

## TITLE 18

WATER AND SEWERS

## CHAPTER

1. SEWAGE DISPOSAL.
2. CROSS-CONNECTIONS, AUXILIARY INTAKES, ETC.

## CHAPTER 1

SEWAGE DISPOSAL<sup>1</sup>

## SECTION

- 18-101. Definitions.
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18-101. Definitions. Unless the context specifically indicates otherwise, the meaning of terms used in this chapter shall be as follows:

(1) "The Act" means Federal Water Pollution Control Act Amendment of 1972, also known as the Clean Water Act, (33 U.S.C. 1251 et. seq.), and subsequent amendments.

(2) "B.O.D" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees C., expressed in terms of weight and concentration [milligrams per liter (mg/l)].

(3) "Building drain" shall mean that part of the lowest horizontal piping of a drainage system which 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.

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<sup>1</sup>Municipal code reference

Building, utility and housing codes: title 12.

Utilities board: title 2.

(4) "Building sewer" shall mean the extension from the building drain to the public sewer or other place of disposal.

(5) "City" shall mean the City of Loudon or the Loudon Utilities Board.

(6) "C.O.D"(denoting chemical oxygen demand) shall mean the quantity of oxygen utilized in the oxidation of organic matter to carbon dioxide and water expressed in terms of weight and concentration [milligrams per liter (mg/l)].

(7) "City judge" means that person appointed by the Loudon City Council to constitute city court and to try all persons charged with violation of the ordinances of the city.

(8) "Combined sewer" shall mean a sewer receiving both surface runoff and sewage.

(9) "Compatible pollutant" shall mean such pollutants as biochemical oxygen demand, suspended solids, pH and fecal coliform bacteria, plus any additional pollutants as are now and may be in the future specified and controlled in this city's NPDES permit for its wastewater treatment works where said works have been designed and used to reduce or remove such pollutants.

(10) "EPA" shall mean the Environmental Protection Agency, an agency of the United States, or where appropriate, the term may be used as a designation for the administrator or other duly authorized official of said agency.

(11) "Garbage" shall mean solid wastes from the domestic and commercial preparation, cooking and dispensing of food, and from the handling, storage and sale of food.

(12) "Grab sample" shall mean a single sample which is taken from a waste stream on a one-time basis from one sampling point.

(13) "Incompatible pollutant" shall mean any pollutant which is not a "compatible pollutant" as defined in this section.

(14) "Industrial user" shall mean a source of discharge which introduces pollutants into the sanitary sewer from any non-domestic source regulated under Section 307(b), (c) or (d) of the Act.

(15) "Industrial wastes" shall mean the liquid wastes resulting from industrial and manufacturing processes and/or trade and business establishments, as distinct from sanitary wastewater.

(16) "Interference" shall mean inhibition or disruption of the sewer systems, treatment processes or operations (including sludge treatment and disposal processes) which contributes to the violation of any requirements of the city's NPDES permit.

(17) "Monitoring" shall mean the measurement, continuous or intermittent, of wastewater quality.

(18) "National Pollutant Discharge Elimination System" or "NPDES Permit" shall mean a permit issued to the city pursuant to Section 402 of the Act.

(19) "National Pretreatment Standard" or "Pretreatment Standard" shall mean any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307 (b) and (c) of the Act which applies to industrial users. These standards are further segregated as:

(a) "National pretreatment standards: prohibited discharges" - establishes prohibitions on pollutants introduced into the sanitary sewer system pursuant to 40 CFR Section 403.5 and applies to all industrial users.

(b) "National Pretreatment Standards: Categorical Standards" - specifies quantities or concentrations of pollutants or pollutant properties which may be discharged to the sanitary sewer pursuant to 40 CFR Section 403.6 and applies only to specific industrial categories.

(20) "Natural outlet" shall mean any outlet into a watercourse, pond, ditch, lake, or other body of surface or groundwater.

(21) "New source" shall mean any building, structure, facility, or installation from which there is or may be a discharge, the construction of which commenced:

(1) After proposal of pretreatment standards in accordance with Section 307(c) of the Act which are applicable to such source or

(2) After proposal of pretreatment standards in accordance with Section 307(c) of the Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 307(c) within 120 days of their proposal.

(22) "Pass through" shall mean the discharge of pollutants through the treatment system into a natural outlet in quantities or concentrations which are a cause of or significantly contribute to any violation of the NPDES permit, this includes pollutants subject to "National Pretreatment Standards: Categorical Standards."

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

(24) "pH" means the hydrogen ion activity of a solution and is expressed as the logarithm of the reciprocal of the hydrogen ion activity in moles per liter at a given temperature.

(25) "Pollution" shall mean the man-made or man-induced alteration of the chemical, physical, biological or radiological integrity of water.

(26) "Pretreatment facility" of "Pretreatment" shall mean the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into the treatment system. The reduction or alteration can be obtained by physical, chemical, or biological

processes, process changes or by other means, except as prohibited by 40 CFR Section 403.6(d).

(27) "Pretreatment requirement" shall mean any substantive or procedural requirement related to pretreatment other than a national pretreatment standard, imposed on an industrial user.

(28) "Process water" shall mean "industrial wastes" as described in this section, definition (15).

(29) "Public sewer" shall mean a sewer in which all owners of abutting properties have equal rights and is controlled by public authority.

(30) "Replacement" shall mean expenditures for obtaining and installing equipment accessories, or appurtenances which are necessary during the service life of the treatment works to maintain the capacity and performance for which such works were designed and constructed. The term operations and maintenance includes replacement.

(31) "Sanitary sewer" shall mean a sewer which carries sewage and to which storm, surface, and ground waters are not intentionally admitted.

(32) "Sanitary wastewater" shall mean liquid wastes discharged from: the sanitary conveniences at dwellings (including apartment houses and hotels), office buildings, industrial plants, or institutions and from the non-commercial preparation, cooking and handling of food, as distinct from industrial wastes.

(33) "Sewage" shall mean 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.

(34) "Sewage works" shall mean all facilities for collecting, pumping, treating and disposing of sewage.

(35) "Sewer" shall mean a pipe or conduit for carrying sewage.

(36) "Shall is mandatory; "May" is permissive.

(37) "Significant industrial user" shall mean any user which meets or exceeds any of the following criteria:

(a) An industrial user which discharges a waste whose characteristics are greater than any of the following:

Flow	25,000 gallons per day
BOD <sub>5</sub>	62 lbs/day
TKN	12 lbs/day
NH <sub>3</sub> -N	6 lbs/day
Suspended Solids	62 lbs/day
Oil and Grease	21 lbs/day

or, contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant, or is designated as such by the Control Authority as defined in 40 CFR 403.12(a) on the basis that the industrial user has reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

(b) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter 1, subchapter N.

(c) All commercial users of EPA funded individual systems.

(d) Upon a finding that an industrial user meeting the criteria in the above sections of this definition has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

(38) "Significant violations" are defined as:

(a) Violations of wastewater discharge limits.

(i) Chronic violations-66% or more of the measurements exceed the same daily maximum limit or the same average limit in a six month period (any magnitude of exceedance).

(ii) Technical Review Criteria (TRC) violations are those in which 33% or more of all the measurements for each pollutant parameter taken during a six month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH).

(iii) Any other violation(s) of effluent level (average or daily maximum) that the Control Authority believes has caused alone or in combination with other discharges, interferences or pass through or endangered the health of the sewage treatment personnel or the public.

