

TOWN OF CRESWELL, NORTH CAROLINA
AN ORDINANCE REGULATING USE OF SEWERS

AN ORDINANCE TO REGULATE, RESTRICT, AND LIMIT, IN THE INTEREST OF THE PUBLIC HEALTH AND SAFETY, THE DEPOSIT OR DISCHARGE OF CERTAIN SUBSTANCES INTO ANY SANITARY SEWER NOW MAINTAINED AND/OR OWNED BY OR WHICH MAY BECOME THE PROPERTY OF THE TOWN OF CRESWELL, INCLUDING PENALTIES FOR ORDINANCE VIOLATIONS, AND TO PROVIDE FOR THE FAIR AND EQUITABLE DISTRIBUTION OF THE COSTS OF OPERATION OF THE SANITARY SEWER SYSTEM.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF CRESWELL AS FOLLOWS:

Section 1: DEFINITIONS

1. Sanitary Sewer is a sewer intended to receive domestic sewage and industrial waste, except that of the type expressly prohibited by this ordinance, without the admixture of surface water and storm water.

2. Domestic Sewage is that liquid waste from bathrooms, toilet rooms, kitchens, and home laundries.

3. Industrial Wastes are the liquid wastes, other than domestic sewage resulting from processes or operations employed in industrial establishments.

4. "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 5 days at 20°C, expressed in milligrams per liter by weight.

5. "Properly Shredded Garbage" shall mean the wastes from the preparation, cooking, and dispensing of food that have been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than 1/2 inch in any dimension.

6. "Suspended Solids" shall mean solids that either float on the surface of, or are in the suspension in water, sewage, or other liquids, and which are removable by laboratory filtering.

7. "pH" shall mean the logarithm of the reciprocal of the hydrogen ion concentration. A stabilized pH will be considered as a pH which does not change beyond the specified limits when the waste is subjected to aeration. A pH value indicates the degree of acidity or alkalinity.

8. Color is the "true color" due to the substances in solution expressed in milligrams per liter.

9. Ammonia Nitrogen shall mean the quantity of ammonia in wastewater expressed as milligrams of nitrogen per liter by weight.

10. Inflow: Water other than wastewater that enters a sewerage system (including sewer service connections) from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage.

11. Infiltration: Water other than domestic sewage and industrial wastes that enters a sanitary sewer (including sewer service connections) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

12. Interference: Inhibition or disruption of sanitary sewer and/or wastewater treatment facilities receiving wastewater from sanitary sewers operated by the Town which contributes to a violation of any requirements of the treatment facilities discharge permits.

13. Pretreatment: The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of the pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into a sanitary sewer.

14. Pretreatment Requirements: Any substantive or procedural requirement related to pretreatment, imposed on an industrial user.

15. Person is any individual, firm, company, association, or corporation.

16. Town is the Town of Creswell, North Carolina.

17. Receiving Stream is that body of water, groundwater, stream, or watercourse receiving the discharge waters from the waste treatment plant or formed by the waters discharged from the waste treatment plant treating sewage originating in the Town sewer system.

18. "Shall" is mandatory; "may" is permissive.

19. Milligrams per liter (M/L) is the standard unit of measurement commonly used in the Sewerage or Wastewater Industry and is equivalent to Parts Per Million (PPM).

20. User Charge: A charge levied on users of sewage collection and treatment works for the cost of operation and maintenance (including replacement) of such works.

21. Town Council is the Town Council of the Town of Creswell or its designated representative.

22. Reasonable Right of Access is the right granted to employees of the Town of Creswell by private property owners allowing employees to enter onto privately owned property for the purpose of maintaining wastewater

collection and treatment facilities either owned or controlled by the Town of Creswell. Reasonable Right of Access allows employees of the Town only freedom of movement on and access to such private property as it is necessary for those employees to move on or over in the course of performing maintenance and does not include any right to enter into any building, structure, or house.

Section 2: CONTROL AND SUPERVISION

The sanitary sewer system of the Town of Creswell shall be under the general control and supervision of the Town Council and the system shall be regulated and operated as the Town Council shall from time to time ordain and direct. The Town Council shall appoint a qualified person to supervise the operation and regulation of the system, under the direction of the Town Council, and such person appointed shall be known as Superintendent.

