# PUBLIC AND PRIVATE SEWERS AND DRAINS ORDINANCE

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JANUARY 28, 1974

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# PUBIC AND PRIVATE SEWERS AND DRAINS ORDINANCE FOR THE TOWN OF BENTON, MAINE

JANUARY 28, 1974

AN ORDINANCE REGULATING THE USE OF PUBLIC AND PRIVATE SEWERS AND DRAINS, THE INSTALLATION AND CONNECTION OF BUILDING SEWERS, AND THE DISCHARGE OF WATERS AND WASTES INTO THE PUBLIC SEWER SYSTEM(S); AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF; IN THE TOWN OF BENTON, COUNTY OF KENNEBEC, STATE OF MAINE.

Be it ordained and enacted by the inhabitants of the Town of Benton, State of Maine, as follows:

# ARTICLE I. DEFINITIONS

Unless the context specifically indicates otherwise, the meaning of terms used in this Ordinance shall be as follows:

- SECTION 1. "BOD" (denoting Biochemical Oxygen Demand) shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five days at 20°C, expressed in milligrams per liter.
- SECTION 2. "Building Drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer, beginning five (5') feet (1.5 meters) outside the inner face of the building wall.
- SECTION 3. "Building Sewer" shall mean the extension from the building drain to the public sewer or other place of disposal.
- <u>SECTION 4.</u> "Combined Sewer" shall mean a sewer receiving both surface runoff and sewage.
- SECTION 5. "Garbage" shall mean solid wastes from the domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage, and sale of produce.
- <u>SECTION 6.</u> "Industrial Wastes" shall mean the liquid wastes from industrial manufacturing processes, trade, or business as distinct from sanitary sewage.
- SECTION 7. "Natural Outlet" shall mean any outlet into a watercourse, pond, ditch, lake, or other body of surface or ground water.
- <u>SECTION 8.</u> "Person" shall mean any individual, firm, company, association, society, corporation, or group
- <u>SECTION 9.</u> "pH" shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.
- SECTION 10. "Properly Shredded Garbage" shall mean the wastes from the preparation, cooking, and dispensing of food that have been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch (1.27 centermeters) in any dimension.
- SECTION 11. "Public Sewer" shall mean a sewer in which all owners of abutting properties have equal rights, and is controlled by public authority.

- <u>SECTION 12.</u> "Sanitary Sewer" shall mean a sewer which carries sewage and to which storm, surface, and ground waters are not intentionally admitted.
- SECTION 13. "Sewage" shall mean a combination of the water-carried wastes from residences, business buildings, institution, and industrial establishments, together with such ground, surface, and stormwaters as may be present.
- <u>SECTION 14.</u> "Sewage Treatment Plant" shall mean any arrangement of devices and structures used for treating sewage.
- <u>SECTION 15.</u> "Sewage Works" shall mean all facilities for collecting, pumping, treating, and disposing of sewage.
- SECTION 16. "Sewer" shall mean a pipe or conduit for carrying sewage.
- SECTION 17. "Shall" is mandatory; "May" is permissive.
- SECTION 18. "Slug" shall mean any discharge of water, sewage, or industrial waste which in concentration of any given constituent or in quantity of flow exceeds for any period of duration longer than fifteen minutes, more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.
- <u>SECTION 19.</u> "Storm Drain" (sometimes termed "Stormed Sewer") shall mean a sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes other than unpolluted cooking water.
- SECTION 20. "Selectmen" shall mean the Board of Selectmen of the Town of Benton, or their authorized deputy, agent, or representative.
- <u>SECTION 21.</u> "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.
- SECTION 22. "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently.
- <u>SECTION 23.</u> "Industrial User" means any person connected to a public sewer and discharging industrial waste. (Amended March 10, 1984)
- SECTION 24. "Categorical Pretreatment Standards" means discharge limitations for specific industrial user categories promulgated by the U.S. Environmental Protection Agency under Sections 307 of the Act. (Amended March 10, 1984)
- SECTION 25. "Interfere" means an inhibition or disruption of the treatment works, its treatment processes or operations, or its sludge processes, use, or disposal which is a cause of or significantly contributes to either a violation of any requirement of the NPDES permit (including an increase in the magnitude or duration of a violation) or to the prevention of sewage sludge use or disposal in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State Sludge Management Plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, and the Toxic Substances Control Act. A user significantly contributes to such a permit violation or prevention of sludge use or disposal violation or prevention of sludge use or disposal in accordance with above-cited authorities whenever such user:
- A. Discharges a daily pollutant loading in excess of that allowed by contract with the Town or by Federal, or State law;

