# Sewer Use Ordinance

### Town of Bennington, Vermont

Article 20.

Prepared by:

July, 6, 1985

#### Sewer Use Ordinance Rules and Regulations Town of Bennington, Vermont

#### **Table of Contents**

		<u>Page</u>
Article 20-1	Enabling Authority	1
Article 20-2	Definitions	1
Article 20-3	Abbreviations	4
Article 20-4	Mandatory Use of Public Sewers	5
Article 20-5	Building Sewers and Connections	5
Article 20-6	Use of Public Sewers	8
Article 20-7	Protection from Damage	14
Article 20-8	Powers and Authority of Inspectors	14
Article 20-9	Penalties	15
Article 20-10	Rates	16
Article 20-11	Validity	22
Article 20-12	Ordinance in Force	22
Residential or Comr	mercial Building Sewer Application	
Industrial Sewer Co	nnection Application	•••••
Private Waste Dispo	osal Application	•••••

#### Sewer Use Ordinance Rules and Regulations Town of Bennington, Vermont

#### **Article 20-1 Enabling Authority**

- 20-1.01 AN ORDINANCE REGULATING THE USE OF PUBLIC AND PRIVATE SEWERS AND DRAINS, THE INSTALLATION AND CONNECTION OF BUILDING SEWERS, AND THE DISCHARGE OF WATER AND WASTES INTO THE PUBLIC SEWER SYSTEM(S): AND PROVIDING PENALTIES FOR VIOLATIONS THEREOF: IN THE TOWN OF BENNINGTON COUNTY OF BENNINGTON, STATE OF VERMONT.
- 20-1.02 Be it ordained and enacted by the Board of Selectmen of the Town of Bennington, State of Vermont as follows:

#### Article 20-2 Definitions

- 20-2.01 Unless the context specifically indicates otherwise, the meaning of terms used in this ordinance shall be as follows:
  - a. "Board of Sewage Disposal Commissioners" shall mean the Board of Selectmen of the Town of Bennington or its authorized representative(s). This shall mean the "Commissioners" referenced herein.
  - b. "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(5) days of 20°C, expressed in milligrams per liter.
  - c. "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.
  - d. "Building Sewer" shall mean that part of the Sewerage System which receives the sewage from the house plumbing system and conveys it to the main sewer or to the nearest "Y" branch on the main sewer. The main sewer is the publicly owned

sewer.

- e. "Combined Sewer" shall mean a sewer receiving both surface runoff and sewage.
- f. "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.
- g. "Industrial Wastes" shall mean the liquid wastes from industrial manufacturing processes, trade or business as distinct from sanitary sewage.
- h. "Natural Outlet" shall mean any outlet into a watercourse, pond, ditch, lake, or other body of surface or groundwater.
- i. "Person" shall mean any individual, firm, company, association, society, corporation, or group.
- j. "pH" shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.
- k. "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 (1/2) inch (1.27 centimeters) in any dimension.
- I. "Public Sewer" shall mean a sewer in which all owners of abutting properties have equal rights, and is controlled by public authority.
- m. "Sanitary Sewer" shall mean a sewer which carries sewage and to which storm, surface, and ground waters are not intentionally admitted.
- n. "Sewage" shall mean a combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments, together with such ground, surface, and storm waters as may be present.
- o. "Sewage Treatment Plant" shall mean any arrangement of devices and structures used for treating sewage.
- p. "Sewage Works" shall mean all facilities for collecting,

- pumping, treating, and disposing of sewage.
- q. "Sewer" shall mean a pipe or conduit for carrying sewage.
- r. "Shall" is mandatory; "May" is permissive.
- s. "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 (15) minutes, more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.
- t. "Storm Drain" (sometimes termed "Storm Sewer") shall mean a sewer which carries storm and surface waters and drainage, but excludes sewage and industrial wastes, other than unpolluted cooling water.
- 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.
- v. "Watercourse" shall mean a channel in which a flow of water occurs, either continuously or intermittently.
- w. "Secretary" shall mean the Secretary of the Agency of Environmental Conservation, State of Vermont or his representatives.