Section 3: CONNECTIONS TO SEWER SYSTEM

1. Every person, group of persons, firm or corporation, owning a dwelling, building or other structure which is used for human habitation or occupancy within the Town of Creswell, situated on a lot or parcel of land which abuts or adjoins a street or other public way, along which is located a sanitary sewer, shall connect such dwelling or structure to the sewer system of the Town of Creswell. In cases where a sanitary sewer is constructed where none before existed, such connection must be made within ninety (90) days of completion of such construction. Provided, however, a connection shall not be required to the system unless the lot or parcel of land on which the dwelling, building or structure is situated is accessible within 200 feet of the sewer system. Provided further that no person shall be required to cross the private property of any other person to make such connection. Where connections are required, all toilets, sinks and other plumbing fixtures shall be installed, arranged or rearranged to drain into the sanitary sewer. Properties which are not accessible to the sewer system for the reason they are more than 200 feet therefrom and/or separated from the sewer system by property under the control of a different owner shall install facilities acceptable to and approved by the Martin-Tyrrell-Washington District Health Department or any agency that may at some time in the future assume the functions of the Martin-Tyrrell-Washington District Health Department.

2. No person, firm or corporation shall make any connection to the sanitary sewer system nor use a connection made by a previous owner unless and until a permit therefor has been issued by the Town of Creswell. Permits shall be issued for connection only after the Superintendent has determined the type of connection required, the type of waste to be placed in the system and, if required by the Town, that an approved plumbing system has been installed within the dwelling, building or structure desiring such connection.

3. Connections to the sanitary sewer system shall consist of a septic tank into which drain all toilets, sinks and other plumbing fixtures, a pump and controls, 2-inch diameter or larger pump discharge line, and

associated appurtenances, as well as such piping as may be necessary to connect all toilets, sinks and other plumbing fixtures to the septic tank. The septic tank, pump, controls, etc., shall be of a type approved by the Superintendent and shall be installed in accordance with standards established by this Ordinance and constructed in a manner approved by the Superintendent. The provision of and cost of power used to operate the pump and controls shall be the responsibility of the owner of the dwelling, building, or structure served by the pump.

4. Any person, firm, or corporation making connection to the sanitary sewer system as a condition of receiving sewer service must:

(a) Grant to the Town of Creswell Reasonable Right of Access as defined in Section 1 of this Ordinance to the property on which the septic tank, pump, pump controls, discharge piping, and related appurtenances are located so as to facilitate maintenance of the septic tank, pump, pump controls, discharge piping, and related appurtenances; and grant to the Town of Creswell the right to maintain the septic tank, pump, pump controls, discharge piping, and related appurtenances; and grant to the Town the right to exchange the septic tank, pump, pump controls, discharge piping, and related appurtenances for similar facilities of comparable quality. In exchange for receiving the Reasonable Right of Access and the right to maintain and exchange the septic tank, pump, pump controls, discharge piping, and related appurtenances, the Town of Creswell shall agree to maintain the pump, pump controls, discharge piping, and related appurtenances in perpetuity provided that the owner of the dwelling, building, or structure or his agent utilizing these facilities complies with the provisions of this Ordinance, including payment of User Charges; or

(b) If an owner of any dwelling, building, or structure or his agent does not wish to grant to the Town the Reasonable Right of Access and the right to maintain and exchange the facilities described in (a) above, he may elect to make a sewer connection to the sewer system provided that: he agrees to comply with all provisions of this Ordinance except Section 3, Item 4(a), and further provided that he agrees to, at his own expense, maintain the septic tank, pump, pump controls, discharge piping, and related appurtenances installed to serve the dwelling, building, or structure under his ownership; that he agrees to save and hold harmless the Town of Creswell from any damages and/or costs caused by or related to improper design, installation, or maintenance of such facilities; that he agrees to, if directed by the Superintendent, install and maintain at his own expense facilities of suitable design and construction for directly measuring the sewage flow that is discharged from his premises into the Town's sewer system; and that he agrees to pay in full the User Charges provided for in this Ordinance, with no special consideration given to him on the account of the Town's not maintaining the facilities associated with his connection to the sewer system.

