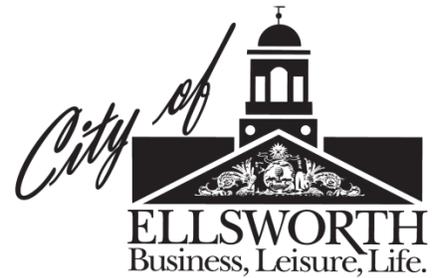


**CHAPTER 5 SEWER ORDINANCE  
CITY OF ELLSWORTH, MAINE**



Adopted April 18, 2005

Revised June 19, 2006

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Revised March 18, 2013

Revised April 15, 2013

Revised November 18, 2013

A true copy –

Attest: \_\_\_\_\_

Heidi-Noel Grindle

City Clerk

An ordinance to promote the public's general health, safety, and welfare, to prevent disease by regulating the use of public and private sewers and drains, private sewage disposal, the installation and connection of building sewers, and the discharge of waters and wastes into the public sewer systems, and providing penalties for violations thereof in the City of Ellsworth, County of Hancock, State of Maine.

## **ARTICLE I - DEFINITIONS**

Unless the context specifically indicates otherwise, the meaning of terms in this ordinance will be as follows:

"A.S.T.M." shall mean American Society for Testing and Materials.

"B.O.D." (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures in five (5) days at twenty (20) degrees Centigrade, expressed in milligrams per liter (Mg/L).

"Builder" shall mean any person, persons, or corporation who undertake to construct, either under contract or for resale, any habitable building.

"Building Drain" shall mean the 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 eight (8) feet outside the inner face of the building.

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

"City" shall mean the City of Ellsworth, Maine.

"City Council" shall mean the duly elected officers of the City of Ellsworth or their authorized deputy or representative.

"Contractor" shall mean any person, firm, or corporation approved by the City Council to do work in the City of Ellsworth.

"D.E.P." shall mean Maine Department of Environmental Protection.

"Developer" shall mean any person, persons, or corporation who undertake to construct simultaneously more than one housing unit on a given tract or land subdivision.

"Drawings" shall mean the drawings that show the character and scope of the sewer extension work to be performed and which have been prepared by the Owner's Engineer and approved by the City and/or its Consulting Engineer.

"Dwelling, Multiple" shall mean a building designed or intended to be used exclusively for residential occupancy by three (3) or more families living independently of one another and containing three (3) or more dwelling units, including apartment buildings and condominiums, but excluding single-family dwellings and two-family dwellings.

"Dwelling, Single-Family" shall mean a building designed or intended to be used exclusively for residential occupancy by one (1) family only and containing only one (1) dwelling unit.

“Dwelling, Two-Family” shall mean a building designed or intended to be used exclusively for residential occupancy by two (2) families and containing two (2) dwelling units, but excluding single-family dwellings.

“Engineer” (also “Consulting Engineer” and “Engineering Consultant”) shall mean the professional engineer or engineering firm or corporation hired by the Owner to design and/or oversee the construction and start-up of the sewer extension project or hired by the City to assist with review of the Sewer Extension design and oversight of construction of said project.

“Family” shall mean one (1) or more persons occupying dwelling unit as a single housekeeping unit whether or not related to each other by birth, marriage, or adoption, but not to consist of more than five (5) unrelated persons.

“Floatable Oil” is oil, fat, or grease in a physical state such that it will separate by gravity from wastewater by treatment in an approved pretreatment facility. A wastewater shall be considered free of floatable oil if it is properly pretreated and the wastewater does not interfere with the collection system.

"Garbage" shall mean solid wastes from the retail preparation, cooking, and dispensing of food and from the retail handling, storage, and sale of produce.

“Grease” shall mean the material removed from a grease interceptor (trap) serving a restaurant or other facility requiring such grease interceptors. Also means volatile and nonvolatile residual fats, fatty acids, soaps, waxes, and other similar materials.

"Industrial Wastewater or Non-Domestic Wastewater" shall mean the wastewater or waterborne wastes resulting from any process of industry, manufacturing trade or business or from development of any natural resources as distinct from domestic wastewater, sewage or unpolluted water. Industrial wastewaters may or may not be discharged separately from sanitary wastewaters. For a combined discharge, the City shall determine if the discharge meets the definition of “industrial wastewater”.

"Manager" shall mean the City Manager of Ellsworth or the individual designated by the City Council to perform this function, or the authorized deputy, agent or representative of this individual.

"Natural Outlet" shall mean any outlet, not man made, into a watercourse, ditch, pond, lake, or other body of surface or ground water.

“Non-residential” shall include, but not be limited to, multiple dwellings.

"Owner" shall mean any individual, firm, company, association, society, or group having title to real property.

"Person" shall mean any individual, firm, company, association, society or group.

"pH" shall mean the logarithm of the reciprocal of the concentration of the hydrogen ions in grams-ionic weight per liter of solution, and is a term used to express the relative acidity or alkalinity of a substance or solution.

"Property Line" shall mean curb line if the building sewer is to connect with the public sewer in a public street. "Property Line" shall mean the edge of a sewer right-of-way in those instances where the buildings sewer connects to the public sewer in a right-of-way.