#### Article 20-2 Definitions

- 20-3.01 For the purpose of this ORDINANCE, the following abbreviations shall have the meaning ascribed to them under this ARTICLE. References to standards of the following organizations shall refer to the latest edition of same.
  - a. ANSI shall mean American National Standards Institute
  - b. ASME shall mean American Society of Mechanical Engineers
  - c. <u>ASTM</u> shall mean American Society for Testing and Materials
  - d. AWWA shall mean American Water Works Association
  - e. NPC shall mean National Plumbing code
  - f. <u>CS</u> shall mean Commercial Standards
  - g. WPCF shall mean Water Pollution Control Federation

- h. <u>ppm</u> shall mean parts per million
- i. mg/l shall mean milligrams per liter
- j. <u>Degrees F</u> shall mean degrees Fahrenheit
- k. <u>Degrees C</u> shall mean degrees Centigrade
- l. cm. shall mean centimeter
- m. <u>m.</u> shall mean meter
- n. <u>sq.m.</u> shall mean square meters
- o. I. shall mean liters
- p. Kg. shall mean kilograms

#### Article 20-4 Mandatory Use of Public Sewers

- 20-4.01 It shall be unlawful for any person to place, deposit, or permit to be placed or deposited, upon public or private property within the Town of Bennington or in any area under the jurisdiction of said town, any human excrement, garbage or other objectionable waste, excepting the stockpiling of composting waste material normally used for garden purposes.
- Is shall be unlawful to discharge to any natural outlet within the Town of Bennington, or in any area under the jurisdiction of said Town, any sewage or other polluted waters, except where suitable treatment has been provided in accordance with subsequent provisions of this ORDINANCE and the laws of the State of Vermont.
- 20-4.03 Except as hereinafter provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or used for the disposal of sewage.
- The owner of all houses, buildings, or properties used for human occupancy, employment, recreation, or other purposes, situated with in the Town of Bennington and abutting on any street, alley or right of way in which there is now located or may in the future be located a public sanitary or combined sewer of the Town, is hereby required at his expense to install suitable toilet facilities therein and to connect such facilities directly with the proper public sewer in accordance with the provisions of this ORDINANCE, within ninety (90) days after date of official notice to do so, provided that said sewer is within one hundred (100) feet (30.5 meters) of the structure to be served, unless undue hardship would result, in which case the property owner should request in writing a deferral of this requirement.

#### Article 20-5 Building Sewers and Connections

- 20-5.01 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 Commissioners. 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 Commissioners at least forty-five (45) days prior to the proposed change or connection.
- 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 of Bennington. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the Commissioners. A permit and inspection fee of ten (10) dollars for a residential building sewer permit and twenty-five (25) dollars for a commercial or industrial building sewer permit shall be paid to the Town at the time the application is filed. This fee shall be reduced to five (5) and fifteen (15) dollars respectively in such cases where an adequate building sewer already exists from the trunk of collector sewer main to the property line.
- All costs and expense incident to the installation and connection of the building sewer shall be borne by the owner. The owner shall indemnify the Town of Bennington from any loss or damage that my directly or indirectly be occasioned by the installation of the building sewer.
- A separate and independent building sewer shall be provided for every building; except where one building stands at the rear of another or 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.
- 20-5.05 Old building sewers may be used in connection with new buildings only when they are found, on examination and test by the Commissioners, to meet all requirements of this ordinance.
- 20-5.06 The size, slope, alignment, materials of construction of a building sewer, and the methods to be used in excavating, placing 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 of Bennington. In the absence of code provision or in amplification thereof the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 shall apply.

- 20-5.07 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 sanitary sewer.
- 20-5.08 No person shall make connection of roof down spouts, exterior foundations drains, areaway drains, cellar drains, basement sumps, or other sources of surface runoff or groundwater to a building sewer or building drain which in turn in connected directly or indirectly to a public sanitary sewer.
- 20-5.09 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 ASTM and the WPCF Manual of Practice No 9. All such connections shall be made gas tight and watertight. Any deviation from the prescribed procedures and materials must be approved by the Commissioners before installation.
- Prior to any connection to the house connection "Y" or to the main sewer, the Commissioners shall be given forty-eight (48) hours notice in order that they may supervise such work. If the Commissioners have not been properly notified, they may require the completed work to be uncovered for examination, at the owner's own expense.
- Clean -outs shall be installed where the distance from the building to the main sewer is greater than one hundred (100) feet or where bends greater than forty-five (45) degrees are used in the building sere. Clean-outs shall be made by installing a "Y" and one-eighth (1/8) bends of the same diameter as the building sewer. The clean-outs shall ordinarily be installed at the point of connection between the building sewer and the outside part of the house plumbing system, at curves on the building sewer and on the straight part of the house sewer to the main sewer. The clean-out shall be brought up from the building sewer to four (4) inches (10.2 cm.) below ground level and be properly capped. Locations of all clean-outs shall be recorded and turned over to the Commissioners.