- B. Discharges wastewater which substantially differs in nature or constituent from the user's average discharge; or
- C. Knows or has reason to know that its discharge alone or in conjunction with discharges from other sources, would result in a permit violation or prevent sewage sludge use or disposal in accordance with the above-cited authorities as they apply to the selected method of sludge management. (Amended March 10, 1984)

SECTION 26. "Slug Loading" means discharge at a flow rate or pollutant concentration that may interfere with the public sewer or waste-water treatment facilities. (Amended March 10, 1984)

# ARTICLE II. BUILDING SEWERS AND

#### CONNECTIONS

- SECTION 1. No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance thereof without first obtaining a written permit from the Selectmen.
- SECTION 2. There shall be two (2) classes of building sewer permits: (a) for residential and commercial service, and (b) for service to establishments producing industrial wastes. In either case, the owner or his agent shall make application on a special form furnished by the Town. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgement of the Selectmen. A permit and inspection fee of \$10 for a residential or commercial building sewer permit and \$20 for an industrial building sewer permit, for each connection, shall be paid to the Town at the time the application is filed.
- SECTION 3. All costs and expenses incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the Town from any loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.
- SECTION 4. 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. The building sewer from the front building may be extended to the rear building and the whole considered as one building sewer.
- SECTION 5. Old building sewers may be used in connection with new buildings only when they are found, on examination and/or test by the Selectmen, to meet all requirements of this Ordinance.
- SECTION 6. The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing of the pipe, jointing, testing, and backfilling the trench, shall all conform to the requirements of the building and plumbing code or other applicable rules and regulations of the Town. In the absence of code provisions or in amplification thereof, the materials and procedures set forth in appropriate specifications of the A.S.T.M. and W.P.C.F. Manual of Practice No. 9 shall apply.
- SECTION 7. Whenever possible, the building sewer shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

- SECTION 8. No person shall make connections of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or ground water to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer.
- SECTION 9. The connection of the building sewer into the public sewer shall conform to the requirements of the building and plumbing code or other applicable rules and regulations of the Town, or the procedures set forth in appropriate specifications of the A.S.T.M. and the W.P.C.F. Manual of Practice No. 9. All such connections shall be made gas tight and water tight. Any deviation from the prescribed procedures and materials must be approved by the Selectmen before installation.
- SECTION 10. The applicant for the building sewer permit shall notify the Selectmen when the building sewer is ready for inspection and connection to the public sewer. The connection shall be made under the supervision of the Selectmen or their representative.
- SECTION 11. All excavations for building sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the Town.
- SECTION 12. "The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated within the Town and abutting on any street, alley, or right-of-way in which there is now located or may in the future be located a public sanitary or combined sewer of the Town, is hereby required at his expense to install suitable toilet facilities therein, and to connect such facilities directly with the proper sewer in accordance with the provisions of this Ordinance, within ninety (90) days after date of official notice to do so, provided that said public sewer is within two hundred (200') feet". (Amended March 8, 1975)

