City Public Works
Attn: FOG Program
233 Tennessee Waltz Parkway
Ashland City, TN 37015

Failure of a grease interceptor certification or grease trap certification. The FSE owner or authorized representative is responsible for including detailed "corrective action response" information on the grease interceptor certification form or the grease trap certification form that is submitted to the city. If necessary, additional pages may be attached to the certification form.

(A) PASS OR FAILURE OF GREASE CONTROL EQUIPMENT CERTIFICATION

1. PASSING GREASE CONTROL EQUIPMENT CERTIFICATION

If a grease interceptor or grease trap "Passes" the certification requirement, the FSE must submit a signed, and completed GCE certification form, completed by a City "GCE certified" grease waste hauler or plumber to the City.

2. FAILURE OF GREASE CONTROL EQUIPMENT CERTIFICATION.

If a grease interceptor or grease trap "Fails" the certification requirement, a corrective action response is required from the FSE owner or authorized representative to the City. The reverse side of the GCE certification form provides an area for the corrective action response, but if necessary additional pages should be attached to explain and document the problem and corrective action response. The corrective action response from the FSE owner or authorized representative must include the following:

i. The completed "failed" certification form signed by the FSE owner or authorized representative, and verify it was completed by a City "GCE certified" grease waste hauler or plumber.

ii. Details on the specific problem(s) identified

iii. Details on the specific corrective action(s) that the FSE owner or authorized representative will do to insure compliance, and the date the corrective action will be completed.

If corrective action responses are incomplete, inadequate or do not meet the corrective action due date then this will result in escalation of enforcement action.

(B) Grease control equipment certification process for grease waste haulers, plumbers, and engineers.

Any grease waste hauler employee, plumbing company employee, contractor, or engineer that will be completing the City's grease control certification forms must either attend an Ashland City Public Works Department Grease Control Equipment Certification Class and pass the GCE certification class test; or provide a proof of passing (certification card copy) a GCE certification class at Metro Water Services, Nashville, Tennessee, or Clarksville Wastewater Department, Clarksville, Tennessee to the city.

(4) Approved grease waste haulers. To ensure proper maintenance of grease control equipment and proper disposal of the FOG waste, the city will maintain an "approved grease waste haulers list." criteria for the grease waste hauler to be placed on the "approved grease waste haulers list" include, but are not limited to, the following:

(a) The grease waste hauler employees that will be completing the food service establishment grease control equipment certification forms must either attend a city grease control equipment certification class and pass the GCE certification class test; or submit proof of passing a Metro Water Services, Nashville, Tennessee or Clarksville Wastewater Department, Clarksville, Tennessee GCE certification class.

(b) Grease waste haulers pump grease interceptors or grease traps must comply with the requirements of this chapter.

(c) Signature of the grease waste hauler company's authorized representative and submittal to the city of a completed "Ashland City approved grease waste hauler agreement" form are required.

The grease waste hauler agreement will include grease waste hauler reporting requirements to the city and making records available to city personnel or their authorized representative. Failure to meet any portion of the grease waste hauler agreement will result in removal of the grease waste hauler from the "Ashland City approved grease waste haulers list" and/or additional enforcement action.

(5) Additives. Any additive(s) placed in the grease interceptor or building discharge line system on a constant, regular, or scheduled basis shall be reported to the public works director. Such additives shall include, but not be limited to, enzymes, commercially available bacteria, or other additives designed to absorb, purge, consume, treat, or otherwise eliminate fats, oils, and grease. The use of additives shall in no way be considered as a substitution to the maintenance procedures required herein. If the additive used by the FSE contributes to the discharge of FOG to the city, the FSE shall be required to discontinue use of the additive.

(6) Chemical treatment. Chemical treatments such as drain cleaners, acid and other chemicals designed to dissolve or remove grease shall not be allowed to enter the grease interceptor.

(7) Grease interceptor abandonment. The property owner of a FSE utilizing a grease interceptor or grease trap shall notify the city within thirty (30) days whenever a FSE meets the criteria for temporary or permanent abandonment of said interceptor as set forth in this section.

(a) Temporary abandonment.

(i) An in ground grease interceptor is considered to be temporarily abandoned if a FSE temporarily closes for business and the property owner intends to utilize the interceptor for another FSE in the same location.

(ii) At the property owner's expense, the interceptor shall be:

(A) Completely pumped of contents

(B) Identify and repair any noncompliant structural or plumbing components

(C) Certified by a city approved grease waste hauler with certification submitted to the city.

(D) After a "passed" certification, the interceptor is to be filled with water to prevent floatation.

(b) Permanent abandonment.