5. All connections to the sanitary sewer system shall be made by authorized employees of the Town in accordance with the requirements of the North Carolina State Plumbing Code and with the requirements established by this Ordinance and/or with such other specifications for such connections that may be established by the Town from time to time and in accordance with all applicable State and Federal regulations: provided that all

electrical work associated with connections to the sewer system shall be done by an electrician licensed to practice in the State of North Carolina; provided that the Superintendent may authorize plumbers licensed to perform plumbing work in the State of North Carolina to make connections or parts of connections exclusive of the electrical work associated with connections; and provided that the Superintendent may authorize qualified private contractors to install the septic tank and interceptor pump basins associated with sewer service connections.

6. A connection charge shall be made for each and every connection to the sanitary sewer system, the amount of which shall be determined by the Superintendent and approved by the Town Council. Such charge shall be based on the actual cost to the Town of making such a connection. Provided, however, that no connection charge shall be made for connections constructed as part of the wastewater collection and treatment system construction program funded under the Environmental Protection Agency Construction Grants Program.

7. Each separate dwelling, structure, or other building shall have a separate connection to the system. Provided that apartments or other multi-use or occupancy buildings may have one combined connection.

8. Whenever any service between any building or premise and the septic tank serving that building or premise becomes clogged, broken, out of order, or in any condition detrimental to the use of the sewer service, the owner, agent, or occupant having charge of such building or premises shall be held responsible for the immediate renewal or repair of said sewer service necessary to maintain an uninterrupted sanitary disposal system. Renewal or repair of sewer service lines between any building or premise and the septic serving that building or premise shall be made at the expense of the property owner, agent, or occupant. Whenever any repair work is performed as required by this section, such work shall be performed only by a licensed plumber authorized to perform such work by the Town of Creswell.

9. Repair and maintenance of any service between the septic tank servicing any building or premise and the sewer force main serving the building or dwelling shall be the responsibility of the Town of Creswell except as provided in 4(b) above. Provided, however, if such repair is found to be necessary because of a discharge to the sewer system in violation of any of the provisions of this Ordinance, that the cost making of such repairs shall be made at the expense of the owner or agent of the building or premise. The owner or agent of any building or premise receiving sewer service shall promptly notify the Superintendent or other employee of the Town whenever he has reason to believe that any part of his sewer service connection is in need of maintenance or repair.

10. Under no circumstances will the discharge of treated or untreated domestic sewage or industrial wastes to the storm sewer of the Town or to any pond, open ditch, stream or watercourse be permitted within the jurisdiction of the Town, except that uncontaminated cooling water may be discharged provided that such discharge is constructed and operated within the laws of the State of North Carolina. Provided, however, that where the Town Council decides that it is not in the best interest of the Town

to accept any particular industrial waste into its sanitary sewer, such waste may be discharged within the Town provided such discharge meets the requirements of the State of North Carolina and of the Town Council.

Section 4: USAGE OF MUNICIPAL SANITARY SEWERS

1. No person shall discharge or deposit any of the following waste materials into any Town sewer.

(a) Any liquid or vapor having a temperature higher than 120°F or which will cause the influent of the treatment works to have a temperature higher than 104°F.

(b) Any water or waste which may contain more than 100 milligrams per liter, by weight, of fat, oil, or grease, exclusive of soap. Provided that up to 500 milligrams per liter may be discharged by Permit Authorization.

(c) Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquids, solid or gas, or any substance which creates a fire or explosion hazard in the sanitary sewer system of the Town or in the sewage treatment facilities receiving sewage from the Town.

(d) Any garbage that has not been properly shredded.

(e) Any ashes, cinders, sand, mud, straw, shaving, metal, glass, bones, rags, feathers, tar, plastics, wood, paunch manure, or other solid or viscous substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the Town sewer system or at the sewage system receiving sewage from the Town.

(f) Any waters or wastes having a stabilized pH lower than 5.5 or higher than 9.0, or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sanitary sewer system of the Town or of the sewage system receiving sewage from the Town.