"Properly Shredded Garbage" shall mean the wastes from the preparation, cooking, and dispensing of food or produce that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch in dimension.

"Public Sewer" shall mean a sewer in which all owners of abutting property have equal rights and which is controlled by public authority.

"Residential Service" shall mean sewer service to single-family and two-family dwellings. Sewer service to multiple dwellings shall be considered "other non-residential service".

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

"Sewage" shall mean a combination of the water carried wastes from residence, businesses, institutions, and industrial establishments, together with such ground, surface, and storm water that may be present.

"Sewage Treatment Plant" shall mean any arrangement of devices and structures used for treating sewage and industrial wastes.

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

"Sewage Works" shall mean all municipal facilities for collecting, conveying, pumping, treating, and disposing of sewage and industrial wastes.

"Shall" is mandatory; "May" is permissive.

"Slug" shall mean any discharge of water, sewage, or industrial waste in which concentration of any given constituent or in quantity of flow exceed for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.

"Standard Methods" shall mean the latest edition of the publication, "Standard Methods for the Examination of Water and Wastewater", published by A.P.H.A., A.W.W.A., and W.P.C.F.

"State Plumbing Code" shall mean the State of Maine Plumbing Code, as amended, from time to time.

"Storm Sewer" or "Storm Ditch" shall mean a pipe or conduit which carries storm and surface waters and drainage but excludes sewage and industrial wastes.

"Superintendent" shall mean the individual retained or designated by the Manager or City Council to supervise and oversee the operation and maintenance of the municipal sewer system and treatment facilities.

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

"Watercourse" shall mean a channel in which a flow of water occurs, either continuously or

intermittently.

## **ARTICLE II - USE OF PUBLIC SEWERS REQUIRED**

Section 201 - It shall be unlawful to discharge to any watercourse, either directly or through any storm sewer within the City or to any area under the jurisdiction of the City, any sewage, industrial wastes, or other polluted waters, except where suitable treatment has been provided in accordance with federal, state, and local laws.

Section 202 - Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, leaching pit, or other facility intended or used for the disposal of sewage.

Section 203 - The owner of any residential building or property situated within the City and abutting on any street, alley, or right-of-way, in which there is now located, or may be in the future 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 to the proper public sewer in accordance with the provisions of this local law, within ninety (90) days after the date of official notice to do so; provided that said public sewer is located within two hundred (200) feet of the building or property to be served by said sewer and the facility can be served by gravity flow. However, where excavation of the public highway is otherwise prohibited by state law or regulation, or where the building or property to be served has public road frontage and is more than two hundred (200) feet from the sewer, the City Council may grant exceptions upon specific application of the owner or lessee of such properties, with such conditions as the said City Council may impose.

Section 204 – The owner of any non-residential or sub-division property situated within the City and abutting on any street, alley, or right-of-way, in which there is now located, or may be in the future 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 to the proper public sewer in accordance with the provisions of this local law, within ninety (90) days after the date of official notice to do so; provided that said public sewer is located within five hundred (500) feet of any subdivision or remaining land of owner or facility to be served by said sewer. However, where excavation of the public highway is otherwise prohibited by state law or regulation, or where the structure to be served has public road frontage and is more than five hundred (500) feet from the sewer, the City Council may grant exceptions upon specific application of the owner or lessee of such properties, with such conditions as the said City Council may impose.

## **ARTICLE III - PRIVATE SEWAGE DISPOSAL**

Section 301 - Where a public sewer is not available under those provisions of Section 203, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this article and the State Plumbing Code.

Section 302 - Construction of private sewage disposal systems shall comply in all respects with requirements of the State Plumbing Code. In addition, a written notice shall be filed with the Code Enforcement Officer on a form furnished by the City, giving notice and details of said installation.

Section 303 - The type, capacities, location, and layout of a private sewage disposal system shall comply with all recommendations of the Department of Human Services, Bureau of Health, State

of Maine.

Section 304 - The building owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the City.

Section 305 - At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in Section 203, connection shall be made to the public sewer in compliance with this ordinance, and any septic tanks, cesspools, or similar private sewage disposal facilities shall be abandoned and filled with suitable material.

Section 306 - No statement contained in this article shall be construed to interfere with any additional requirements that may be imposed by the Health Officer.

#### **ARTICLE IV - BUILDING SEWERS AND CONNECTIONS**

Section 401 - No person shall uncover, use, alter, or disturb any public sewer or appurtenance thereof, without first obtaining a written permit from the Superintendent.

Section 402 –

A. There shall be two (2) classes of building sewer permits - (1) for residential service, and (2) for commercial, industrial, and other non-residential service. In either case, the owner or his agent shall make application on a form furnished by the City. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the Superintendent.

\*Sewer Connection fees shall be as follows and paid to the City Treasurer at the time an application is filed: Residential \$500; Non-residential connection fees shall be based on the design flow of the building use cited in the design flow table of the most recent edition of the sub-surface sewer rules of the State of Maine. The fee shall be \$500 for the first 270 gallons of design flow and \$5 per gallon of design flow thereafter. The connection fee will be reviewed annually at the January City Council meeting.

B. If a residential service is changed to commercial, industrial, or other non-residential service, the owner or agent shall make a new application for the new class of use in accordance with subsection (A). If the property owner paid a residential connection fee, the fee paid will be credited toward the new fee calculated based on design flow.