# ARTICLE III. MISCELLANEOUS INDUSTRIAL PRETREATMENT REQUIREMENTS March 10, 1984

- SECTION 1. All persons discharging wastes into the public sewer shall comply with applicable requirements of Federal and State Industrial Pretreatment Regulations and the rules and regulations of the Kennebec Sanitary Treatment District.
- SECTION 2. Industrial users shall comply with Federal and State general pretreatment standards and applicable categorical pretreatment standards. Such compliance with categorical standards shall be achieved within three (3) years of the date such standard is effective, unless a shorter compliance time is specified, but in no case later than July 1, 1984.
- SECTION 3. The Selectmen and authorized employees or agents may, after informal notice to the discharger to the public sewer, immediately halt or prevent any discharge of pollutants reasonably appearing to present an imminent endangerment to the health and welfare of persons, or any discharge presenting, or which may present, an endangerment to the environment, or which threatens to interfere with operation of the public sewer or wastewater treatment facilities. Actions which may be taken by the Selectmen and authorized employees or agents include seeking ex parte temporary judicial injunctive relief, entry on private property to halt such discharge, blockage of a public sewer to halt such discharge, or demand of specific action by the discharger.
- <u>SECTION 4.</u> The Selectmen and authorized employees or agents shall investigate instances of non-compliance with industrial pretreatment standards and requirements, as requested by the Kennebec Sanitary Treatment District.
- SECTION 5. Within 180 days after the effective date of a categorical pretreatment standard, existing industrial users subject to such standards shall submit to the Kennebec Sanitary Treatment District an application for a categorical permit containing information required under applicable Federal and State Industrial Pretreatment Regulations. Such information, as a minimum, shall include:
- o the name and address of the facility, including the name of the operators and owners:
- a list of all environmental permits held by or for the facility;
- o a brief description of the nature, average rate of production, and Standard Industrial Classification of the operations carried out at such facility;
- a schedule of actions to be taken to comply with the categorical standards;
- o information showing the measured average daily and maximum daily flow, in gallons per day, to the public sewer from related process streams and from other streams;
- o an identification of the industrial pretreatment standards applicable to each regulated process; and
- o an analysis identifying the nature and concentration of pollutants in the discharge.

The Selectmen and authorized employees or agents may require additional information to be included in such application.

SECTION 6. Within ninety (90) days after the date for final compliance by existing industrial users with applicable categorical pretreatment standards, or in the case of new source, following commencement of the introduction of wastewater into the public sewer, industrial users shall submit to the Kennebec Sanitary Treatment District a report indicating the nature and concentration of pollutants in the discharge from the regulated process(es) governed by pretreatment standards and the average and maximum daily flow for these process units. Such report shall state whether the applicable pretreatment standards are being met on a consistent basis and, if not, what additional operation and maintenance practice or pretreatment is necessary. Such industrial users shall submit to the Kennebec Sanitary Treatment District during the months of June and

December, unless required more frequently, a report indicating the nature and concentration of pollutants in the discharge. Additional requirements for such report may be imposed by the Selectmen and authorized employees or agents.

<u>SECTION 7.</u> Industrial users shall give written notice to the Selectmen and authorized employees or agents and the Kennebec Sanitary Treatment District at least forty-five (45) calendar days before making significant changes in the nature, quantity, or rate of discharge of industrial waste.

<u>SECTION 8.</u> Industrial users shall immediately notify the Selectmen and authorized employees or agents and the Kennebec Sanitary Treatment District of any slug loading discharge by such user.

<u>SECTION 9.</u> All reports submitted by industrial users under this Article shall be signed by an authorized representative. An authorized representative may be:

- a principal executive officer of at least a level of vice president, if the industrial user is a corporation;
- a duly authorized representative of either of the individuals designated above, if such representative is responsible for the overall operation of the subject facility.

SECTION 10. Industrial users subject to the reporting requirements under this Article shall maintain records of all information resulting from any monitoring activities required to prepare such reports. Such records shall include for each sample:

- the date, exact place, method, and time of sampling and the names of person or persons taking the sample;
- the dates analyses were performed;
- who performed the analyses;
- the analytical techniques and methods used; and
- the results of such analyses.

Such records shall be maintained for a minimum of three years and shall be made available for inspection and copying by the Selectmen and authorized employees or agents and the Kennebec Sanitary Treatment District.