(g) Any water or wastes having a Biochemical Oxygen Demand in excess of 300 milligrams per liter by weight. Provided that up to 500 milligrams per liter may be discharged by Permit Authorization.

(h) Any waters or wastes containing more than 300 milligrams per liter by weight of suspended solids. Provided that up to 500 milligrams per liter may be discharged by Permit Authorization.

(i) Any waters or wastes having an objectionable color which is not removable in the existing sewage treatment plant processes.

(j) Any waters or wastes containing a toxic or poisonous substance or any other materials in sufficient quantity to injure or interfere with any waste treatment process, or constitute a hazard to humans or animals, or create any hazard in the receiving stream at the sewage treatment plant receiving the Town's sewage.

(k) Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.

(l) Any noxious or malodorous gas or substance capable of creating a public nuisance.

(m) Any waters or wastes containing more than 200 milligrams per liter of chlorides. Provided that up to 500 milligrams per liter may be discharged by Permit Authorization.

(n) Any water from an inflow source. All new sewers and services shall be designed and constructed to prevent such inflow sources. Any existing sewer service that would allow the introduction of water from an inflow source shall be reconstructed so as to remove the inflow source.

(o) Any water or wastes having an ammonia concentration in excess of 25 milligrams per liter by weight when expressed as nitrogen.

(p) Any pollutant including oxygen demanding pollutants (BOD, etc.), released in a discharge of such volume or strength as to cause interference in the sanitary sewers or at the wastewater treatment plant receiving sewage from the Town.

(q) Any pollutant discharged except in compliance with Federal Standards promulgated pursuant to the Clean Water Act of 1977, and any more stringent standards established by the State of North Carolina and/or the Town of Creswell or by the Superintendent.

2. Pretreatment Standards established by the Federal and State Governments shall be considered to be the standards of the Town and an integral part of this Ordinance unless more stringent limits are explicitly stated in this Ordinance.

3. No statement contained in this section shall be construed as preventing any special agreement or arrangement between the Town and any person whereby pollutants of unusual strength or character such as BOD, COD, suspended solids nitrogen, oil, grease, and other oxygen demanded constituents may be admitted into the sanitary sewers of the Town except that such discharges shall not violate the provisions of Section 403.5 of the Federal Water Pollution Control Act, as amended, nor shall any special agreement be made that would violate the NPDES Permit held by the plant treating the wastes produced by the Town.

4. Notice shall be given to the Superintendent whenever a change in the industrial process of waste discharge is contemplated or when the normal operation of the industry discharging industrial waste into the Town sewer system will be interrupted for three days or longer with no industrial discharge.

Section 5: STRUCTURES REQUIRED

1. Residential dwellings and commercial and institutional establishments shall have a septic tank, pump, pump controls, and discharge line and related appurtenances conforming to the standards established by this section of the Sewer Use Ordinance.

2. Septic tanks shall be of watertight construction, structurally sound, and not subject to excessive corrosion or decay. Septic tank liquid volumes shall be a minimum of 1,000 gallons for residences having up to four (4) bedrooms. An additional 250 gallons of liquid volume shall be provided for each additional bedroom. Commercial and institutional establishments shall have septic tanks with a liquid volume of 1,000 gallons or greater if needed to insure a level or reduction in solids, oils and grease comparable to that achieved by properly designed septic tanks treating residential sewage. Multiple septic tanks may be used if necessary. Septic tanks shall provide for minimum liquid depth of 48 inches. The length of the septic tank shall be not less than twice the width of the septic tank and not greater than three times the width of the septic tank. The inlet of the septic tank shall be a straight pipe. The outlet of the septic tank shall be a sanitary tee extending down two-fifths of the liquid depth. In lieu of a sanitary tee, a solid baffle around a straight outlet pipe may be used provided that the baffle is made of durable, noncorrosive materials and extends downward two-fifths of the liquid depth. A minimum elevation of 2 inches shall be maintained between the invert of the inlet pipe and the invert of the outlet pipe, with the inlet pipe having the higher elevation. Septic tanks shall be constructed with a solid partition constructed of suitable material running the full width of the septic tank and extending down two fifths of the liquid depth. This partition shall be located near the outlet end of the tank at approximately two-thirds of the length of the tank. Inspection covers shall be provided over the inlet and outlets of the tank. An access manhole having a minimum diameter of 18 inches or, if rectangular in configuration, a minimum dimension of 18 inches x 18 inches shall be provided. Covers for manholes and inspection covers shall be watertight and weigh not more than 150 pounds. A minimum of 9 inches freeboard shall be provided between the liquid level of the septic tank and the roof of the septic tank. The septic tank shall be constructed in a manner that will allow it to withstand any and all stresses to which it can reasonably be expected to be subjected.