C. If a commercial, industrial, or other non-residential use is expanded or in any way enlarged, causing the design flow to increase, the owner or agent shall be charged a fee based on increased design flow only. If a commercial, industrial, or non-residential user relocates to another location within the public sewer area, the connection fee must be based on the design flow as stipulated in Section 402 A. The Wastewater Superintendent may allow for a reduction in design flow by deducting the average flow of the most current business within the building being redeveloped from the design flow. If the design flow of the relocating business is less than the average flow of the business it is relocating to, no fee will be assessed.

Section 403 - A separate and independent building sewer shall be provided for every building except where one building stands at the rear of another on an interior lot and no private sewer is available or can be constructed to the rear building through an adjoining alley, court, yard, or driveway, in which case the building sewer from the front building may be extended to the rear building and the whole

considered as one building sewer.

Section 404 - Existing 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 the requirements of this ordinance.

Section 405 - The building sewer shall be schedule 35 or higher plastic pipe, or other suitable material approved by the Superintendent. The quality and weight of materials shall conform to the specifications of the State Plumbing Code. All joints shall be tight and waterproof. Where the building sewer is exposed to damage by tree roots or is installed in filled or unstable ground, the Superintendent shall have the authority to stipulate such special pipe materials or installation provisions as he deems necessary for the circumstances.

Section 406 - The size and slope of the building sewer shall be subject to the approval of the Superintendent, but in no event shall the diameter be less than four (4) inches. The slope of the building sewer pipe shall not be less than one-eighth (1/8) inch per foot.

The sewer shall be laid at uniform grade and in straight alignment insofar as possible. Changes in direction shall be made only with man-holes or pipe fittings as approved by the Superintendent. A cleanout shall be located a minimum of four inches above the basement floor also, cleanout shall be provided at bends greater than 45 degrees or at 100 foot maximum intervals.

Section 407 - Whenever possible the building sewer shall be brought to the building at an elevation below the basement floor. No building sewer shall be laid parallel to or within three (3) feet of any bearing wall which might thereby be weakened. The depth shall be sufficient to afford protection from frost. The building sewer shall be laid at uniform grade and in straight alignment insofar as possible. Changes in direction shall be made only with approved pipe and fittings.

Section 408 - In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such drain shall be lifted by approved artificial means and discharged to the building sewer.

Section 409 - The type of pipe and installation of joints and connections of building sewers shall be in conformance with the State Plumbing Code in all respects. Other jointing materials and methods may be used only upon written approval of the Superintendent.

Section 410 - The connection of the building sewer into the public sewer shall be made with the wye branch or its equivalent. When connecting a four (4) inch diameter building sewer to any public sewer eight (8) inches in diameter or less, or when connecting a six (6) inch diameter building sewer to any public sewer twelve (12) inches in diameter or less, a wye branch must be installed in a location specified by the Superintendent. Where the public sewer has a greater than the maximum diameter for installation of a wye branch as specified above or no properly located wye branch is available, a neat hole may be cut into the upper quadrant of the public sewer to receive the building sewer with entry to be made in the downstream direction at an angle of approximately forty-five (45) degrees, again in a location specified by the Superintendent. A properly sized wye saddle shall be inserted into the hole so as not to extend past the inner surface of the public sewer. A smooth, neat joint shall be made and the connection made secure and watertight by encasement in concrete or as otherwise approved. Special fittings may be used for the connection only when approved by the Superintendent.

Section 411 - The applicant for the building sewer permit shall notify the Superintendent when the building sewer is ready for inspection and connection to the public sewer. No public sewer shall be disturbed except under the supervision of the Superintendent.

Section 412 - All excavation work for building sewer installations shall meet the following conditions:

A. The traveling public shall be adequately protected.

1. At least one-way traffic shall be maintained at all times.

2. Work shall be signed, barricaded, lighted, and traffic officers will be supplied when necessary.

B. Construction methods shall be such that excessive size of excavation and excessive destruction of pavement will be avoided. Bituminous concrete pavements shall be cut in advance along the proposed edges of the excavation. Trenches showing a tendency to collapse shall be supported by substantially placed sheeting.

C. Special backfill of suitable material may be used in the trench, immediately around the pipe. Otherwise, all material used for backfill shall be the same as or equivalent to that removed from each layer of excavation. Where the nature of the highway base material is not readily determined, backfill shall be clean gravel. The top eighteen (18) inches of any trench through paving shall be clean gravel. (At its option, in the interest of good public relations, the contractor or owner may place a temporary cold mix bituminous pavement.)

D. Backfill material shall be uniformly distributed in layers of not more than eight (8) inches and thoroughly compacted by use of approved mechanical compactors before successive layers are placed. Water shall be added when necessary to increase the moisture content of the backfill material in order to obtain adequate compaction. Puddling or jetting of backfill will not be allowed. Backfill materials shall be free from large clods of earth, free from stones and rock fragments over 50 lbs., and free from frozen materials.