SECTION 11. Information and data submitted to the Selectmen and authorized employees or agents and the Kennebec Sanitary Treatment District under this Article relating to wastewater discharge characteristics shall be available to the public without restriction. Other such information shall be available to the public at least to the extent provided by 40 CFR Section 2.302.

SECTION 12. The Selectmen and authorized employees or agents may temporarily exclude from the public sewer industrial wastes from one or more industrial users, whether pretreated or not, if necessary or helpful in determining the effects of such wastes upon the public sewer or Kennebec Sanitary Treatment District facilities.

# ARTICLE IV. USE OF THE PUBLIC SEWERS

- SECTION 1. No person shall discharge or cause to be discharged any stormwater, surface water, ground water, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer.
- SECTION 2. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the Selectmen. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Selectmen, to a storm sewer, combined sewer, or natural outlet.
- SECTION 3. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:
- A. Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid, or gas.
- B. Any waters or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant.
- C. Any waters or wastes having a pH lower than (5.5), or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works.
- D. Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the sewage works such as, but not limited to, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole blood, paunch manure, hair and fleshings, entrails and paper dishes, cups, milk containers, etc., either whole or ground by garbage grinders.
- E. Heat in amounts which will interfere with the public sewer or Kennebec Sanitary Treatment District facilities, but in no case in such quantities that temperature exceeds 104°F (40°C). (Amended March 10, 1984)
- SECTION 4. No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if it appears likely in the opinion of the Selectmen that such wastes can harm either the sewers, sewage treatment process, or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property, or constitute a nuisance. In forming their opinion as to the acceptability of these wastes, the Selectmen will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction of the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treatability of wastes in the sewage treatment plant, and other pertinent factors.

The substances prohibited are:

- A. Any liquid or vapor having a temperature higher than 150°F (65°C).
- B. Any water or waste containing fats, wax, grease, or oils, whether emulsified or not, in excess of 100 mg/1 or containing substances which may solidify or become viscous at temperatures between 32° and 150° (0° and 65°C).

- C. Any garbage that has not been properly shredded. The installation and operation of any garbage grinder equipped with a motor of 3/4 horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Selectmen.
- D. Any waters or wastes containing strong acid, iron pickling wastes, or concentrated plating solutions whether neutralized or not.
- E. Any waters or wastes containing iron, chromium, copper, zinc, and similar objectionable or toxic substances; or wastes exerting an excessive chlorine requirement, to such degree that such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Selectmen for such materials.
- F. Any waters or wastes containing phenols or other taste or odor producing substances, in such concentrations exceeding limits which may be established by the Selectmen as necessary, after treatment of the composite sewage to meet the requirements of the State, Federal, or other public agencies or jurisdiction for such discharge to the receiving waters.
- G. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Selectmen in compliance with applicable State or Federal regulations.
- H. Any waters or wastes having a pH in excess of 9.5.
- I. Materials which exert or cause:
  - Unusual concentrations of inert suspended solids (such as, but not limited to: Fullers earth, lime slurries, and lime residues); or of dissolved solids (such as, but not limited to: sodium chloride and sodium sulfate).
  - 2. Excessive discoloration (such as, but not limited to: dye wastes and vegetable tanning solutions).
  - 3. Unusual BOD, biochemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works.
  - 4. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.
- J. Waters or wastes containing substances which are not amenable to treatment or reduction by the sewage treatment processes employed, or are amenable to treatment only to such degree that the sewage treatment plant effluent cannot meet the requirements of other agencies having jurisdiction over discharge to the receiving waters.

SECTION 5. If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or possess the characteristics enumerated in Section 4 of this Article, and which in the judgement of the Selectmen, may have a deleterious effect upon the sewage works, processes, equipment, or receiving waters or which otherwise create a hazard to life or constitute a public nuisance, the Selectmen may:

- A. Reject the wastes;
- B. Require pretreatment to an acceptable condition for discharge to the public sewers:
- C. Require control over the quantities and rates of discharge; and/or,

D. Require payment to cover the added cost of handling and treating the wastes not covered by existing taxes or sewer charges under the provision of Section 10 of this Article.