3. Pumps and pump controls for use with residential dwellings shall be of the type and model specified by the Superintendent except that where a property owner elects to follow the procedures outlined in Section 3, Item 3(b) of this Ordinance, the choice of pump rests with the property owner provided that it is subject to approval by the Superintendent. A single pump may be used to serve up to two single family dwellings. Commercial and institutional establishments having a maximum expected daily wastewater flow of less than 200 gallons may use a single pump. Where more than two single family dwellings or more than 200 gallons of wastewater flow a day are expected, a minimum of two pumps shall be installed. Multiple pump installations shall be designed so that pumps will run alternatively and so that if one pump for any reason does not operate, the other pump(s) will remain in service.

4. Pumps and float switches for residential dwellings shall be installed in pump basins. Pump basins shall be designed to accept the pump and pump mounting system, shall have a sealing metal cover with access plates of suitable size, shall have suitable gas tight fittings to accept underground feed of power and control wiring, shall be of watertight construction, and shall have sufficient anchoring weight to resist the buoyant uplift of zero groundwater depth. Anchoring rings and concrete encasement shall be employed if required. Openings of correct sizes and location shall be constructed into the basin during fabrication. Hubs and couplings shall be provided as needed for watertight installation. The basin shall be constructed of FRP or precast concrete. The pump basin shall be placed on a level bed of sand or crushed stone a minimum of 8 inches thick. All joints between pipe and pump basin wall shall be made watertight using hub adaptor, rubber gasketed wall sleeves, or other methods that may be approved by the Superintendent. The pump basins shall have a minimum inside dimension of 33 inches and a minimum depth of 52 inches and have a greater depth if required by the Superintendent. If constructed of reinforced concrete, the pump basins shall have a wall thickness of 3 inches minimum and minimum reinforcement of 6 x 6 10/10' wwm.

5. Pump controls and wiring for residential connections shall be installed in accordance with the specifications contained in Appendix A of this Ordinance. All wiring and other electrical work shall be installed by an electrician licensed to perform such work in North Carolina. The Superintendent shall approve the installation and equipment prior to allowing a residential sewer connection.

6. Discharge piping and appurtenances used in residential sewer services shall conform to the specification contained in Appendix B of this Ordinance and shall be approved by the Superintendent prior to its being covered with earth and connected with the sewage collection system.

7. Industrial waste discharges shall install and maintain facilities capable of reducing suspended solids and oil and grease to a level comparable with that found in typical residential septic tank effluent prior to discharging wastes into the sewer system. If directed by the Superintendent, industrial waste discharges shall also install facilities that allow the industrial waste discharge to be discharged uniformly over a 24-hour period and/or that allow for the continuous and/or intermittent sampling of industrial waste flows. Where in the opinion of the Superintendent industrial waste flows can be served by a sewer service connection comparable to that used for residential dwellings, the Town shall take responsibility for the maintenance of the connection provided that the conditions specified in Section 3, Item 4(a) are met by the industrial user.

Section 6: PERMITS

1. Any person desiring to deposit or discharge, or who is now depositing or discharging any industrial waste into the sanitary sewers, shall make application for the disposal of industrial waste to the Superintendent. The Superintendent shall approve such applications only when evidence is submitted by the applicant that the discharge into the

sanitary sewer will comply with all of the regulations of this Ordinance. Such permit shall be for twelve (12) months' duration, and, at the end of the permit period, an application must be made to re-issue the permit.