(i) An in ground grease interceptor is considered to be permanently abandoned when the building is remodeled such that the grease interceptor will not be used; or the building is replaced with a type of business that will not be required to utilize the grease interceptor; or when the property is condemned.

(ii) The property owner must contact the city to determine a plan of action for proper grease interceptor abandonment and removal protocol. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-708. Solvents prohibited. The use of degreasing or line cleaning products containing petroleum based solvents is prohibited. (as added by Ord. #388, Nov. 2011)

18-709. Enforcement and penalties. Any person who violates this chapter shall be guilty of a civil violation punishable under and according to the general penalty provision of the city's municipal code of ordinances. Each day's violation of this chapter shall be considered a separate offense. The customer may be assessed an administrative penalty of not to exceed one thousand dollars ($1,000.00) per violation per day.

Enforcement action against the food service establishment includes, but is not limited to, failure to clean or pump grease control equipment, failure to maintain grease control equipment including installation of a properly functioning influent/effluent-T and baffle(s), failure to install grease control equipment, failure to control FOG discharge from the FSE, failure to certify the grease interceptor or trap, FSE responsible for sewer line obstruction, FSE responsible for a sanitary sewer overflow, and FSE use of additives so that FOG is diluted and pushed downstream of the FSE.

If the FSE fails to initiate corrective action in response to a noncompliance notification or notice of violation, other escalation in enforcement action will be issued and additional fees or penalties may be assessed. Fees may include compliance inspection fees, costs associated with service calls for sewer line blockages, line cleaning, camera trucks, line and pump repairs, including all labor, material and equipment

For all other violations not specifically mentioned above, the city will use the Ashland City Food Service Establishment Enforcement Response Guide as a guide for enforcement action. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-710. Alteration of control methods. The city through the director of public works reserves the right to request additional control measures if measures taken are shown to be insufficient to protect sewer collection system and treatment plant from interference due to the discharge of fats, oils, and grease, sand/soil, or lint. (as added by Ord. #388, Nov. 2011)

18-711. Customer's responsibility. The customer is responsible for assuring that the produced waste is disposed of in accordance with all federal, state and local disposal regulations. The authorized representative of the FSE shall ensure that Best Management Practices (BMPs) for controlling the discharge of FOG from their facility are implemented at the FSE.

Food service establishments shall provide such facilities and institute such procedures as are reasonably necessary to prevent or minimize the potential for accidental discharge of fats, oils, and grease into the sewage collection system. Documentation of implementing and observing BMPs shall be provided by the FSE. Examples of BMPs include, but are not limited to:

(1) Educate and train all employees on BMPs and proper methods of FOG disposal. Employees must understand the basis and importance of BMPs so they will be more willing to initiate the BMPs. BMP education and training of employees will not only help to prevent public sewer line FOG SSOs and blockages, but also help prevent FSE private sewer line blockages and back-ups.

(2) Recycle waste cooking oils (yellow grease) by pouring all liquid oil and cooking grease from fryers, pots, woks, and pans into a covered grease recycle bin or container. Use a permitted recycled (yellow) grease waste collection company or authorized recycle center. Keep a log of the volume of recycled grease hauled offsite by the yellow grease waste collection company.

(a) When transporting used recycled yellow grease to the grease recycle container do not overfill containers and use covers on the transport container.

(b) Yellow (recycled) grease is a valuable commodity where the FSE may be paid by the yellow grease collection company.

(c) Do not dispose any grease trap waste (brown grease) into the recycled (yellow) grease container or bin. The beneficial reuse of the yellow grease will be compromised, and the yellow grease value decreases.

(d) Keep all yellow grease recycle bins or containers covered to prevent rain water from contaminating the yellow grease and prevent an overflow of the yellow grease container.

(e) Insure that the yellow grease recycle containers or bins are located in a flat area, and separated by curbing, posts or other material to prevent accidental spills of the yellow grease. Especially prevent the location of the yellow grease recycle container from being next to dumpsters, since trash collection trucks may bump and tip over the recycle container during trash pick-up.

(3) Have a "grease spill kit" available. If an oil or grease spill occurs, clean up using "dry" oil absorbent material (i.e. oil absorbent pads, kitty litter) or use ice to make grease solidify. Scoop up and dispose of the greasy solids into a sealed container then put in the trash. Do not wash oil or grease into drains!

(4) Display or post "NO GREASE" signs above all kitchen sinks and throughout the kitchen area to remind employees to never pour any oils or grease into kitchen sinks or drains.