(iv) Any discharge of a pollutant that has caused imminent endangerment to human health/welfare or the environment and has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge.

(b) Violations of compliance schedule milestones contained in a local control mechanism or enforcement order, for starting construction, completing construction, and attaining final compliance by 90 days or more after the scheduled date.

(c) Failure to provide reports for compliance schedules, self monitoring data, or categorical standards (baseline monitoring reports, 90 day compliance reports, and periodic reports) within 30 days from the due date.

(d) Failure to accurately report noncompliance.

(e) Any other violation or group of violations that the Control Authority considers to be significant.

(39) "Slug" shall mean wastewaters at a flow rate or containing such concentrations or quantities of pollutants that exceeds for any time period longer than fifteen (15) minutes more than five (5) times the average

twenty-four (24) hour concentration, quantities or flow during normal operation and that would cause a treatment process upset and subsequent loss of treatment efficiency.

(40) "Standard Industrial Classification or SIC" shall mean a classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972.

(41) "Storm drain" (sometimes termed "storm sewer") shall mean a sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.

(42) "Superintendent" shall mean the superintendent of sewage works and/or of sewage plant of the City of Loudon, his authorized deputy agent or representative.

(43) "Suspended solids" shall mean the total suspended matter that is in suspension or floating on the surface in water, sewage, or other liquids, and which are removable by laboratory filtering, expressed in terms of weight and concentration [milligrams per liter (mg/l)].

(44) "Toxic pollutant" shall mean any pollutant or combination of pollutants listed as toxic in regulations promulgated by the administrator of the Environmental Protection Agency under the provisions of 33 U.S.C. 1317.

(45) "Twenty-four hours, flow proportional composite sample" shall mean a sample consisting of several effluent portions collected during a twenty-four (24) hour period in which the portions of sample are proportionate to the flow to combine to form a representative sample.

(46) "Useful life" shall be the estimated period during which a treatment works will be operated.

(47) "User" shall mean any individual, firm, company, association, society, corporation or group.

(48) "User charge" shall mean a charge levied on users of the treatment works for the cost of operation and maintenance of such works.

Scientific terms not otherwise defined herein shall be as adopted in the latest edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation. (1976 Code, § 8-301, as replaced by Ord. #1996-2, May 1996)

18-102. Requirements for proper sewage disposal. (1) Disposal of human and animal excrements. It shall be unlawful for any user to place, deposit, or permit to be deposited in any unsanitary manner on public or private property within the City of Loudon, or any area under the jurisdiction of the said city, any human or animal excrement, garbage, or other objectionable waste.

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

(3) Septic tank, cesspool, privy vault, and privy construction. Except as hereafter 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.

(4) Requirement of sewer connections. The owner of all houses, buildings or properties used for human occupancy, employment, recreation, or other purposes, situated within the city 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 sewer of the city, 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 chapter, within ninety (90) days after date of official notice to do so.

(5) 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, state, and federal 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. (1976 Code, § 8-302, as replaced by Ord. #1996-2, May 1996)

18-103. Building sewer permits and proper connections. (1) Sewer connections. No unauthorized user shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenances thereof without first obtaining a written permit from the superintendent.

No connections outside the corporate limits of the City of Loudon shall be made unless by contract signed by all parties and approved by action of the Loudon City Council.

(2) Building sewer permits. There shall be two (2) classes of building sewer 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 city. Their permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgement of the superintendent. A permit and inspection fee of ten dollars (\$10.00) shall be paid to the city at the time the application is filed.

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

(4) Users per connection. A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another or any 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) Use of existing sewer connection. Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the superintendent, to meet all requirements of this chapter.

(6) Design consideration for building sewers. 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 following requirements:

(a) The minimum size of a building sewer shall be four (4) inches.

(b) The minimum depth of a building sewer shall be eighteen (18) inches.

(c) Four (4) inch building sewers shall be laid on a grade greater than 1/8 inch per foot. Larger building sewers shall be laid on a grade that will produce a velocity when flowing full of at least 2.0 feet per second.

(d) Slope and alignment of all building sewers shall be neat and regular.

(e) Building sewers shall be constructed only of (1) concrete or clay sewer pipe using rubber or neoprene compression joints of approved type; (2) cast iron soil pipe with leaded or compression joints; (3) polyvinyl chloride pipe with solvent welded or with rubber compression joints of approved type; or (5) such other materials of equal or superior quality as may be approved by the superintendent. Under no circumstances will cement mortar joints be acceptable.

(f) A cleanout shall be located five (5) feet outside of the building, one as it taps onto the utility lateral and one at each change of direction of the building sewer which is greater than 45 degrees. Additional cleanouts shall be placed not more than seventy-five (75) feet apart in horizontal building sewers of four (4) inch nominal diameter and not more than one hundred (100) feet apart for larger pipes. Cleanouts shall be extended to or above the finished grade level directly above the place where the cleanout is installed. A "Y" (wye) and 1/8 bend shall be used for the cleanout base. Cleanouts shall not be smaller than four (4) inches on a four (4) inch pipe.

(g) Connections of building sewers to the public sewer system shall be made at the appropriate existing wye or tee branch using compression type couplings or collar type rubber joint with corrosion resisting or stainless steel bands. Where existing wye or tee branches are



not available, connections of building services shall be made by either removing a length of pipe and replacing it with a wye or tee fitting or installing a tee-saddle or tee-insert of a type approved by the superintendent. All such connections shall be made gas-tight and watertight.

(h) The building sewer may be brought into the building below the basement floor when gravity flow from the building to the sanitary sewer is at a grade of 1/8 inch per foot or more if possible. In cases where basement or floor levels are lower than the ground elevation at the point of connection to the sewer, adequate precautions by installation of check valves or other backflow prevention devices to protect against flooding shall be provided by the owner. 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 at the expense of the owner.

(i) The methods to be used in excavating, placing of pipe, jointing, testing, backfilling the trench, or other activities in the construction of a building sewer which have not been described above shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city or to the procedures set forth in appropriate specifications of the ASTM and Water Pollution Control Federal Manual of Practice No. 9. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.

(j) An installed building sewer shall be gas tight and water tight.

(7) Maintenance of building sewers. Each individual property owner or user of the POTW shall be entirely responsible for the maintenance of the building sewer located on private property. This maintenance will include repair or replacement of the service line as deemed necessary by the superintendent to meet specifications of the city.

(8) Illegal connections. No user shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of uncontaminated surface runoff or groundwater to a building sewer or building which in turn is connected directly or indirectly to a public sanitary sewer.

(9) Design considerations for connecting building and public sewers. The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the city, or the procedures set forth in appropriate specifications of the A.S.T.M. and the W.P.C.F. Manual of Practice No. 9. All such connections shall be made gas tight and water tight. Any deviation from the prescribed procedures and materials must be approved by the superintendent before installation.

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

(11) Excavation. 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 city. (1976 Code, § 8-303, as replaced by Ord. #1996-2, May 1996)

18-104. Prohibitions and limitations on wastewater discharges.

(1) Special agreements. Nothing in this section shall be construed, as preventing any special agreement or arrangement between the city and any user of the wastewater treatment system whereby wastewater of unusual strength or character is accepted into the system and specifically treated subject to any payments or user charges as may be applicable. This special agreement shall be implemented by a "Major Industrial Discharge Permit", ref. section 18-105. The making of such special agreements or arrangements between the city and the user shall be strictly limited to the capability of the sewage works to handle such wastes without interfering with unit operations or sludge use and handling or allowing the pass through of pollutants which would result in a violation of the NPDES permit.