Should any person fail to secure a permit or fail to have his or its application approved or is subsequently found to be exceeding the limits set forth in his or its permit, the Superintendent may direct upon twenty-four hour notice, if such person is using Town water, such a person's connection with the Town water system be disconnected, and the same will only be reconnected at such owner's expense and if such person, after twenty-four hour notice, shall have his connection with the Town sewer system severed, such services will only be restored at such person's expense.

3. In situations where an actual or threatened discharge from any person presents or may present an imminent or substantial endangerment to the health or welfare of persons, to the environment, or where such a discharge could cause interference, as defined in this Ordinance, with the Town's Sanitary Sewers or the wastewater treatment plant receiving the Town's sewage, the Superintendent may immediately disconnect such a person's connection with the Town water system or take other measures sufficient to prevent the discharge from occurring or continuing to occur. Water and sewer service shall be restored to such person only after the causes of the service discontinuation have been eliminated and will only be restored at such person's expense.

Section 7: OUTSIDE CONNECTIONS

Any person owning or controlling premises located beyond the corporate limits of the Town of Creswell and desiring to install a plumbing system for the purpose of discharging domestic sewage and/or industrial waste into the sanitary sewers of the Town of Creswell may do so by complying with the requirements of this Ordinance.

Section 8: POWERS AND AUTHORITY FOR INSPECTION

1. The Superintendent and other duly authorized employees of the Town, bearing proper credentials and identification, shall be permitted to enter upon all properties from which industrial wastes are discharged for the purpose of inspection, observation, measurement, sampling, and testing, in accordance with the provisions of this Ordinance. Nothing in this Ordinance shall be construed to relieve any person from liability in the event that the representative(s) of the Town is injured, involved in a mishap, etc., while performing such inspections, observations, measurements, sampling, and testing.

2. Authority is hereby granted to the Superintendent to temporarily exclude any industrial waste, whether pretreated or not, from the sanitary sewers whenever, in the opinion of the Superintendent, such action is necessary for the purpose of determining the effects of such wastes upon the sewage system and sewage treatment plant or for the purpose of preventing detrimental effects to said system and plant or to the receiving stream.

3. The Superintendent and other duly authorized employees of the Town, bearing proper credentials and identification, shall be permitted to enter upon properties on which are located septic tanks, pumps, pump controls, discharge lines and appurtenances for purposes of maintaining those facilities. The Superintendent and other duly authorized employees shall endeavor to undertake such maintenance work during normal business hours except in cases of emergency. Provided, however, that the Superintendent and other employees of the Town are not authorized by this Ordinance to enter properties on which are located septic tanks, pumps, pump controls, discharge lines and appurtenances that have been installed under the provisions of Section 3, Item 4(b) of this Ordinance.

Section 9: MEASUREMENT OF FLOW

1. The volume of flow used in computing industrial waste surcharges shall be based upon metered water consumption as shown in the records of meter readings maintained by the Town Water Department. In the event that a person discharging wastes into the sanitary sewer system produces evidence to the Superintendent that more than 10% of the total annual volume of water used for all purposes does not reach the Town sanitary sewer, an estimated percentage of total water consumption to be used in computing charges may be agreed upon between the Superintendent and the persons discharging industrial wastes into said sewers. In the event that the Superintendent determines that the volume of industrial waste being discharged is more than 10% greater than the metered water consumption, then the industrial waste charges shall be based upon the volume discharged as measured by a volume measuring device approved by the Superintendent.

2. Where the person discharging industrial or domestic wastes into the sanitary sewers of the Town procures any part, or all of, his water supply from sources other than the Town of Creswell, all or part of which is discharged into the sanitary sewer, the person discharging said waste shall install and maintain at his expense water meters or other measuring devices of a type approved by the Superintendent for the purpose of determining the proper volume of flow to be charged.

Section 10: DETERMINATION OF CHARACTER AND CONCENTRATION OF WASTES

1. The industrial waste of each person discharging same into the Town sanitary sewers shall be subject to periodic inspection and a determination of character and concentration of said wastes shall be made quarterly, or more often as may be necessary, by the Superintendent.