E. Surplus material shall be removed from the site and the area shall be left in a clean, presentable condition.

F. Permanent pavement shall be replaced at the owner or developer's expense.

G. The City reserves the right, after due notice in writing to the Contractor or Owner:

1. To provide such supervision and inspection as it may deem necessary, at Owners or Contractor's expense

2. To properly excavate and backfill areas as necessary at Owners or Contractor's expense

3. To clean up areas of private property not properly cleaned by Owner or Contractor, at Owner's or Contractors expense.

H. Sidewalks, parks, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the Street Commissioner.

Section 413 - Any building sewer serving a school, hospital, or similar institution or public building, or serving a complex of commercial or industrial buildings, or which, in the opinion of the Superintendent, will receive sewage or industrial wastes of such volume or character that frequent maintenance of said building sewer is anticipated, then such building sewer shall be connected to the public sewer through a manhole. If required, a new manhole shall be installed in the public sewer and the location of this manhole and the building sewer connection to it or to an existing manhole shall be as specified by the Superintendent.

Section 414 - All costs and expense incident to the installation, connection, and maintenance 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.

Section 415 - Where permitted by the plumbing codes or other appropriate laws or regulations of the

State of Maine, other types of material and construction methods may be used notwithstanding any provisions of this ordinance to the contrary.

Section 416 - No person shall dismantle or move any building having a building service entrance into a public sewer without first having sealed the area of the entrance of the service into such building with a masonry plug. If upon examination by the Superintendent, the sewer service is found to be unserviceable, the owner shall remove such service and seal it at the public sewer.

Section 417 – No person shall connect to an existing sewer line unless the existing sewer line discharges into the public sewer. Furthermore, all lines tying into the existing line shall also be identified as approved connections to the public sewer system.

Section 418 – Any person proposing a new discharge into the system or a substantial change in the volume or character of pollutants that are being discharged into the system shall notify the City at least 45 days prior to the change or connection.

#### **ARTICLE V - SEWER EXTENSIONS**

Section 501 – For gravity sewer extensions requested by individual homeowners, the City will not participate in the financing of the sewer extensions.

Section 502 - For those sewer extensions which are to serve subdivisions on new streets, the City will not participate in the financing of the sewer extensions.

Section 503 – Any developer incurring the cost of an approved sewer extension may recoup up to seventy five percent (75%) of the cost of the construction of such extension through future customer rebates. Future customers, with the exception of individual homeowners, that connect to the new main within ten (10) years of initial construction shall be required to pay a per foot cost based on the location of the connection on the new extension. The per foot cost shall be determined by dividing the 75% cost by the length in linear feet of the extension. The total infrastructure expansion fee shall be the per foot cost multiplied by the number of feet from the beginning of the extension to the point of the new connection. If there are multiple connections within the ten year period, a customer that connects in a location further along the extension may subtract the infrastructure expansion fee the customer before them has previously paid. As such, any customer that connects in a location below an existing customer must reimburse that customer directly above, their portion of the infrastructure expansion fee previously paid. (See Appendix A for examples)

The infrastructure extension fee is in addition to the sewer connection fee and is payable to the City of Ellsworth for connection to the public sewer system.

Section 504 - All extensions to the sanitary sewer system shall be designed in accordance with the Recommended Standards for Sewage Works, as adopted by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers. Plans and specifications for sewer extensions shall be submitted to and approval obtained from the Superintendent before construction may proceed. The design of sewers must anticipate and allow for flows from all anticipated future extensions or developments within the surrounding area for the foreseeable future.

Section 505 - Sewer design shall be in accordance with the following provisions: Pipe material shall be schedule 35 or higher plastic pipe meeting the A.S.T.M. standards. No standard strength clay pipe or non-reinforced concrete pipe shall be used. Minimum internal pipe diameter shall be eight (8) inches. Joints for each kind of pipe shall be designed and manufactured such that "O" ring gaskets of the "snap-on" type are employed. Gaskets shall be continuous, solid and natural or synthetic rubber and shall provide a positive compression seal in the assembled joint such that the requirements of Section 505 are met. Joint preparation and assembly shall be in accordance with the manufacturer's recommendations. Wye branch fittings shall be installed for connection to building sewers in accordance with section 411. Trench widths as measured just above the crown of the pipe shall not

exceed the internal diameter of the pipe plus three (3) feet. Pipe shall be firmly and evenly bedded on a minimum of six (6) inches of screened gravel or bank run sandy gravel with stone size not exceeding one (1) inch. Pipe thickness and field strength shall be calculated on the following criteria:

Safety Factor 1.9

Load Factor 1.7

Weight of Soil 120 lbs./cu. ft.

Wheel Loading 16,000 lbs.

Utilizing the above information, design shall then be made as outlined in Chapter IX of the Water Pollution Control Federation Manual of Practice No. 9, "Design and Construction of Sanitary and Storm Sewers".

Manholes shall be constructed at all changes in slope or alignment or at intervals of three hundred (300) linear feet. The manholes shall be constructed with a poured three thousand (3,000) psi concrete base eight (8) inches thick, steel troweled concrete or mortar bench walls and inverts and precast four (4) foot diameter concrete manhole barrel sections with tapered top sections, as specified by ASTM C-478. The manhole frame and cover shall be the standard design of the City and shall be set with no less than two (2) courses of brick underneath to allow for later adjustment in elevation. All joints shall be sealed against infiltration.