(2) Wastes excluded from discharge into Loudon's Sewerage System. An industrial user shall not introduce into the Loudon Utilities sewer system any pollutant(s) which causes pass through or interferences. All industrial users shall be subject to "National Pretreatment Standards: prohibited discharges" as detailed in 40 CFR, Section 403.5. In addition, no user shall discharge or allow to be discharged into the sewerage works any of the following materials:

(a) Unpolluted Waters. This includes uncontaminated storm water, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer. Storm water and all other unpolluted drainage shall be discharged to such sewers, or to a natural outlet approved by the (Tennessee Division of Water Pollution Control). Industrial cooling water or unpolluted process waters may be discharged, on approval of the (Tennessee Division of Water Pollution Control), to a storm sewer, or natural outlet.

(b) Solid or Viscous Wastes. Solid or viscous substances which will or may cause obstruction to the flow in a sewer, or otherwise interfere with the proper operation of the wastewater treatment system. Prohibited materials include, but are not limited to, grease, uncommunicated garbage, animal guts or tissues, paunch manure, cannery wastes, bones, hair, hides or fleshings, entrails, whole blood,

feathers, bull solids, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastic, tar, asphalt, residues, painting residues, residues from refining or processing of fuel or lubricating oil, and similar substances.

(c) Explosive Mixtures. Pollutants which create a fire or explosion hazard in the Loudon Utilities sewer system, including but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test method specified in 40 CFR 251.21. Liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in an other way to the sewage works or to the operation of the system. At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the sewer system, be more than five percent (5%) nor any single reading over ten percent (10%) of the Lower Explosive Limit (L.E.L.) of the meter. Controlled materials include, but are not limited to, gasoline, kerosene, naphta, benzene, toluene, zylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides.

(d) Improperly shredded garbage. Garbage that has not been ground or comminuted to such a degree that all particles will be carried freely in suspension under flow conditions normally prevailing in the public sewers, with no particle greater than one-half ( $\frac{1}{2}$ ) inch (1.27 centimeters) in any dimension.

(e) Corrosive wastes. Any waste which will cause corrosion or deterioration of the sewage works. All wastes discharged to the public sewer system must have a pH value in the range of five (5) to nine (9) standard units. Prohibited materials, include, but are not limited to, acids, sulfides, concentrated chloride and fluoride compounds and substances which will react with water to form acidic products.

(f) Oils and grease. Any waters or wastes containing fats, wax, grease, or oil, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) or one hundred fifty (150) degrees F (0 and 65°C).

(g) Noxious materials. Noxious or malodorous solids, liquids or gases, which, either single or by interaction with other wastes, are capable of creating a public nuisance or hazard to life, or are or may be sufficient to prevent entry into a sewer for its maintenance and repair.

(h) Discolored materials. Wastes with objectionable color such as dye waste.

(i) Toxic substances. Any toxic substances in amounts exceeding standards promulgated by the Administrator of the United

States Environmental Protection Agency pursuant to Section 307(a) of the Act, and chemical elements or compounds, phenols, or any other substances which are not susceptible to treatment or which may interfere with the biological processes or efficiency of the treatment system or that will pass through the system.

(j) Radioactive wastes. 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 which will or may cause damage or hazards to the sewerage facilities or personnel operating the system.

(k) High temperature wastes. Any liquid or vapor having a temperature higher than one hundred four (104) degrees Fahrenheit, forty (40) degrees Centigrade.

(l) Flow rate/concentrations. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the Loudon Utilities sewer system.

(m) Trucked or hauled waste. Any trucked or hauled pollutants, except at discharge points designated by Loudon Utilities.

(3) Limitation on wastewater discharges. No person shall discharge or convey, or permit, or allow to be discharged or conveyed to a public sewer any wastewater containing pollutants of such character or quantity that will:

(a) Require unusual attention or expense to handle at the wastewater treatment facilities.

(b) Constitute a hazard to human or animal life, or to the stream or water course receiving the treatment plant effluent.

(c) Violate, National Pretreatment Standards as promulgated by the EPA with appropriate effective dates.

(d) Cause the treatment plant to experience problems with unit operations, sludge handling and disposal options or compliance with its NPDES permit limitations. More specifically, concentrations shall not exceed the amounts as detailed in Table 1, "Protection Criteria Parameters". (TABLE 1 FOLLOWS)

TABLE 1  
PROTECTION CRITERIA PARAMETERS

<u>Constituent</u>	<u>Daily Average Concentration (mg/l)<sup>1</sup></u>
Compatible Pollutants <sup>2</sup> :	
Ammonia Nitrogen	
Biochemical Oxygen Demand	300
Total Suspended Solids	300
Nitrogen (Total Kjeldahl)	60
Fats, Oil and Grease	100
Incompatible Pollutants:	
Antimony	5.0
Arsenic	1.0
Benzene	0.013
Boron	50
Cadmium	0.02
Carbon Tetrachloride	0.03
Chloroform	0.224
Chromium (Total)	0.375
Copper	0.5
Cyanide	0.605
Ethylbenzene	0.04
Lead	0.1
Mercury	0.004
Methylene Chloride	0.096
Naphthalene	0.0125
Nickel	0.273
Phenols	0.1979
Silver	0.029
Tetrachloroethylene	0.139
Toluene	0.214
1, 1, 1-Trichlorethane	0.25
Trans-1, 2-Dichloroethylene	0.139
Trichloroethylene	0.1
Zinc	1.053
<hr/>	
Bis (2 Ethylhexl) phthalate	*
Butylbenzylphthalate	*
DI-N-Butylphthalate	*
Diethylphthalate	*
Total	*

<sup>1</sup>Based on 24-hour flow proportional composite samples

<sup>2</sup>Based on design capacity of plant

## Notes:

- (a) Additional constituents shall be added as needed to protect the treatment works.
- (b) Dilution of any wastewater discharge for the purpose of satisfying these requirements shall be considered a violation of this chapter.
- (c) "Slugs", as defined in section 18-101 shall be avoided.
- (d) Wastewater discharges which substantially differ in nature or constituents from the users average discharge shall be prohibited unless prior approval is obtained, in writing, from the superintendent.
- (e) In the event that the influent at the POTW reaches or exceeds acceptable levels, the superintendent shall initiate technical studies to determine the cause of the influent violation and shall recommend to the city the necessary remedial measures, including, but not limited to, recommending the establishment of new or revised pretreatment levels for these parameters. The superintendent shall also recommend changes to any of these criteria in the event that: the POTW effluent standards are changed, there are changes in any applicable law or regulation affecting same, or changes are needed for more effective operation of the POTW. (1976 Code, § 8-304, as replaced by Ord. #1996-2, May 1996)

18-105. User compliance with waste discharge standards.