2. Samples shall be collected and composited in such a manner as to be representative of the actual quality of the wastes. The laboratory methods used in the examination of said wastes shall be those set forth in Standard Methods for the Examination of Water and Wastewater - as published by the American Public Health Association, the most recent edition, a copy of which is on file with the Town Clerk for inspection by any interested parties.

3. The determination of the character and concentration of the industrial wastes by the Superintendent or his authorized assistants shall be binding as a basis for charges.

4. Total costs incident to the supervision, inspection, sampling, and analyzing of wastes shall be included in the charge made to persons discharging wastes into the Town sanitary sewers.

Section 11: USER CHARGE SYSTEM

1. User Charges:

(a) Authority: Pursuant to the provision of Public Law 92-500, Section 240(b), the Town of Creswell, having received a Federal Grant for the construction of treatment works, shall adopt a system of charges to assure that each person (or user) receiving waste treatment services within the Town's jurisdiction will pay its proportionate share of the cost of operation and maintenance (including replacement) of any waste treatment services provided by the Town.

(b) Intent: The intent of such user charges is to distribute the cost of operation and maintenance of publicly owned treatment works to the pollutant source and to promote self-sufficiency of treatment works with respect to operation and maintenance costs.

(c) Definition: The term "replacement" referred to in paragraph 1(a) of this section is defined as those expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary during the service life of the collection and treatment works to maintain the capacity and performance for which such works were designed and constructed. The term "operation and maintenance" includes replacement.

(d) User Class: Each user shall be charged a share of the treatment works operation and maintenance cost based on the measured proportional contributions to the treatment works loading. Generally, solids, nitrogen, and other pollutant contributions discharged by all users are approximately equal. Where such pollutants exceed the range of concentration of these pollutants in normal domestic sewage, a surcharge will be added to the base charge. The models used in calculating the user charge are defined in paragraph (f) below.

(e) User Charge Criteria: The User Charge System shall be approved by the Regional Administrator of the Environmental Protection Agency and shall be maintained by the Town in accordance with the following requirements:

(1) The User Charge System must result in the distribution of the cost of operation and maintenance of treatment works within the Town's jurisdiction to each user (or user class) in proportion to such user's contribution to the total wastewater loading of the treatment works. Factors such as strength, volume, and delivery flow rate characteristics shall be considered and included as the basis for the user's

contribution to ensure a proportional distribution of operation and maintenance costs to each user (or user class).

(2) The user charge system must generate sufficient revenue to offset the cost of all treatment works operation and maintenance provided by the Town.

(f) Model User Charge Systems: The User Charge System adopted by the Town shall result in the distribution of treatment works operation and maintenance costs to each user (or user class) in approximate proportion to his contribution to the total wastewater loading of the treatment works. The following user charge models shall be used for this purpose. The symbols used in the models are as defined below:

C_f = Total fixed operation and maintenance (O & M) costs per unit of time.

C_t = Total operation and maintenance (O & M) costs per unit of time.

C_u = A user's charge for O & M per unit of time.

C_s = A surcharge for wastewaters of excessive strength.

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

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

B_c = Charge for a unit of biochemical oxygen demand (BOD) above a base level.

B = Concentration of BOD from a user above a base level.

S_c = Charge for a unit of suspended solids (SS) above a base level.

S = Concentration of SS from a user above a base level.

P_c = Charge for a unit of any pollutant above a base level.

P = Concentration of any pollutant from a user above a base level.

(1) Model No. 1: Whereas the treatment works is primarily flow dependent as the BOD, suspended solids, and other pollutant concentrations discharged by the majority of users are approximately equal; therefore, the user charge will be developed on a volume basis in accordance with the model below:

$$C_u = \frac{C_t}{V_t} (V_u) + \frac{C_f}{\text{Total Number of Users}}$$

(2) Model No. 2: Where determined by the Town that BOD, suspended solids, and other pollutant concentrations from the user exceed the range of concentration of these pollutants in normal domestic sewage,

a surcharge added to a base charge, calculated by means of Model No. 1, shall be levied. The surcharge shall be computed by the model below:

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

Refer to Section 4 of this Ordinance for the baseline pollutant concentrations.