If the Selectmen permit the pretreatment or equalization of waste flows, the design and installation of the plants and equipment shall be subject to the review and approval of the Selectmen and subject to the requirements of all applicable codes, ordinances, and laws.

SECTION 6. Grease, oil, and sand interceptors shall be provided when, in the opinion of the Selectmen, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand, or other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Selectmen and shall be located as to be readily and easily accessible for cleaning and inspection.

<u>SECTION 7.</u> Where preliminary treatment or flow-equalizing 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 8. When required by the Selectmen, the owner of any property serviced by a building sewer carrying industrial wastes shall install a suitable control manhole together with such necessary meters and other appurtenances in the building sewer to facilitate observation, sampling, and measurement of the wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the Selectmen. The manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

SECTION 9. All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in this Ordinance shall be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association, and shall be determined at the control manhole provided, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the building sewer is connected. Sampling shall be carried out by customarily accepted methods to reflect the effect of constituents upon the sewage works and to determine the existence of hazards to life, limb, and property. (The particular analyses involved will determine whether a twenty-four (24) hour composite of all outfalls of a premise is appropriate or whether a grab sample or samples should be taken. Normally, but not always, BOD and suspended solids analyses are obtained from twenty-four (24) hour composites of all outfalls whereas pH's are determined from periodic grab samples.)

SECTION 10. No statement contained in this Article shall be construed as preventing any special agreement or arrangement between the Town and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the Town for treatment, subject to payment therefor, by the industrial concern.

## ARTICLE V. AMENDED MARCH 12, 1977

#### GENERAL:

<u>SECTION 1.</u> These rules and regulations are minimum general and specific requirements. They are intended to apply to the usual and not necessarily to the exceptional conditions. The Selectmen reserve the right to specify more or less stringent requirements in any case as their judgement may be in the public interest.

SECTION 2. The "Public Sewer" is a "sanitary sewer" which means no storm, surface, or ground waters are intended to flow in the sewer. One purpose of these rules and regulations is to ensure that any extensions or connections to the "Public Sewer" shall not contribute storm, surface or ground waters to the "Public Sewer". Any "Private Sewer" that is connected to or intended to connect to the "Public Sewer" shall meet all the requirements of these rules and regulations before any connection is made. It is also the purpose of this Ordinance to insure that adequate design and construction criteria are maintained in any extensions or connections. Proper operation and maintenance of any extensions as well as the existing system are vital to the spirit of this Ordinance.

SECTION 3. Any new "Sewer" proposal shall be submitted to the Selectmen for review and approval. Such proposals shall include detailed plans and specifications covering all materials to be used and all methods of construction. These plans and specifications shall bear the stamp or seal of a Professional Engineer registered in the State of Maine. No construction shall begin until the proposal is approved by the Selectmen. Any proposal that is rejected by the Selectmen shall be returned with a written notice of rejection noting the reasons for rejection. The Selectmen may employ outside technical assistance to evaluate the proposal. Review and approval of plans and specifications by the Selectmen, while based on the use of reliable information, does not constitute a guarantee thereof and no liability is incurred by the Town of Benton by virtue of its approval of said plans and specifications. The person preparing the plans and specifications is not relieved from any liability or responsibility for faulty, inadequate or insufficient design.

<u>SECTION 4.</u> Any sewer that is constructed shall be inspected and tested under the supervision of a Professional Engineer registered in the State of Maine. A signed and sealed statement by the Professional Engineer shall be delivered to the Selectmen upon completion of the sewer construction. This statement shall indicate that the sewer was constructed substantially as shown and specified by the plans and specifications. Results of all testing shall be included in the statement.

<u>SECTION 5.</u> Two (2) copies of "Record Drawings" (as built drawings) shall be supplied to the Selectmen upon completion of the sewer construction prior to acceptance of the sewer. These record drawings shall indicate the actual construction including any revisions or changes that were made during construction. "Ties" to all manholes and services shall be clearly recorded on these drawings.