(1) Regulatory actions. Disposal into the sewer system by any person is unlawful except in compliance with federal standards promulgated pursuant to the Federal Water Pollution Control Act Amendments of 1972 (FWPCAA), and any more stringent state and local standards. If any waters or wastes are discharged or are proposed to be discharged to the public sewers, and contain the substances or possess the characteristics enumerated in section 18-104 or the criteria established by the federal government on discharge of toxic and hazard materials or violates the treatment facilities protection criteria and which in the judgement of the superintendent and/or the Division of Water Quality Control, Tennessee Department of Public Health, may have a deleterious effect upon the sewage works, processes, equipment or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the superintendent may:

- (a) Require a "Major Industrial Discharge Permit" as described in section 18-106 of this chapter.
- (b) Prohibit the discharge of such wastewater; this includes the right to disconnect the users connection with sewer system, ref. section 18-108(2).
- (c) Require a discharger to demonstrate that in-plant modifications will reduce or eliminate the discharge of such substances in conformity with this chapter.

(d) Require pretreatment, including storage facilities or flow equalization necessary to reduce or eliminate objectionable characteristics or substances so that the discharge will not violate these rules and regulations.

(e) Require grease, oil, and sand interceptors (separation facilities) when in the opinion of the superintendent they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the superintendent and shall be located as to be readily and easily accessible for cleaning and inspection.

(f) Require the person making, causing or allowing the discharge to pay an additional cost or expense incurred by the city for handling and treating excess loads imposed on the treatment system.

(g) Take such other remedial action as may be deemed to be desirable or necessary to achieve the purpose of this chapter.

(2) Right of entry. Whenever it shall be necessary for the purpose of these rules and regulations, the superintendent, or his authorized representative, upon the presentation of credentials, may enter upon any property or premises at reasonable times for the purpose of (1) copying any records required to be kept under provisions of this chapter, (2) inspecting any monitoring equipment or method, and (3) sampling any discharge of wastewater to the treatment works. The superintendent may enter upon the property at any hour under emergency circumstances. EPA and/or State Health Department representatives may also enter upon properties or premises but only when accompanied by the superintendent.

(3) Personal injury. While performing the necessary work on private properties referred to in this chapter, the superintendent or duly authorized employees of the city shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the city employees and the city shall indemnify the company against loss or damage to its property by community 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.

(4) Protection from accidental discharge. Each user shall provide protection from accidental discharge of prohibited materials or other wastes regulated by this chapter. Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the owner or operator's own cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the superintendent for review, and shall be approved by him before construction of

the facility, except as provided in the "Major Industrial Discharge Permit." Review and approval of such plans and operating procedures shall not relieve the user from the responsibility to modify his facility as necessary to meet the requirements of this chapter.

(5) Reporting of accidental discharge. If for any reason a facility does not comply with or will be unable to comply with any prohibition or limitations in this chapter or the users permit, the facility responsible for such discharge shall immediately notify the superintendent so that corrective action may be taken to protect the treatment system. In addition, a written report addressed to the superintendent detailing the date, time and cause of the accidental discharge, the quantity and characteristics of the discharge and corrective action taken to prevent future discharges shall be filed by the responsible facility within five (5) days of the occurrence of the noncomplying discharge. (1976 Code, § 8-305, as replaced by Ord. #1996-2, May 1996)

18-106. Major industrial discharge permit system. (1) Wastewater discharge permits required. All major industrial users (as defined in section 18-101) proposing to connect to or discharge into any part of the wastewater treatment system must first obtain a discharge permit. [All existing major users connected to or discharging to any part of the city system must obtain a wastewater discharge permit within ninety (90) days from and after the effective date of this chapter.] The superintendent has final authority on who qualifies as "major industrial user."

(2) Permit application. Users seeking a wastewater discharge permit shall complete and file with the superintendent an acceptable application. In support of this application, the user shall submit the following information: (Note: the superintendent may, on a case by case basis, either require additional information or delete certain requirements at his discretion at no time can the information in requirement (k) be deleted from the application).

- (a) Name, address, and SIC number of applicants;
- (b) Volume of wastewater to be discharged;
- (c) Wastewater constituents and characteristics including, but not limited to, those set forth in section 18-104 and Table 1 of this chapter, as determined in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater;"
- (d) Location of discharge point(s), accompanied with appropriate sketches;
- (e) Average and 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 and appurtenances by size location and elevation.



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

(h) Each product produced by type, amount, and rate of production;

(i) Complete description of pretreatment or flow equalization facilities;

(j) Other information that may be defined by the superintendent for reasonable evaluation of the permit application.

The receipt by the city of a prospective customer's application for wastewater discharge permit shall not obligate the city to render the wastewater collection and treatment service. If the service applied for cannot be supplied in accordance with this chapter or the city's rules and regulations and general practice, the application shall be rejected and there shall be no liability of the city to the applicant of such service.

(k) The person or persons signing the application must also include a certification statement on company letterhead, dated and signed, worded as follows: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(3) Permit conditions. Wastewater discharge permits shall be expressly subject to all provisions of this chapter and all other regulations, user charges and fees established by the city. The conditions of wastewater discharge permits shall be uniformly enforced in accordance with this chapter, and applicable state and federal regulations. Permit conditions will include the following:

(a) The average and maximum wastewater constituents and characteristics;

(b) Limits on rate and time of discharge or requirements for flow regulations and equalizations;

(c) Requirements for installation of inspection and sampling facilities, and specifications for monitoring programs;

(d) All plant records, analyses, and reports relating to wastewater discharges shall be submitted to Loudon Utilities within thirty (30) days of their completion. The certification statement in section 18-106(2)(k) must also accompany these reports, analyses, and plant records submitted to Loudon Utilities by the industry. These reports

shall be retained by the industry a minimum of three (3) years. This period of retention shall be extended during the course of any unresolved litigation or when requested by the director or the regional administrator. All analyses shall be performed in accordance with 40 CFR 136.

(e) Daily average and daily maximum discharge rates, or other appropriate conditions when pollutants subject to limitations and prohibitions are proposed or present in the user's wastewater discharge;

(f) Compliance schedules;

(g) Other conditions to ensure compliance with this chapter.

(4) Duration of permits. Permits shall be issued for a specific time period, not to exceed four and one half (4 1/2) years. The terms and conditions of the permit may be subject to modification and change by the superintendent during the life of the permit. The superintendent shall be notified in writing ninety (90) days prior to the expiration of the permit by the user of any requested modifications of the user's permit. The user shall be informed of any proposed changes to the permit no less than sixty (60) days prior to the effective date of change. An expired permit will continue to be effective and enforceable up to ninety (90) days until the permit is reissued if:

(a) the user has submitted a complete permit application at least ninety (90) days prior to the expiration date of the user's existing permit.

(b) the failure to reissue the permit, prior to expiration of the previous, is not due to any act or failure to act on the part of the user.

(c) an extension is granted, in writing, by the superintendent by the expiration date of the permit.

At the end of the extension, the user shall be considered in significant noncompliance and subject to the enforcements of the Loudon Sewer Use Ordinance and any future enforcements.

(5) Transfer of a permit. 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 changed operation.

(6) Revocation of permit. Any user who violates the following conditions of his permit or of this chapter, or of applicable state and federal regulations, is subject to having his permit revoked. Violations subjecting a user to possible revocation of his permit include but are not limited to the following:

(a) Failure of a user to accurately report the wastewater constituents and characteristics of his discharge;

(b) Obtaining a permit by representing or failing to disclose fully all relevant facts;

(c) Failure of the user to report significant changes in operations or wastewater constituents and characteristics;

(d) Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring; or

(e) Violation of terms and conditions of the permit.