(5) Use strainers and screens in kitchen sink drains and floor drains to prevent large food particles and other debris from going into the kitchen sewer lines. Make sure all kitchen floor drain covers are secure to not allow food solids, straws, cans, or other debris to enter the kitchen floor drains and cause a sewer back-up in the kitchen.

(6) Do not pour any oils or grease into sinks, floor drains, mop sinks, or any other indoor drains; and do not pour any oils or grease into any outside storm drain or other drain. If any improper disposal of oils or grease is identified, then it will result in enforcement actions.

(7) Food solids traps could be installed to prevent food solids from entering the grease control equipment and causing excess loading in the grease interceptor or grease trap. If food solids traps are installed it can reduce the frequency of pumping/cleaning the grease interceptor or grease.

(8) Dispose of food waste by recycling and/or solid waste removal. Food grinder use is discouraged due to buildup of solids in the grease interceptor or grease trap which causes decreased efficiency of the grease control equipment and the need to increase the pumping/cleaning frequency of the grease interceptor or grease trap. If a food grinder is used, then installation of a food solids trap is recommended.

(9) "Dry wipe" or scrape excess food solids and grease residue from pots, pans, plates, utensils, screens, and floor mats into a trash container for solid waste disposal.

(10) Routinely clean kitchen exhaust system vent hoods/filters to prevent FOG storm water impacts and FOG related vent hood/filter fires. If the FSE has a grease interceptor, waste from kitchen exhaust system hoods/filters can be pH adjusted and filtered and disposed in a drain to a grease interceptor. Other FSEs will need to hire a professional vent hood/filter cleaning company that properly disposes of the vent hood wastewater. Insure that any vent hood/filter cleaning company provides records of proper disposal of the vent hood/filter waste. Do not discharge vent hood/filter cleaning waste directly to the city sewer system with no pretreatment of the wastewater. This can cause a FOG related SSO event, public sewer line blockage, or private sewer line back-up at the FSE. (as added by Ord. #388, Nov. 2011, as replaced by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

18-712. Fees and permits. (1) The city may charge plans review, inspection, monitoring, assessment, impact, surcharge, commercial food facility,

and/or permit fees to the food service establishments to get reimbursement for the FOG program and/or POTW impact costs.

(2) A monthly FOG program surcharge fee may be added to each FSE's wastewater bill.

(3) An additional compliance inspection fee may be charged to each food service establishment for each re-inspection due to noncompliance issues.

(4) The city may issue individual or general FOG permits to food service establishments. FOG permits may be issued for a period or duration of up to five (5) years. All new FSEs shall complete the city's grease control application form and submit the form to the city, which will serve as the FSE's FOG permit application. The city's FOG inspection form will serve as the permit application for existing FSEs. Additional fees may be implemented by the city for food service establishment wastewater treatment and impacts to the POTW. (as added by Ord. #484, Oct. 2017 ***Ch12_6-11-19***)

APPENDIX A

MINIMUM STANDARDS

These designs represent "minimum standards" for normal usage. Installations with heavier usage require more stringent measures for which the owner/user is responsible, and shall bear the costs. The owner/user is responsible to provide relevant usage information to the Public Works Director and Plans Review.

Precast Concrete Interceptors

The minimum volume of a precast concrete interceptor shall be 740 gallons. The minimum depth of the liquid capacity shall be 42". The maximum volume is subject to availability. Individual tanks larger than 2000 gallons are to be pre-approved by the Public Works Director when the required effective capacity of the grease interceptor is greater than the capacity of available acceptable interceptors, installation of grease interceptors in series shall be required.

Specific intentions of the sizing formula and design requirements are:

- to provide a minimum of 2 hours retention for grease saturated high temperatures waste water. Significant separation of suspended grease can occur if adequate retention time is provided to allow signification calming and cooling of the waste water.
- to provide adequate holding capacity for estimated accumulated greases between cleanings: normally 1 month (plus 2 weeks buffer).

Pre-cast concrete grease interceptors shall be sized in accordance with the following formula:

Restaurants:
(S) x (GS) x (HR divided by 12) x (LF) = Effective capacity of grease interceptor in gallons.
S = Number of seats in dining area
GS = Gallons of waste water per seat (use 20 gallons for ordinary restaurant, use 10 gallons for single service article restaurants)
HR = Number hours restaurant is open
LF = Loading factor (use 1.25 interstate highway, use 1.00 other freeways, 1.00 recreational area, 0.08 main highway and 0.50 other highways)

Other Establishments with Commercial Kitchens:
(M) x (GM) x (LF) = effective capacity of grease interceptor in gallons.
M = Meals prepared per day
GM = Gallons of waste water per meal (use 5 gallons)
LF = Loading factor (use 1.00 with dishwashing machine and 0.50 without dishwashing machine)

ADDENDUM TO FATS, OIL, & GREASE MANAGEMENT PLAN

Grease interceptors are required for Customers that meet any of the following criteria:

- new construction
- remodels, additions, alterations or repairs valued at or greater than $20,000
- has caused or contributed to a grease related collection system blockage resulting in maintenance requirements and/or a sewage spill

All new grease interceptors shall be designed, constructed and installed in accordance with specifications of the Ashland City Water and Sewer Department, and have a sampling access point located downstream of the interceptor.