### DESIGN:

#### SECTION 1. SEWERS

- A. All sewers shall be designed with full consideration to allow for and include all potential future needs and sewer extensions of all areas accessible to the proposed sewer by gravity or reasonable pumping.
- B. All sewers shall be constructed of material acceptable to the Selectmen for the purposes and conditions they are intended to serve.

C. Sewers shall be designed with such hydraulic slopes as will give a mean velocity of not less than two (2') feet per second when flowing full, based on Kutter's or Manning's formula with "n" = 0.013. The fall in feet per 100 feet of sewer shall be not less than the following:

Pipe <u>Diameter</u>	Fall in Feet per 100 feet of Sewer
8 n	0.40
10"	0.29
12".	0.29
15"	0.16

- D. When grades less than those specified above are proposed, an explanation for the use of such grades shall be submitted with the plans.
- E. Grades producing velocities in excess of ten (10') feet per second are not recommended.
- F. The minimum size of gravity sewers shall be eight (8") inches.
- G. Curved sewers shall be approved only under special conditions. Manhole spacing for curved sewers shall not exceed two hundred (200') feet.
- H. Sewers installed where unusual strength is indicated (such as stream crossings and steep embankments) shall be of steel, cast iron, or other suitable material and shall be properly protected.
- I. Wherever possible, sewers shall be installed to comply with the Department of Human Service's recommendations with regard to water main locations.
- J. All sewer mains shall be tested for leakage by standard test methods that measure either infiltration or exfiltration. Infiltration tests may be used in areas where the groundwater table exerts a hydraulic head of at least four (4') feet over the sewer pipe. Areas without sufficient groundwater to provide the required head shall be tested by exfiltration of either water or air. If water is used, the sewer pipe shall be appropriately plugged and filled with water to provide a minimum of six (6') feet of hydraulic head. This applied head shall be at least six (6') feet above any ground water head (i.e., if the groundwater is one (1') foot above the top of the sewer pipe, seven (7') feet of test head shall be applied to the pipe). If air is used to measure exfiltration, the sewer shall be appropriately plugged and a minimum of 4 psi air pressure applied to the pipe. Again, the minimum pressure indicates pressure applied in excess of any ground water over the pipe (i.e., if the ground water is 2.3 feet above the top of the sewer, a test pressure of 5 psi shall be applied).

The maximum allowable infiltration or exfiltration rate as tested with water shall be two hundred (200) gallons per day per inch of pipe diameter per mile of pipe (except clay tile pipe shall not exceed 300 gal/day/inch dia/mile). The maximum exfiltration rate as tested with air shall be 1 psi drop during the time period listed below for various size pipes.

## PIPE DIAMETER

Inches	Minutes
4	2.0
6	3.0
8	4.0
10	5 - 0
12	5.5
15	7.5

Any joint or any pipe that shows an appreciable amount of leakage or is defective shall be cause for non-acceptance of the sewer regardless of any test results.

#### SECTION 2. MANHOLES

- A. Manholes shall be provided at the ends of each sewer line and at intersections and at all changes in grade, size or alignment.
- B. Distances between manholes shall not exceed three hundred (300') feet unless specifically authorized by the Selectmen.
- C. A drop pipe shall be provided for sewers entering manholes above the manhole invert wherever the difference in elevation is two (2') feet or more.
- D. A drop in invert of at lest 0.1 feet shall be provided between all manhole inlets and outlets.
- E. Manholes shall be a minimum of four (4') feet in diameter.
- F. The manhole shall be constructed of high quality reinforced concrete, sound, durable, and water tight. Manholes shall be provided with a properly constructed invert of high quality concrete or water struck sewer brick Grade AS, as specified by the American Society of Testing Materials.
- G. Manholes shall be provided with a frame and cover having a minimum clear opening of twenty-two (22") inches and a minimum weight of 450 pounds. The cover shall have the letter "S" or the word "SEWER" cast across the top face.
- H. Manholes shall be provided with rungs of 5/8 inch minimum diameter 304 stainless steel or of polypropylene plastic coated steel or equal.
- J. Manholes shall be designed for H-20 loadings.