(7) Permit appeal procedure. An industry shall have the right to appeal all items established in the discharge permit. The procedure shall be as follows:

A written notice signed by the person in charge of the industry seeking an appeal hearing, shall be delivered by registered mail to the superintendent outlining the permit provisions which the user wishes to appeal. The superintendent shall then have sixty (60) days from the time of receipt of the notice to notify the Tennessee Department of Public Health and the Loudon City Council that an appeal hearing will be held. A hearing shall then be conducted and all grievances alleged by the user shall be discussed, and appropriate decisions rendered by the superintendent. Any decisions which in the judgement of the user are inappropriate may be appealed to the Loudon City Council by filing a written notice with said board within fourteen (14) days after completion of the first hearing. The city council shall have then forty-five (45) days in which to notify the Tennessee Department of Public Health that a grievance still exists, and to convene a meeting of the board to hear all unresolved grievances and issue appropriate decisions. The user and/or superintendent shall have the right to appeal any and all decisions to the Tennessee Department of Public Health. Exemptions or variances of the protection criteria established for the system shall not be granted during this appeal procedure. Failure to petition for reconsideration of this permit within sixty (60) days of receipt of the permit is deemed a waiver by the permittee of his/her right to challenge the terms of the permit. Loudon Utilities retains the right to deny or condition pollutants that do not meet pretreatment standards or would cause a violation of Loudon Utilities NPDES permit. (1976 Code, § 8-306; as replaced by Ord. #1996-2, May 1996)

18-107. Charges and fees (user charge system). (1) Purpose of charges and fees. A schedule of charges and fees shall be adopted by the City of Loudon which will enable it to comply with the revenue requirements of Section 204 of the Clean Water Act. Charges and fees shall be determined in a manner consistent with regulations of the Federal Grant Program to ensure that sufficient revenues are collected to defray the cost of operating and maintaining adequate wastewater collection and treatment systems. Specific charges and fees shall be adopted by a separate ordinance, this section describes the procedure to be used in calculating the charges and fees. Additional charges and fees to recover funds for capital outlay, bond service costs, and capital

improvements may be assessed by the City of Loudon. These charges and fees shall be recovered through the user classification established below.

(2) Classification of user. All users shall be classified by the superintendent either by assigning each one to a "user classification" category according to the principal activity conducted on the user's premises, by individual user analyzation, or by a combination thereof. The purpose of such collective and/or individual classification is to facilitate the regulation of wastewater discharges based on wastewater constituents and characteristics.

(3) Types of charges and sewer fees. The charges and fees as established in treatment works schedule of charges and fees, may include, but not be limited to:

- (a) User classification charges;
- (b) Fees for monitoring requested by user;
- (c) Fees for permit applications;
- (d) Appeal fees;
- (e) Charges and fees based on wastewater constituents and characteristics;
- (f) Fees for use of garbage grinders;
- (g) Fees for holding tank wastes.

(4) Basis of determination of charges. Charges and fees may be based upon a minimum basic charge for each premise, computed on the basis of "normal wastewater" from a domestic premise with the following characteristics:

BOD <sub>5</sub>	300 milligrams per liter
COD	600 milligrams per liter
TKN	60 milligrams per liter
NH <sub>3</sub> -N	30 milligrams per liter
Suspended Solids	300 milligrams per liter
Fats, Oil and Grease	100 milligrams per liter

The charges and fees for all classifications of users other than the basic domestic premise shall be based upon the relative difference between the average wastewater constituents and characteristics of that classification as related to those of a domestic premise.

The charges and fees established for permit users shall be based upon the measured or estimated constituents and characteristics of the wastewater discharge of that user which may include, but not be limited to, BOD, cod, SS, NH<sub>3</sub> as N, TKN, oil, grease, chlorine demand, and volume.

(5) User charges. Each user shall be levied a charge for payment of bonded indebtedness of the treatment system and for that user's proportionate share of the operations and maintenance costs of the system. A surcharge will be levied against those users with wastewater that exceeds the strength of "Normal Wastewater."

The user charge will be computed from a base charge plus a surcharge. The base charge will be the users proportionate share of the costs of operations

and maintenance (O&M) including replacement for handling its periodic volume of "Normal Wastewater."

(a) Operation and maintenance user charges. Each user's share of operation and maintenance costs will be computed by the following formula:

$$C_u = \frac{C_t}{V_t} (V_u)$$

Where:  $C_u$  = User's charge for O&M per unit of time.

$C_t$  = Total O&M cost per unit of time.

$V_t$  = Total volume contribution from all users per unit of time.

$V_u$  = Volume contribution from a user per unit of time.

Operation and maintenance charges may be established on a percentage of water use charge only in the event that water use charges are based on a constant cost per unit of consumption.

(b) Surcharges. The surcharge will be the user's proportionate share of the O&M costs for handling its periodic volume of wastewater which exceeds the strength of BOD<sub>5</sub>, suspended solids, and/or other elements in "normal wastewater" as defined by section (4). The amount of the surcharge shall be determined by the following formula:

$$C_s = [(B_c B) + (S_c S) + (P_c P)]V_u$$

Where:  $C_s$  = Surcharge for wastewaters exceeding the strength or "normal wastewater" expressed in dollars per billing period.

$B_c$  = O&M cost for treatment of a unit of BOD<sub>5</sub> expressed in dollars per pound.

$B$  = Concentration of BOD<sub>5</sub> from a user above the base level of 2.50 lbs/1,000 gallons expressed in pounds per 1,000 gallons.

$S_c$  = O&M costs for treatment of a unit of suspended solids expressed in dollars per pound.

$S$  = Concentration of suspended solids from a user above the base level of 2.50 lbs/1,000 gallons expressed in pounds per 1,000 gallons.

$P_c$  = O&M cost for treatment of a unit of any pollutant which the publicly-owned treatment works is committed to treat by virtue of an NPDES permit; or other regulatory requirement expressed in dollars per pound.

- P = Concentration of any pollutant from a user above base level. Base levels for pollutants subject to surcharges will be established by the superintendent.
- Vu = Volume contribution of a user per billing period. (Expressed in thousands of gallons).

The values of parameters used to determine user charges may vary from time to time. Therefore, the superintendent is authorized to modify any parameter or value as often as necessary. Review of all parameters and values shall be undertaken whenever necessary; but in no case less frequently than annually.

(6) Appeal procedure. A user shall have the right to appeal any and all charges and fees assessed against them. The procedure shall be as follows:

A written notice, signed by the user seeking an appeal hearing, shall be delivered by registered mail to the superintendent outlining the fees and charges which the user wishes to appeal. The superintendent shall then have thirty (30) days from the time of receipt of the notice to notify the Tennessee Department of Public Health and the Loudon City Council that an appeal hearing will be held. A hearing shall then be conducted and all grievances alleged by the user shall be discussed, and appropriate decisions rendered by the superintendent. Any decisions which in the judgement of the user are inappropriate may be appealed to the Loudon City Council by filing a written notice with said council within fourteen (14) days after completion of the first hearing. The Loudon City Council shall then have forty-five (45) days in which to notify the Tennessee Department of Public Health that a grievance still exists, and to convene a meeting of the council to hear all unresolved grievances and issues appropriate to decisions. The user and/or the superintendent shall have the right to appeal any and all decisions to the Environmental Protection Agency.

Nothing in this section shall affect a person's right to appeals provided by state law.