(g) Other Considerations: User Charges may be established based on a percentage of the charge for water usage. However, the unit rate sewer user charge for the largest volume users must be as great as or greater than the unit cost of operation and maintenance (excluding debt service). In such event, a surcharge shall still be levied in accordance with the provisions of Model No. 2, above. The system of user charges for the Town of Creswell shall be based on total system costs, including all operation and maintenance expenses. The debt service portion of the annual system expense will be recovered in a manner to be determined by the Town Council.

2. Calculation of User Charge Payment:

(a) Domestic: The user charge fee shall be based on the Model No. 1 formula:

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

Appendix C shows the necessary calculations to arrive at a value for C_t . In addition, a typical residential customer's bill is calculated and shown in Appendix C.

(b) Industrial: The user charge for industrial customers shall be calculated on the same basis as residential customers unless pollutant loadings exceed those concentrations in normal domestic sewage and are above the baseline pollutant concentrations established in Section 4. Where so determined, a surcharge, added to the base charge (calculated by Model No. 1), shall be levied.

The formula used in calculation the surcharge is the same as Model No. 2, i.e.,

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

Table 2 presents values for B_c and S_c . Unit costs for additional pollutant concentrations (P_c) shall be developed as required and needed.

A typical surcharge for an industry is calculated and shown in Appendix C.

3. Review of Rates: The Town Council shall review the recommended user charge rate annually, or more often as deemed necessary, and adopt a rate or rates to be charged during the ensuing fiscal year or unit revised by the Council.

4. Billing:

(a) The user charges, as set forth in paragraph 3 of this Section 11, shall be billed and payable monthly on a bill rendered to the proper persons by the Town.

(b) The sewer user charge shall be billed to each user at the same time that water bills are rendered and shall be collected at the same time and in the same manner as water accounts.

(c) Persons having a sewer connection to the sewer system, but not connected to the Town's water system and not governed by the provisions of Section 9 of this Ordinance, shall pay a minimum sewer user charge equal to that which would be paid by a customer having a monthly consumption of 3,000 gallons of water, unless under the requirements of Section 9, Item 2, of this Ordinance other provisions have been made for determining water use.

(d) Notice of delinquency and termination of sewer service for failure to pay sewer user charges follow the same practice as is now used for water bills.

Section 12. PROTECTION FROM DAMAGES

No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any equipment or materials belonging to the Town of Creswell used for the purpose of making tests or examinations and left upon the premises of a person discharging wastes into the sewers.

If any person or persons violate any provisions of this Ordinance, the Town of Creswell shall at a minimum recover from that person or persons the cost of repairing the damages and/or additional wastewater treatment and sewage collection operation and maintenance expenses resulting from that violation. The Town Board may also, where they deem such action is in the best interest of the Town, permanently deny continued water and sewer service to any person or persons found to have violated any of the provisions of this Sewer Use Ordinance and institute such criminal and civil actions as the General Statutes of the State of North Carolina allow.

Section 13: REPEALING CLAUSE

All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed. If any section, paragraph, subdivision, clause or provision of this Ordinance shall be adjudged invalid, such adjudication shall apply onto to such section, paragraph, subdivision, clause or provision so adjudged, and the remainder of this Ordinance shall be deemed valid and effective.

Section 14: PENALTIES

Violation of this Ordinance shall be a misdemeanor punishable on conviction by a fine not exceeding Fifty Dollars (\$50.00) or by imprisonment not exceeding thirty (30) days. In addition, this Ordinance may be enforced by an appropriate equitable remedy issued by the General Court of Justice, including, but not limited to, a mandatory injunction.

Section 15: EFFECTIVE DATE

This Sewer Use Ordinance, exclusive of the User Charge provisions (Section 11) shall take effect and be in full force from and after the date indicated below. The User Charge provisions of this Ordinance shall take effect and be in full force from and after the date of commencement of the full use of the wastewater treatment facilities constructed with Environmental Protection Agency funding, at which time collection of the user charge and surcharge shall commence.

Adopted this the _____ day of _____, 19____, by
the Town Council of the Town of Creswell, North Carolina.

ATTEST:

Town Clerk

Reginald D. Schulze

Mayor

APPROVED AS TO FORM:

Town Attorney