Section 506 - All Public sewers shall satisfy requirements of a final vacuum test before they will be approved and sewage flow accepted from them by the City. Testing methods shall be as follows:

A. General: Test all sanitary sewer pipes after backfill.

B. Gravity Sewer – Leakage Tests: Use low pressure air tests as follows:

1. Plug ends of section to be tested
2. Supply air slowly to the pipe to be tested until the air pressure inside the pipe is 6 psi.
3. Disconnect air supply and allow a minimum of 2 minutes for stabilization of pressure.
4. Following stabilization period measure drop in pressure over a 6-minute test period.
5. Acceptable drop; No more than 1.0 psi.

C. Repair all pipes not passing tests using materials and methods approved by the owner and retest.

#### MANHOLE VACUUM TESTING

A. The manhole being tested must not be backfilled. The test is passing if the manhole holds ten (10) inches of mercury vacuum for 3 minutes, with one (1) inch of mercury loss allowable.

#### REPAIRS

A. Determine causes of all leaks and repair them. Perform earthwork required if manhole has been backfilled.

B. Perform repairs using methods and materials approved by the owner. Remove and replace or reconstruct manhole if necessary. Remove and replace defective sections if required by the owner.

Section 507 - All extensions of public sewers constructed at the expense of the property owner, builder, or developer, after approval by the Superintendent, and acceptance by the City Council, shall become the property of the City and shall thereafter be maintained by the City. Sewers shall be guaranteed against defects in the materials or workmanship for eighteen (18) months, from the date of acceptance by the City. The guarantee shall be in a form approved by the City and may include a completion bond or certified check.

Section 508 - No builder or developer shall be issued a building permit for a new dwelling or structure requiring sanitary facilities within the City of Ellsworth, unless a suitable and approved method of waste disposal is proposed.

#### **ARTICLE VI - USE OF PUBLIC SEWERS**

Section 601 - No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water, or unpolluted industrial process water, to any sanitary sewer.

Section 602 - Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm drains for such discharge or to a natural outlet approved in writing by the Manager or his designee. Industrial cooling water or unpolluted process waters may be discharged, upon written approval of the Manager or his designee, to a storm sewer or natural outlet, provided, however, that said discharge shall be in accordance with all State regulations.

Section 603 - Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

- A. Any liquid or vapor having a temperature higher than one hundred fifty (150) degrees Fahrenheit.
- B. Any water or waste which may contain more than twenty five (25) milligrams per liter of fat, oil, or grease, or containing substances which may solidify or become viscous at temperatures between 32 and 150 degrees Fahrenheit.
- C. Any gasoline, benzene, naptha, fuel oil, lubricating oils, or other flammable or explosive liquids, solids or gases.
- D. Any garbage that has not been properly shredded.
- E. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works.
- F. Any waters or wastes having a pH lower than 6.5 or higher than 8.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works.
- G. Any waters or wastes containing suspended solids or biochemical oxygen demand (BOD) of such character and quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant.
- H. 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.
- I. Any noxious or malodorous gas or substance capable of creating a public nuisance.

Section 604 – Grease interceptors shall be required in the following establishments where food is prepared or dispensed including but not limited to: restaurants, cafes, lunch counters, cafeterias, bars and clubs, hotels, bed and breakfasts, hospitals, sanitariums, factories, school kitchens, commercial kitchens, and nursing homes. The Superintendent may authorize an annual waiver if it is determined that an establishment generates wastewater or other waste entering the public sewer which contains less than 25 parts per million, by weight of fat, oil, or grease. In reaching this determination, the Wastewater Superintendent may require a test. Testing fees, if necessary, shall be paid by the applicant.

A grease interceptor is not required for individual dwelling units or for any private living quarters. Establishments which are not on the public sewer system are exempt from the requirements of this ordinance.

All grease interceptors shall be of a design conforming to Plumbing and Drainage Institute Standards PDI-G101, December, 1985 Edition. Sand and oil interceptors, when in the opinion of the Superintendent are necessary, shall conform to the same standards as grease interceptors. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, water-tight and equipped with easily removable covers which when bolted in place shall be gas tight and water tight.

Installation and maintenance of any interceptor shall comply with the Plumbing and Drainage Institute Standards PDI-G101, except that accumulated grease shall be removed at a minimum of once every four (4) weeks or more often if needed. Owners of properties in which grease interceptors are installed shall, on forms available at the Ellsworth Wastewater Treatment Plant, maintain record of the dates and times that such interceptors are cleaned.

Section 605 – Oil and sand interceptors shall be provided when, in the opinion of the Superintendent, they are necessary for the proper handling of liquid wastes containing any flammable wastes, sand or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. Sand and Oil interceptor design shall conform to the most current edition of the Plumbing and Drainage Institute Standards PDI-G101.

Where installed, all grease, oil, and sand interceptors or traps shall be maintained by the owner, at his expense, in continuously efficient operation at all times. The owner or tenant of the premises shall grant to the City permission to conduct unannounced inspections of any such interceptor during normal business hours. Such inspections shall not unreasonably interfere with normal operations of the business.