(7) Wastewater characteristics. The wastewater characteristics of each industrial user shall be determined by monitoring or where monitoring is not feasible, wastewater characteristics may be estimated using historical records, data from similar industrial users, etc. After initiation of the charges and fee system, major industrial users shall be monitored on a regular basis, not less often than annually. Monitoring of minor industries may be done intermittently. The City of Loudon has developed a definition of major and minor industry and a monitoring program for each which reflects its relative impact on the cost of construction of the treatment works (such information is available at the superintendent's office). Monitoring shall be conducted during

periods of normal discharge. (1976 Code, § 8-307, as replaced by Ord. #1996-2, May 1996)

18-108. Enforcement procedures and penalties. (1) Administrative enforcement remedies. (a) Notification of Violation (NOV). Whenever the superintendent finds that any industrial user has violated or is violating this chapter, or a wastewater permit or order issued hereunder, the superintendent or his agent may serve upon said user written notice of violation. Within 10 days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted to the superintendent. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the Notice of Violation.

(b) Consent orders. The superintendent is hereby empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with the industrial user responsible for the noncompliance. Such orders will include specific action to be taken by the industrial user to correct the noncompliance within a time period also specified by the order. Consent orders shall have the same force and effect as administrative orders issued pursuant to section (d) below.

(c) Show cause hearing. The superintendent may order any industrial user which causes or contributes to violation of this chapter or wastewater permit or order issued hereunder, to show cause why a proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action and the reasons for such action, and a request that the user show cause why this proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least 10 days prior to the hearing. Such notice may be served on any principal executive, general partner or corporate officer. Whether or not a duly notified industrial user appears as noticed, immediate enforcement action may be pursued.

(d) Compliance order. When the superintendent finds that an industrial user has violated or continues to violate the ordinance or a permit or order issued hereunder, he may issue an order to the industrial user responsible for the discharge directing that, following a specified time period, sewer service shall be discontinued unless adequate treatment facilities, devices, or other related appurtenances have been installed and are properly operated. Orders may also contain such other requirements as might be reasonably necessary and appropriate to

address the noncompliance, including the installation of pretreatment technology, additional self monitoring, and management practices.

(e) Cease and desist orders. When the Superintendent finds that an industrial user has violated or continues to violate this chapter or any permit or order issued hereunder, the superintendent may issue an order to cease and desist all such violations and direct those persons in noncompliance to:

(i) Comply forthwith.

(ii) Take such appropriate remedial or preventative actions as may be needed to properly address a continuing or threatened violation, including halting operations and terminating the discharge.

(f) Administrative fines. Notwithstanding any other section of this chapter, any user who is found to have violated any provision of this chapter, or permits and orders issued hereunder, shall be fined in an amount not to exceed one thousand dollars (\$1,000.00) per violation. Each day on which noncompliance shall occur or continue shall be deemed a separate and distinct violation. Such assessments may be added to the user's next scheduled sewer service charge and the superintendent shall have no other collection remedies as he has to collect other service charges. Unpaid charges, fines, and penalties shall constitute a lien against the individual user's property. Industrial users desiring to dispute such fines must file a request for the superintendent to reconsider the fine within 10 days of being notified of the fine. Where the superintendent believes a request has merit, he shall convene a hearing on the matter within 15 days of receiving the request from the industrial user.

(g) Emergency suspensions.

(i) The superintendent may suspend the wastewater treatment service and/or wastewater permit of an industrial user whenever such suspension is necessary in order to stop an actual or threatened discharge presenting or causing an imminent or substantial endangerment to the health or welfare of persons, the POTW, or the environment.

(ii) Any user notified of a suspension of the wastewater treatment service and/or the wastewater permit shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the superintendent shall take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals. The superintendent shall allow the user to recommence its discharge when the endangerment has



passed, unless the termination proceedings set forth in section (h) are initiated against the user.

(iii) An industrial user which is responsible, in whole or in part, for imminent endangerment shall submit a detailed written statement describing the causes of the harmful contribution and the measure taken to prevent any future occurrence to the superintendent prior to the date of the hearing described in paragraph (ii) above.

(h) Judicial remedies. If any person discharges sewage, industrial wastes, or other wastes into the wastewater disposal system contrary to the provisions of this chapter or any order or permit issued hereunder, the superintendent, through the city attorney, may commence an action for appropriate legal and/or equitable relief in the Chancery Court for Loudon County.

(i) Injunctive relief. Whenever an industrial user has violated or continues to violate the provisions of this chapter or permit or order issued hereunder, the superintendent, through counsel may petition the court for the issuance of a preliminary or permanent injunction or both (as may be appropriate) which restrains or compels the activities on the part of the industrial user. The superintendent shall have such remedies to collect these fees as it has to collect other sewer service charges.

(j) Civil penalties.

(i) Any industrial user who has violated or continues to violate this chapter, or permit or order issued hereunder, shall be liable to superintendent for a civil penalty of not more than \$10,000.00 plus actual damages incurred by the POTW per violation per day for as long as the violation continues. In addition to the above described penalty and damages, the superintendent may recover reasonable attorney's fees, court cost, and other expenses associated with the enforcement activities, including sampling and monitoring.

(ii) The superintendent shall petition the court to impose, assess, and recover such sums. In determining amount of liability, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through the industrial user's violation, corrective actions by the industrial user, the compliance history of the user, and any other factor as justice requires.

(k) Criminal prosecution. Violations - generally.

(i) Any industrial user who willfully or negligently violates any provision of this chapter or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed \$ 1,000.00 per violation per day or imprisonment for not more than one year or both.

(ii) In the event of a second conviction, the user shall be punishable by a fine not to exceed \$3,000.00 per violation per day or imprisonment for not more than 3 years or both.

Falsifying information.

(i) Any industrial user who knowingly makes any false statements, representations, or certifications in any application, record, report, plan, or other document filed or required to be maintained pursuant to this chapter, or wastewater permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this chapter shall, upon conviction, be punished by a fine of not more than \$1,000.00 per violation per day or imprisonment for not more than one year or both.

(ii) In the event of a second conviction, the user shall be punishable by a fine not to exceed \$3,000.00 per violation per day or imprisonment for not more than 3 years or both.

(2) Supplemental enforcement remedies.

(a) Annual publication of significant violations. The superintendent shall publish, at least annually in the largest local newspaper for the service area, a description of those industrial users which are found to be in significant violation, as defined under the section of this chapter describing definitions.

(b) Water supply severance. Whenever an industrial user has violated or continues to violate the provisions of this chapter or permit or order issued hereunder, water service to the industrial user may be severed and service will only recommence, at the user's expense, after it has satisfactorily demonstrated its ability to comply.

(c) Public nuisances. Any violation of the prohibitions or effluent limitations of this chapter or permit or order issued hereunder is hereby declared a public nuisance and shall be corrected or abated as directed by the superintendent or his designee. Any person(s) creating a public nuisance shall be subject to the provisions of the Loudon Sewer Use Ordinance governing such nuisances, including reimbursing the POTW for any cost incurred in removing, abating, or remedying said nuisance.

(d) Treatment upsets. (i) Any industrial user which experiences an upset in operations that places it in a temporary state of

noncompliance, which is not the result of operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation, shall inform the superintendent thereof immediately upon becoming aware of the upset. Where such information is given orally, a written report thereof shall be filed by the user within five days. The report shall contain:

(A) A description of the upset, its cause(s), and impact on the discharger's compliance status.

(B) The duration of noncompliance, including exact dates and times of noncompliance and if the noncompliance is continuing, the time by which compliance is reasonable expected to be restored.