Each grease interceptor shall have an effluent filter installed on the outlet side of the tank. The filter size will be determined by the Public Works Department Pretreatment Coordinator based upon a 12-month consumption history for existing FHF's and projected flow forecasts for new facilities. Each grease interceptor shall be maintained

- by removing the entire contents of the interceptor each time the interceptor is pumped.
- To ensure proper operation, maintenance and performance
- At a minimum pumping frequency of once per three-month period, or more frequently to ensure that the facility discharge does not cause or contribute to grease related collection system blockage resulting in maintenance requirements and or a sewage spill.
- Through pumping by the Ashland City Water and Sewer Department approved food handling waste grease hauler.

The food-handling establishment shall retain maintenance records with the following information for each grease removal devise located on the

premises. The records shall be kept a minimum of three years and provided to the Ashland City Water and Sewer Department upon request.

- Date of service
- Volume pumped (gallon)
- Name of Public Works Director
- Approved waste grease disposal location

The food service establishment shall notify Public Works Director-Department of Environmental Compliance at (615) 441-5406 of any

- Sale, lease, or transfer of the operation for which the permit was issued
- Change of facility name
- Changes to grease removal device(s)
- Remodel, addition, alterations or repairs valued at or greater than $5,000.00

Access to the facility shall be granted to WADC personnel to conduct wastewater compliance inspections and to collect wastewater discharge samples.

WADC will conduct random, unannounced inspections to verify compliance with the terms and conditions of the Fats, Oils, Grease Management Plan, and/or of the Food Handling Wastewater Discharge permit.

WADC will pursue enforcement and penalties in accordance with the WADC Fats, Oil, and Grease Enforcement Response Plan.

ASHLAND CITY WATER AND SEWER

Inspection Date: _____
Inspected by: _____

FATS, OILS, GREASE CONTROL INSPECTION FORM

Business Name: _____ Bus. Phone: _____

Contact Person: _____ Title: _____

Contact's Cell Phone: _____ Contact's Email: _____

Business Address: _____ Billing Address: _____

City: _____ Street/P.O. Box: _____

State: _____ City/State: _____

Zip: _____ Zip: _____

Year Established: _____ Seating Capacity: _____

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Grease INTERCEPTOR _____ Yes ____ No (If No, proceed to next section.)

Number of Manhole Access? _____

Interceptor size (gals) ___ 750 ___ 1000 ___ 1500 ___ 2000 ___ other

Estimated Grease Layer (inches): _____ Effluent T Visable? ____ yes ____ no

Effluent T Attached & In Good Condition? ____ yes ____ no ____ unknown

Effluent Filter Attached & In Good Condition? ___ yes ____ no ____ unknown

Waste Grease Hauler Used? _____ Frequency Interceptor Cleaned: _____

Records of Maintenance/Cleaning Available? ____ yes ____ no

Date Last Cleaned: _____

Additional Comment(s): _____

_____

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Grease TRAP? ____ Yes ____ No (If No, proceed to next section.)

Frequency Trapped Cleaned: _____

Trap Location: ___ Under Sink Trap ___ Floor Trap ___ Outside Floor Trap ___

Grease Trap Flow-Through Rating/Grease Capacity:

_____ 5 gpm/10 lb _____ 10 gpm/20 lb _____ 15 gpm/30 lb

_____ 20 gpm/40 lb _____ 35 gpm/70 lb _____ other

Records of Maintenance/Cleaning Available? ____ yes ____ no

Date Last Cleaned: _____

Additional Comment(s): _____

_____

++

Grease Recycling Bin? ____ yes ____ no Recycling Grease Hauler: _____

Cleanout Covers Missing or Damaged? _____ Yes _____ no

FOG Impact at Dumpster or Around Recycling Bin? (if yes, give explanation below.) ____ yes ____ no

Additional Comment(s): _____

_____

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Is there a specifically designed water meter for the facility _____ Yes _____ No

If yes, provide account number: _____

If no, provide description below of the arrangement for the supply of water.

_____

_____