Section 606 - The admission into the public sewers of any waters or wastes having (a) a 5-day B.O.D. greater than three hundred (300) milligrams per liter; or (b) containing more than three hundred fifty (350) parts per million by weight of suspended solids; or (c) containing any quantity of substance having the characteristics described in Section 603; or (d) having an average daily flow greater than two (2%) percent of the average daily flow of the City shall be subject to the review and approval of the Superintendent. Where necessary, in the opinion of the Superintendent, the owner shall provide at his expense, such preliminary treatment as may be necessary to (a) reduce the Biochemical Oxygen Demand to three hundred (300) milligrams per liter; or (b) reduce suspended solids to three hundred fifty (350) milligrams per liter; or (c) reduce objectionable characteristics to within the maximum limits provided for in Section 603; or (d) control the quantities and rates of discharge of such waters or wastes. Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the Superintendent and the Department of Environmental Protection of the State of Maine. No construction of such facilities shall be commenced until said approvals are obtained in writing.

Section 607 - Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense.

Section 608 - When required by the Superintendent, the owner of industrial or commercial property, served by a building sewer carrying industrial wastes shall install a suitable control structure in the building sewer to facilitate observation, sampling, and measurements of wastes. Such structure, shall be accessible, safely located, and shall be constructed in accordance with plans approved by the Superintendent. The structure and all necessary measuring and sampling equipment shall be installed by the owner at his expense, and controlled and maintained by the owner, but shall be open to inspection by the Superintendent.

Section 609 - All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in Sections 603 and 606 shall be determined in accordance with "Standard Methods for the Examination of Water and Sewage", and shall be determined at the control manhole

provided for in Section 608, or upon suitable samples taken at said controls structure. Records of the measuring and sampling shall be those prescribed by the Superintendent and shall be available to the Superintendent for his inspection.

Section 610 - For industrial wastes of unusual volume, strength of character, special agreements, as determined by the City in accordance with Federal and State regulations, shall be required between the City and the industry concerned providing for the acceptance of such wastes in the municipal system.

Section 611 – Pretreatment Standards - All users of the Public Sewer System will comply with all standards and requirements of the Clean Water Act, including The National Pretreatment Standards and the National Categorical Standards. The National Categorical Standards located 40 CFR Chapter I, Subchapter N, Parts 405-471 are hereby incorporated into this ordinance.

Section 612 – Dilution – Except where expressly authorized to do so by an applicable Pretreatment Standard, no user shall ever increase the use of process water or, in any other way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with a Pretreatment Standard.

#### **ARTICLE VII - PROTECTION FROM DAMAGE**

Section 701 - No person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is part of the municipal sewage works. Violators shall be subject to criminal charges.

Section 702 - A contractor must present a certificate showing proof of liability insurance before a permit will be issued for construction of building sewers, sewer extensions, or private sewage disposal.

Section 703 – General Prohibitions – no user shall contribute or cause to be contributed, in any manner or fashion, directly or indirectly, any pollutant or wastewater which is determined by the Ellsworth Wastewater Department to be detrimental to the operation or performance of the Ellsworth Wastewater Facility.

Without limiting the generality of the foregoing, a user may only contribute the following substances with written authorization from the Ellsworth Wastewater Department, however, at no time shall the prohibitions of 40 CFR 403.5 (a) & (b) or Categorical standards or Section 603 limits be violated:

1. Any solids, liquids, or gases which, by reason of their nature or quantity, are or may be sufficient at point of discharge, either alone or by interaction with other substances, to cause a fire or an explosion or be injurious, in any way, to the District, or to the operation of the District. The closed cup flash point of the waste being discharged to the District not, per 40 CFR 403.5 (b) (1), be less than 60 degrees C using the approved laboratory procedure, at the end of pipe.

2. Any solid or viscous substances in amounts which may cause obstruction to the flow in the sewer collection system resulting in interference or cause a nuisance with the operation of the wastewater treatment facilities. Unless explicitly allowable by a written permit, such substances include, but are not limited to, grease, garbage with particles greater than one-half (1/2) inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood, feathers, ashes, cinders, sand, spent shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar asphalt residues, residues from refining or processing fuel or lubricating oil, mud, or glass grinding or polishing wastes.

3. Any wastewater having a ph less than 5.5 or greater than 9.5, except at the discretion of the Ellsworth Wastewater Department, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment, and/or City personnel. In no case shall the ph be

less than 5.0 or greater than or equal to 12.5 at end of pipe as per 40CFR 403.5 (b) (2).

4. Oils and grease – Any commercial, institutional, or industrial wastes containing floatable fats, waxes, grease, or oils, or which become floatable when the wastes cool to the temperature prevailing in the wastewater at the Wastewater Treatment Plant, during the winter season; also any commercial, institutional, or industrial wastes containing more than 100 mg/l of oil or grease; also any substances which will cause the sewage to become substantially more viscous, at any seasonal sewage temperature in the District. At no time shall there be a discharge of petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through as per 40 CFR 403.5 (b) (6).

5. At no time shall there be a discharge of any substance which will cause interference or pass through as per 40 CFR 403.5 (a) (1).

6. Any wastewater with objectionable color which is not removed in the treatment process. At no time shall a discharge impart color to the receiving waters which causes those waters to be unsuitable for the designated uses and characteristics ascribed to their class.