(C) All steps taken or planned to reduce, eliminate, and prevent recurrence of such an upset.

(ii) An industrial user which complies with the notification provisions of this section in a timely manner shall have an affirmative defense to any enforcement action brought by the superintendent for any noncompliance with this chapter, or an order or permit issued hereunder by the user, which arise out of violations attributable to and alleged to have occurred during the period of documented and verified upset.

(e) Treatment bypasses.

(i) A bypass of the treatment system is prohibited unless all of the following conditions are met:

(A) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage

(B) There was no feasible alternative to the bypass, including the use of auxiliary treatment or retention of the wastewater, and

(C) The industrial user properly notified the superintendent as described in paragraph (ii) below.

(ii) Industrial users must provide immediate notice to the superintendent upon discovery of an unanticipated bypass. If necessary, the superintendent may require the industrial user to submit a written report explaining the cause(s), nature, and duration of the bypass, and the steps taken to prevent its recurrence.

(iii) An industrial user may allow a bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it is for essential maintenance to ensure efficient operation of the treatment system. Industrial users anticipating a bypass must notify the Superintendent at least ten days in advance. The superintendent may only approve the anticipated bypass if the circumstances satisfy those set forth in

paragraph (i) above. (1976 Code, § 8-309, as replaced by Ord. #1996-2, May 1996)

**18-109. Savings clause.** If any provision, paragraph, word, section or article of this chapter is invalidated by a court of competent jurisdiction, the remaining provisions, paragraphs, words, sections, and articles shall not be affected and shall continue in full force and effect. (1976 Code, § 8-309, as replaced by Ord. #1996-2, May 1996)

**18-110. Enforcement response plan**

<u>Noncompliance</u>	<u>Nature of Violation</u>	<u>Enforcement Response</u>	<u>Personnel</u>
A. UNAUTHORIZED DISCHARGES	(No Permit)	Phone call; NOV with application form	PC
1. Unpermitted discharge	IU unaware of requirement; harm to POTW/environment	AO with fine (1) Civil action	S
S	Failure to apply continues after notice by the POTW	Civil action Criminal investigation Terminate services	S S
2. Nonpermitted discharge (failure to renew)	IU has not submitted application within 10 days of due date	Phone call; NOV	PC
B. DISCHARGE LIMIT VIOLATION			
1. Exceedance I, PC of local or Federal Standard (per limit)	Isolated, not significant	Phone call; NOV	
	Isolated, significant (no harm)	AO to develop spill prevention plan and fine fine (2)	PC
	Recurring, no harm to POTW or environment	AO with fine (2, 3)	PC

Recurring, significant (harm)	AO with fine (2, 4) Show cause order Civil action Terminate service	PC PC, S S S
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C. MONITORING AND REPORTING VIOLATION

1. Reporting Violation	Report is improperly signed or certified	Phone call or NOV	PC
	Report is improperly signed or certified after notice by POTW	AO Show cause order	PC PC, S
	Isolated, not significant (ex., 5 days late)	Phone call; NOV	I, PC
PC	Significant (ex., report 30 days or more late)	AO to submit with fine (1) per additional day	
	Reports are always late or no reports at all	AO with fine (1) Show cause order Civil action	PC PC, S S
	Failure to report spill or changed discharge (no harm)	NOV	PC
	Failure to report spill or changed discharge (results in harm)	AO with fine (1) Civil action	PC S
	Repeated failure to report	Show cause order Terminate service	PC, S S
S	Falsification spills	Criminal investigation  Terminate service	  S
2. Failure to monitor correctly	Failure to monitor all pollutants as required by permit	NOV or AO	PC

	Recurring failure to monitor	AO with fine (1) Civil action	PC S
3. Improper S sampling	Evidence of intent	Criminal investigation	
		Terminate service	S
4. Failure to install monitoring equipment	Delay of less than 30 days	NOV	PC
	Delay of 30 days or more	AO to install with fine for each additional day (1)	PC
	Recurring, violation of AO	Civil action Criminal investigation	PC
S		Terminate service	S
5. Compliance schedules (in permit)	Missed milestone by less than 30 days or will not affect final milestone	NOV or AO with fine (5)	PC
	Missed milestone by more than 30 days, or will affect final milestone (no good cause for delay)	Show cause order Civil action Terminate service	PC, S S S
	Recurring violation or violation of schedule	Civil action Criminal investigation	S
S	in AO	Terminate service	S

D. OTHER PERMIT VIOLATIONS

1. Wastestreams are diluted in lieu of treatment	Initial violation	AO with fine (1)	PC
	Recurring	Show cause order Terminate service	PC, S S
2. Failure to mitigate noncompliance or halt	Does not result in harm	NOV	PC

production	Does not result in harm	AO with fine (1) Civil action	PC S
3. Failure to properly operate and maintain pretreatment facility	Same as number 2, above		
<b>E. VIOLATIONS DETECTED DURING SITE VISITS</b>			
1. Entry denial	Entry denied or consent withdrawn Copies of records	Obtain warrant and return to IU; possible permit revocation	I
2. Illegal discharge	No harm to POTW/ environment	AO with fine (2, 3)	PC
S	Discharges causes harm or evidence of intent/  negligence	Civil action Criminal investigation	S
	Recurring violation of AO	Terminate service	S
3. Improper sampling	Unintentional sampling at incorrect location	NOV	I, PC
	Unintentionally using incorrect sampling techniques	NOV	I, PC
4. Inadequate record keeping	Inspector finds files incomplete to missing (no evidence of intent)	NOV	I, PC
	Recurring	AO with fine (1)	PC
5. Failure to report additional monitoring	Inspection finds additional files	NOV	I, PC
	Recurring	AO with fine (1)	PC

## TIME FRAMES FOR RESPONSES

- A. All violations will be identified and documented within 5 days of receiving compliance information.
- B. Initial enforcement responses involving contact with the IU and requesting information on actions will occur within 15 days if violation detection.
- C. Follow up actions for continuing or reoccurring violations will be taken within 60 days of the initial enforcement response. For all continuing violations, the response will include a compliance schedule.
- D. Violations which threaten health, property or environmental quality are considered emergencies and will receive immediate responses such as halting the discharge or terminating the service.
- E. All violations meeting the criteria for significant noncompliance will be addressed with an enforceable order within 30 days of the identification of significant noncompliance. (as added by Ord. #1996-2, May 1996)



## CHAPTER 2

CROSS-CONNECTIONS, AUXILIARY INTAKES, ETC.<sup>1</sup>

## SECTION

- 18-201. Definitions.
- 18-202. Standards.
- 18-203. Construction, operation, and supervision.
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18-201. Definitions. The following definitions and terms shall apply in the interpretation and enforcement of this chapter:

(1) "Public water supply." The waterworks system furnishing water to the City of Loudon for general use and which supply is recognized as the public water supply by the Tennessee Department of Public Health.

(2) "Cross-connection." Any physical connection whereby the public water supply is connected with any other water supply system, whether public or private, either inside or outside of any building or buildings, in such manner that a flow of water into the public water supply is possible either through the manipulation of valves or because of any other arrangement.

(3) "Auxiliary intake." Any piping connection or other device whereby water may be secured from a source other than that normally used.

(4) "By-pass." Any system of piping or other arrangement whereby the water may be diverted around any part or portion of a water purification plant.