#### SECTION 3. FORCE MAINS

- A. Force mains shall be of cast iron or other acceptable material.
- B. Force main velocities shall not be less than two (2') feet per second at normal pumping rates.
- C. Properly designed air release valves shall be provided on the high points of the force mains.
- D. Blow-offs, properly valved, shall be located on all low points of force mains. Adequate space shall be available at all such locations for handling the displaced waste.

#### SECTION 4. PUMP OR EJECTOR STATIONS

- A. All pumping stations or ejectors shall be specifically designed and use equipment and materials specifically built and intended to be used for the purposes proposed.
- B. Automatic sound and visual alarms, operating independently of the station power, shall be installed to give warning of high water, power failure, or breakdown.
- C. Pumping stations shall not be subject to flooding and must be accessible by motor vehicles.
- D. Adequate light and ventilation shall be provided at all pumping stations. Where operational or maintenance duties are required in enclosed areas or pits, forced ventilation by suitable means shall be provided with sufficient capacity to induce at least six (6) air changes per hour when designed to operate continuously or thirty (30) changes per hour when designed to operate intermittently. With intermittent operation, the timer shall be shunted by the interior light switch. Explosion-proof equipment shall be utilized.
- E. Adequate fresh-water facilities shall be provided to permit routine washdown and cleaning operations at all pumping stations.
- F. Pumping station capacity should be compatible with the ultimate capacity of the influent sewer. At least two (2) pumps, each designed to handle peak flows for ten (10) years hence, shall be provided. If more than two (2) pumps are provided, their capacities shall be such that, upon failure of the largest pump, the others will handle the peak flows. When ejectors are provided as the method of raising sewage, two (2) compressor units are required. They shall be so interconnected that the duplicate unit will commence operation in the event of failure of the one in use.
- G. In general, pumps and pneumatic ejectors shall be capable of passing twenty-five (25") inch solids.
- H. A means of flow measurement is required. Shut-off valves shall be provided on suction and discharge piping, which shall be flanged or otherwise removable, and check valves shall be provided on discharges.
- Special repair tools and accessories required for maintenance shall be provided.
- J. Dry and wet wells shall be provided with adequate ventilation and drainage. Means of entrance and exit shall be provided. In wet wells, ladders may be used.
- K. Dry wells shall provide sufficient space for accessibility for the repair and removal of pumps. Provision shall be made for the removal, if necessary, of pumps and motors.
- L. The floors of wet wells shall slope at least forty-five (45°) degrees toward pump suctions to prevent solids accumulation.
- M. The floors of dry wells shall slope at least % inch per foot toward a drain, and shall be made slop proof.
- N. Dry wells shall be provided with a sump pump.
- O. Package-type stations may be constructed of properly protected steel or reinforced concrete.
- P. Ejector stations shall be provided with outside compressor connections.

## ARTICLE VI. PRIVATE SEWAGE DISPOSAL

(Amended March 8, 1975)