7. Any solid, liquid, vapor, or gas having a temperature higher than 65 degrees C (150 degrees f); however, such materials shall not cause the wastewater treatment plant influent temperature to be greater than 40 degrees C (104 degrees F). The City reserves the right to prohibit wastes at temperatures lower than 65 degrees C.

8. Unusual flow rate or concentration of wastes, constituting slugs, except by Industrial Wastewater Permit, but in no case any discharge of a flow rate or concentration which will cause pass through or interference as per 40 CFR 403.5 (a) (1).

9. Any wastewater containing any radioactive wastes except as approved by the District, and in compliance with applicable State and Federal regulations.

10. Any wastewater which causes a hazard to human life or which creates a public nuisance, either by itself or in combination, in any way, with other wastes.

Section 704 – Concentration Based Limitations – No person shall discharge, directly or indirectly, into the sewer, wastewater containing any of the following substances in concentrations exceeding those specified below on a daily basis, except by permit. Concentration limits are applicable to wastewater effluents at the point just prior to discharge into the Ellsworth Collection System (“end of pipe” concentration).

#### EFFLUENT LIMITS

SUBSTANCE	ALLOW. AVG DAILY	ALLOW. MASS LIMITS
Cadmium	0.45 mg/l	0.008 lbs/day
Chromium (tot)	4.99 mg/l	0.106 lbs/day
Copper	7.47 mg/l	0.108 lbs/day
Lead	3.33 mg/l	0.062 lbs/day
Mercury	0.03 mg/l	0.0004 lbs/day
Nickel	15.53 mg/l	0.278 lbs/day
Zinc	2.70 mg/l	0.600 lbs/day

(1) All concentrations listed for metallic substances shall be as “total metal”, which shall be defined as the value measured in a sample acidified to a ph value of 2 or less, without prior filtration.

(2) As determined on a composite sample, unless otherwise stated in writing, taken from the User’s daily discharge over a typical operational and/or production day.

## **ARTICLE VIII - POWERS AND AUTHORITY OF INSPECTORS**

In emergency situations or with reasonable cause, the Superintendent and other duly authorized employees of the City bearing proper credentials and identifications shall be permitted to enter upon all properties for the purpose of inspection, observation, and measurement sampling and testing in accordance with the provisions of this ordinance.

## **ARTICLE IX - PENALTIES**

Section 901 - Any person violating any provision of this ordinance except Section 701 shall be served by the City with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in said notice, permanently cease all violations.

Section 902 - Any person who fails to comply with the provisions of this ordinance other than those provisions pertaining to the payment of charges for services established herein, shall, be liable for a civil penalty not exceeding five hundred dollars (\$500.00) for each offense. The continued violation of any provision of any section of this ordinance, other than those pertaining to the payment of charges for services established herein, shall constitute a separate offense for each and every day such violation of any provision hereof shall continue.

Section 903 - As an alternative, upon violation of this ordinance, the proper authorities of the City, in addition to other remedies, may institute any appropriate action or proceedings including an injunction to prevent such unlawful use, construction, or maintenance of cesspools, septic tanks, sewage disposal systems, pipes or drains, to restrain, correct or abate such violation, or to prevent the occupancy of any building structure or land where said violations of this ordinance are found.

Section 904 - Any person violating any of the provisions of this ordinance shall become liable to the City for any expense, loss, or damage incurred by the City by reason of such violation. The City Manager is authorized to order that legal action be taken to enforce the provisions of this Ordinance pursuant to 30-A M.R.S.A. Section 4452.

## **ARTICLE X - SEWER SERVICE CHARGE**

Section 1001 – The City shall impose a Sewer Service Charge upon owners of property whose residence or place of business is connected to the City of Ellsworth public sewer system.

Section 1002 - Sewer Service Charge rates shall be determined by the City Council annually and in general, such charges will be determined on a rate structure based on water consumption. All users not served by the water utility shall be charged on volume as determined by a meter installed and maintained by the owner, but open to inspection by the Superintendent. Said meter shall be of the type and design approved by the City. The sewer service charge shall be computed and billed at quarterly intervals throughout the calendar year and shall be due and payable as of the date of the bill.

Section 1003 - A Special Sewer Service Charge shall be assigned any user whose waste varies significantly in strength or otherwise from that of normal domestic sewage. In general, a Special Sewer Charge will be based on equitable prorating of costs for conveying and treating such waste, taking into account, but not necessarily limited to, the effect of volume, B.O.D., suspended solids, settleable solids, chlorine demand, toxicity, and pH. Pretreatment by the industry may also be a requirement if necessary to make the waste compatible with flow in the sewer system. The City Council, shall assign a Special Sewer Service Charge to the user. The applicable portions of the preceding sections as well as the equitable rights of the public shall be the basis for such an arrangement.