(5) "Inter-connection." Any system of piping or other arrangement whereby the public water supply is connected directly with a sewer, drain, conduit, pool, storage reservoir, or other device which does or may contain sewage or other waste or liquid which would be capable of imparting contamination to the public water supply.

(6) "Person." Any and all persons, natural or artificial, including any individual firm or association, and any municipal or private corporation organized or existing under the laws of this or any other state or country.

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<sup>1</sup>Municipal code reference

Plumbing and related codes: title 12.

(7) "Water system inspector." Any person or persons so designated by the City of Loudon Utilities Board. (1976 Code, § 8-401)

18-202. Standards. The City of Loudon Public Water Supply is to comply with Sections 53-2001 and 53-2004 of the Tennessee Code Annotated,<sup>1</sup> as well as the Rules and Regulations for Public Water Supplies, legally adopted in accordance with this code which pertain to cross-connections, auxiliary intakes, by-passes, and interconnections, and establish an effective, ongoing program to control these undesirable water uses. (1976 Code, § 8-402)

18-203. Construction, operation, and supervision. It shall be unlawful for any person to cause a cross-connection to be made; or allow one to exist for any purpose whatsoever unless the construction and operation of same have been approved by the Tennessee Department of Public Health, and the operation of such cross-connection, auxiliary intake, by-pass or inter-connection is at all time under the direct supervision of the Water System Inspector of the City of Loudon. (1976 Code, § 8-403)

18-204. Statement required. Any person whose premises are supplied with water from the public water supply, and who also has on the same premises a separate source of water supply or stores water in an uncovered or unsanitary storage reservoir from which the water stored therein is circulated through a piping system, shall file with the Water System Inspector a statement of non-existence of unapproved, or unauthorized auxiliary intakes, by-passes, or inter-connections. Such statement shall also contain an agreement that no cross-connection, auxiliary intake, by-pass, inter-connection will be permitted upon the premises. (1976 Code, § 8-404)

18-205. Inspections required. It shall be the duty of the City of Loudon Public Water Supply to cause inspections to be made of all properties served by the public water supply where cross-connections with the public water supply are deemed possible. The frequency of inspections and reinspections based on potential health hazards involved shall be established by the water system inspector of the City of Loudon Public Water Supply and as approved by the Tennessee Department of Public Health. (1976 Code, § 8-405)

18-206. Right of entry for inspections. The Water System Inspector or authorized representative shall have the right to enter at any reasonable time, any property served by a connection to the City of Loudon Public Water Supply for the purpose of inspecting the piping system or systems thereon for cross-

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<sup>1</sup>These sections are currently codified in Tennessee Code Annotated, sections 68-13-101 and 68-13-104, respectively.

connections, auxiliary intakes, by-passes, or inter-connections. On request, the owner, lessee, or occupant of any property so served shall furnish to the inspection agency any pertinent information regarding the piping system or systems on such property. The refusal of such information or refusal of access, when requested, shall be deemed evidence of the presence of cross-connections. (1976 Code, § 8-406)

18-207. Correction of existing violations. Any person who now has cross-connections, auxiliary intakes, or inter-connections in violation of the provisions of this chapter shall be allowed a reasonable time within which to comply with provisions of this chapter. After a thorough investigation of existing conditions and an appraisal of time required to complete the work, the amount of time shall be designated by the Water System Inspector of the City of Loudon Public Water Supply.

The failure to correct conditions threatening the safety of the public water system as prohibited by this chapter and Tennessee Code Annotated Section 53-2004,<sup>1</sup> within a reasonable time and within the time limits set by the City of Loudon Public Water Supply, shall be grounds for denial of water service. If proper protection has not been provided after a reasonable time, the utility shall give the customer legal notification that water service is to be discontinued, and physically separate the public water supply from the customer's on-site piping system in such a manner that the two systems cannot again be connected by an unauthorized person.

Where cross-connections, inter-connections auxiliary intakes, or by-passes are found that constitutes an extreme hazard of immediate concern on contaminating the public water system, the manager of the utility shall require that immediate corrective action be taken to eliminate the threat to the public water system. Immediate steps shall be taken to disconnect the public water supply from the on-site piping system unless the imminent hazard(s) is corrected immediately. (1976 Code, § 8-407)

18-208. Use of protective devices. Where the nature of use of the water supplied a premises by the water department is such that it is deemed

- (1) impractical to provide an effective air-gap separation,
- (2) that the owner and/or occupant of the premises cannot or is not willing to demonstrate to the official in charge of the system, or his designated representative, that the water use and protective features of the plumbing are such as to propose no threat to the safety of potability of the water supply,
- (3) that the nature and mode of operation within a premises are such that frequent alterations are made to the plumbing,

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<sup>1</sup>This section is currently codified in Tennessee Code Annotated, section 68-13-104.

(4) there is a likelihood that protective measures may be subverted, altered, or disconnected, the Water System Inspector of the City of Loudon Public Water Supply, or his designated representative, shall require the use of an approved protective device on the service line serving the premises to assure that any contamination that may originate in the customer's premises is contained therein. The protective devices shall be reduced pressure zone type backflow preventer approved by the Tennessee Department of Public Health as to manufacture, model, and size. The method of installation of backflow protective devices shall be approved by the Water System Inspector Public Water Supply prior to installation and shall comply with the criteria set forth by the Tennessee Department of Public Health. The installation shall be at the expense of the owner or occupant of the premises.

Personnel of the City of Loudon Public Water Supply shall have the right to inspect and test the device or devices on an annual basis or whenever deemed necessary by the Water System Inspector or his designated representative. Water service shall not be disrupted to test the device without the knowledge of the occupant of the premises.

Where the use of water is critical to the continuance 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 the protective device or devices. Where it is found that only one unit has been installed and the continuance of service is critical, the Water System Inspector shall notify, in writing, the occupant of the premises of plans to discontinue water service and arrange for a mutually acceptable time to test and/or repair the device. The water supply shall require the occupant of the premises to make all repairs indicated promptly, to keep the unit(s) working properly, and the expense of such repairs shall be made by qualified personnel, acceptable to the Water System Inspector of the City of Loudon Public Water Supply.

If necessary, water service shall be discontinued (following legal notification) for failure to maintain backflow prevention devices in proper working order. Likewise the removal, by-passing or altering the protective device(s) or the installation thereof so as to render the device(s) 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 of the City of Loudon Public Water Supply. (1976 Code, § 8-408)

18-209. Unpotable water to be labeled. The potable water supply made available to premises served by the public water supply shall be protected from possible contamination as specified herein. Any water outlet which could be used for potable or domestic purposes and which is not supplied by the potable system must be labeled in a conspicuous manner as:

WATER UNSAFE  
FOR DRINKING

Minimum acceptable sign shall have black letters at least one inch high located on a red background. (1976 Code, § 8-409)

18-210. Application of chapter. The requirements contained herein shall apply to all premises served by the City of Loudon Water System whether located inside or outside the corporate limits and are hereby made a part of the conditions required to be met for the city to provide water services to any premises. Such action, being essential for the protection of water distribution system against the entrance of contamination which may render the water unsafe healthwise, or otherwise undesirable, shall be enforced rigidly without regard to location of the premises, whether inside or outside the City of Loudon corporate limits. (1976 Code, § 8-410)

18-211. Violations. It shall be unlawful for any person to neglect or refuse to comply with any of the provisions of this chapter. (1976 Code, § 8-411)