- SECTION 1. Where a public sanitary or combined sewer is not available under the provisions of Article II, Section 4, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this Article.
- SECTION 2. Before commencement of construction of a private sewage disposal system, the owner shall first obtain a written permit signed by the <u>Code Enforcement Officer</u> or his representative. The application for such a permit shall be made on a form furnished by the Town, which the applicant shall supplement by any plans, specifications, and other information deemed necessary by the <u>Code Enforcement Officer</u> or his representative. A permit and inspection fee shall be paid to the Town at the time the application is filed. (Amended to CEO on March 12, 1983.)
- <u>SECTION 3.</u> A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the Selectmen or their representative. They shall be allowed to inspect the work at any stage of construction and, in any event, the applicant for the permit shall notify the Selectmen or representative when the work is ready for final inspection and before any underground portions are covered. The owner or contractor must give the selectmen or their representative at least 24 hour notice when ready for inspection.
- <u>SECTION 4.</u> The type, capacity, location, and layout of a private sewage disposal system shall comply with all recommendations of the Department of Human Services of the State of Maine. NO septic tank or cesspool shall be permitted to discharge to any natural outlet.
- SECTION 5. Contents of septic tanks shall not be discharged into the public sewers, unless written permission is obtained prior thereto from the Selectmen or representative.
- <u>SECTION 6.</u> The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the Town.
- SECTION 7. No statement contained in this Article shall be construed to interfere with any additional requirements that may be imposed by the Health Officer or the State Plumbing Code or the Department of Human Services.
- SECTION 8. When a public sewer becomes available, the building sewer shall be connected to said sewer within sixty (60) days and the private sewage disposal system shall be cleaned of sludge and filled with gravel or dirt. The time limit for a connection may be extended for valid and extenuating circumstances at the discretion of the Selectmen or their representative.

## ARTICLE VII. PROTECTION FROM DAMAGE

<u>SECTION 1.</u> No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which is a part of the sewage works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

# ARTICLE VIII. POWERS AND AUTHORITY OF INSPECTORS

SECTION 1. The Selectmen and other duly authorized employees of the Town bearing proper credentials and identification shall be permitted to enter all properties for the purposes of inspection, observation, measurement, sampling, and testing in accordance with the provisions of this Ordinance. The Selectmen or their representatives shall have no authority to inquire into any processes including metallurgical, chemical, oil, refining, ceramic, paper, or other industries beyond that point having a direct bearing on the kind and source of discharge to the sewers or waterways or facilities for wastes treatment.

SECTION 2. While performing the necessary work on private properties referred to in Article VIII, Section 1 above, the Selectmen or duly authorized employees of the Town shall observe all safety rules applicable to the premises established by the company and the company shall be held harmless for injury or death to the Town employees and the Town shall indemnify the company against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions as required in Article IV, Section 8.

SECTION 3. The Selectmen and other duly authorized employees of the Town bearing proper credentials and identification shall be permitted to enter all private properties through which the Town holds a duly negotiated easement for the purposes of, but not limited to, inspection, observation, measurement, sampling, repair, and maintenance of any portion of the sewage works lying within said easement, such inspection shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

## ARTICLE IX. PENALTIES

SECTION 1. Any person found to be violating any provision of this Ordinance, except Article VII, shall be served by the Town with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

SECTION 2. Any person who shall continue any violation beyond the time limit provided for in Article IX, Section 1, shall be guilty of a misdemeanor, and on conviction thereof shall be fined in the amount not less than \$100 for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

SECTION 3. Any person violating any of the provisions of this Ordinance shall become liable to the Town for any expense, loss, or damage occasioned the Town by reason of such violation.

SECTION 4. The Selectmen may seek injunctive relief against any person violating this Ordinance.

### ARTICLE X. AMENDMENT AND VALIDITY AND SEVERABILITY

SECTION 1. This Ordinance may be amended by a majority vote of the legally constituted municipal governing body. A certified copy of all amendments to this Ordinance shall be filed at the office of the Town Clerk. Amendments may be initiated by the municipal officers, a majority vote of the Planning Board, or written petition by a number of voters equal to at least ten (10%) percent of the number of votes cast in the municipality in the last gubernatorial election.

 $\underline{\mathtt{SECTION}\ 2}_{\star}$  All Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

<u>SECTION 3.</u> The invalidity of any section, clause, sentence, or provision of this Ordinance shall not affect the validity of any other part of this Ordinance which can be effective without such invalid part or parts.

### ARTICLE XI. ORDINANCE IN FORCE

<u>SECTION 1.</u> This Ordinance shall be in full force and effect from and after its passage, approval, recording, and publication as provided by law.

<u>SECTION 2.</u> Passed and adopted by the Inhabitants of the Town of Benton, State of Maine, on the 28th day of January, 1974.