Section 1004 - INDUSTRIAL & NON-DOMESTIC COST RECOVERY - In addition to the Special

Sewer Service Charge, there shall be an additional charge to non-governmental users of the Public Sewage Work identified in the Standard Industrial Classification Manual, 1972, prepared by the Federal Government Office of Management and Budget, as amended and supplemented, under the following divisions:

Division A - Agriculture, Forestry and Fishing

Division B - Mining

Division D - Manufacturing

Division E - Transportation, Communications, Electric, Gas and Sanitary Services

Division I - Services

A user in the Divisions listed may be excluded if it is determined that it will introduce primarily segregated domestic wastes or wastes from sanitary conveniences. Any facility whose nature is within one or more of the above Divisions, which is connected to the Public Sewage Works, and which is discharging or is connected with the intent of discharging to the Public Works significant quantities of process, industrial or other wastes not of a domestic or sanitary nature, shall be subject to the special charge to be established by separate agreement between said user and the City for the purpose of recovering that portions of Federal Grants expended in aid of the construction of Public Sewage Works, under programs administered by the United States Environmental Protection Agency, allocable to the treatment of wastes from such users in accordance with the following provisions:

A. Each year during the cost recovery period, each user of the treatment works shall pay its share of the total grant amount divided by the recovery period.

B. The cost recovery period shall be equal to thirty (30) years or the useful life of the treatment works, whichever is less.

C. Payments shall be made no less often than annually. The First payment by an industrial user shall be made no later than one year after use of the treatment works begins.

D. A user's share shall be based on all factors which significantly influence the cost of the treatment works. Factors such as strength, volume, and delivery flow rate characteristics shall be considered and included to insure a proportional distribution of the grant amount allocable to industrial use to all industrial users of the treatment works. At a minimum, an industry's share shall be based on its flow versus treatment works capacity except in unusual cases.

E. If there is a substantial change in the strength, volume or delivery flow rate characteristics introduced into the treatment works by an industrial user, such user's share shall be adjusted accordingly.

F. If there is an expansion or upgrading of the treatment works, each existing industrial user's share will be adjusted accordingly.

G. An industrial user's share shall not include any portion of the grant amount allocable to unused or unreserved capacity.

H. An industrial user's share shall include any firm commitment to the grantee of increased used by such user.

I. An industrial user's share shall not include an interest component.

Section 1005 - The City Council reserves the right from time to time to change Sewer Service Charges originally or previously assigned to any property owner.

Section 1006 - All property owners outside the city limits, who, by their own request are served by

sanitary sewers, must pay a Sewer Service Charge established by the City Council.

Section 1007 - Each sewer charge, together with accrued interest, levied pursuant to this ordinance, is hereby made a lien on the real estate served or benefited by the sewer; and if not paid within ninety (90) days of the due date, may be collected by the City Treasurer pursuant to the provisions of Title 38, Section 1208, M.R.S.A., and Title 30, Section 4355 M.R.S.A. as amended.

Section 1008 - ABATEMENTS - Abatements for use of water for lawn sprinklers, garden hoses, or other uses of significant volumes of water, which do not enter the public sewer, may be made on application to the City. The adjusted billing determined shall not be less than the highest billing or adjusted billing during the previous three quarters. No more than one (1) adjustment can be given in one (1) calendar year. The City shall require verification of the significant sewer usage which is cause for abatement. The City Manager or his/her designee shall approve or deny abatements.

Section 1009 - INTEREST ON UNPAID BILLS - There shall be charged, in addition to the rates herein established, interest at the annual rate of eighteen (18%) percent on all sewer use fees which are not paid on the due date shown on the bill except that such interest so charged shall be excused unless notice of lien claim for non payment of sewer use fees is mailed in accordance with these regulations.

Section 1010 – CAPITAL CHARGE – The City shall impose a capital sewer charge to offset capital costs involved in maintaining and improving the collection system and treatment facility. The capital sewer charge rates shall be determined by the City Council on a year to year basis, and in general, such charges will be determined on a rate structure based on metered consumption.

#### **ARTICLE XI - ACCEPTANCE OF SEPTIC TANK WASTES AT SEWAGE TREATMENT PLANT**

Section 1101 - Septic tank wastes pumped from septic tanks will not be accepted for treatment at the sewage treatment plant, including septic tanks within the corporate limits of the City of Ellsworth.

#### **ARTICLE XII INFLOW REMOVAL PROGRAM**

In order to reduce unapproved inflow to the sewer collection system, the City of Ellsworth will charge a \$50 quarterly inflow surcharge against those contributing said inflows. This surcharge will be assessed for each incidence of unapproved connections to the sewer. This charge will be eliminated upon removal of the unapproved or illegal connection to the sewer service and a proven and viable method for ground water and surface water removal has been installed to the Wastewater Departments specifications. Illegal inflows include but are not limited to sump pumps, foundation drains, and basement drains.

This fee will commence 180 days after approval by the City Council. This surcharge will be applied to all users; exemptions will be given if no illegal connection is found or if an illegal connection is satisfactorily removed per the above specifications. Sewer users should contact City Hall to schedule an appointment for inspection to determine exemption eligibility.

#### **ARTICLE XIII - VALIDITY OF ORDINANCE**

Section 1301 - All ordinances or parts of ordinances in conflict herewith are hereby repealed.

Section 1302 - The validity of any section, clause, sentence or provision of this ordinance shall not affect the validity of any part of this ordinance which can be given without such invalid part or parts.

#### **ARTICLE XIV - ORDINANCE IN FORCE**

This ordinance shall be in full force and effect from and after its passage, approval, and recording, except Section 204 is not applicable to any project, development or subdivision that has received final Planning Board approval or other local review approval or other local review approval prior to

date of adoption of this Ordinance by the Ellsworth City Council.