- 20-5.12 Before any portion of the existing plumbing system outside of the building is connected to the building sewer, the owner shall prove to the satisfaction of the Commissioners, that it is clean and conforms in every respect to this ORDINANCE and that all joints are watertight.
- 20-5.13 Where pipe is installed for building sewers, such work shall be performed by a plumber approved by the Commissioners.
- The Commissioners shall apply appropriate tests to the pipes and the plumber and contractor, at their own expense, shall furnish all necessary tools, labor, materials, and assistance for such tests and shall remove or repair any defective materials when so ordered by the Commissioners.
- 20-5.12 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 manner satisfactory to the Town of Bennington.
- 20-5.16 The contractor shall not block any driveway, street, road or railroad at any time without permission of the Commissioners and other controlling agencies. Every effort shall be made to permit the movement or interfere with roads, walks, or drives, whether public or private, the contractor shall maintain, at his own expense, and subject to the approval of the Commissioners, safe bridges or other means of egress.

#### Article 20-6 Use of the Public Sewers

- 20-6.01 No person shall discharge or cause to be discharged any storm water, surface water, groundwater, roof runoff, subsurface drainage, uncontaminated cooling water, or unpolluted industrial process waters to any sanitary sewer.
- 20-6.02 Storm water 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 Superintendent. Industrial cooling water or unpolluted process waters may be discharged, on approval of the Commissioners, to a storm sewer, combined sewer, or natural outlet.
- 20-6.03 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 interface 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 5.0 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 operations 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.
- 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 Commissioners 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 his opinion as to the acceptability of these wastes, the Commissioners will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in the sewers, materials of construction in the sewers, nature of the sewage treatment process, capacity of the sewage treatment plant, degree of treat ability 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 one hundred fifty (150) degrees F (65 degrees C).
  - b. Any water or waste containing fats, wax, grease, or oils, whether emulsified or not, in excess of one hundred (100) mg/l or containing substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty (150) degrees F (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 three-fourths (3/4) horsepower (0.76 hp metric) or greater shall be subject to the review and approval of the Commissioners.

- d. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.
- e. Any water or wastes containing iron, chromium, copper, zinc, and similar objectionable or toxic substance, or wastes exerting an excessive chlorine requirement, to such degree that any such material received in the composite sewage at the sewage treatment works exceeds the limits established by the Commissioners for such materials. Limits are defined in Appendix A.
- f. Any water or wastes containing phenols or other waste or odor producing substances, in such concentrations exceeding limits which may be established by the Commissioners as necessary, after treatment of the composite sewage to meet the requirements of the State, Federal or other public agencies having jurisdiction for such discharge to the receiving waters. Limits are defined in Appendix A.
- g. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Commissioners in compliance with applicable State and Federal regulations. Limits are defined in Appendix A.
- h. Any waters or wastes having pH in excess of 9.5.
- i. Materials which exert or cause:
  - (1) 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, chemical oxygen demand, or chlorine requirements in such quantities as to constitute a significant load on the sewage treatment works and as

may cause the effluent limitations of the discharge permit to be exceeded.

- (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 amendable 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.
- 20-6.05 If any waters or wastes are discharged, or are proposed to be discharged to the public sewers, which waters contain the substances or posses the characteristics enumerated in Section 4 of this Article, and which in the judgement of the Commissioners 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 Commissioners 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.

If the Commissioners 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 Commissioners and Health Officer, and subject to the requirements of all applicable codes, ordinances and laws and to the municipal discharge permit. Further, such pretreatment installations must be consistent with the requirements of any state pretreatment permit issued to the industry.

- Grease, oil, hair, and sand interceptors shall be provided when, in the opinion of the Commissioners, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand and 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 Commissioners and shall be located as to the readily and easily accessible for cleaning and inspection.
- 20-6.07 Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be substantial construction, watertight and equipped with easily removable covers which, when bolted in place,

shall be gas tight and watertight.

- Where installed, all grease, oil, hair, and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times. Materials collected shall not be reintroduced into the public sewerage system.
- 20-6.09 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.
- a)When required by the Commissioners, 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 Commissioners. The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible to all times.

b)All industries discharging into a public sewer shall perform such monitoring of their discharges as the Commissioners may reasonably require including installation, use and maintenance of monitoring equipment, keeping records and reporting the results of such monitoring to the Commissioners. Such records shall be made available upon request by the Commissioners to other agencies having jurisdiction over discharging to the receiving waters. Where industrial pretreatment permits are issued by the State of Vermont, monitoring records must also be submitted to the Secretary in accord with such permit. Records of any monitoring will be supplied by the Commissioners to the Secretary on request.

All measurements, test, and analysis of the characteristics of waters and wastes to which reference is made in this ORDINANCE shall be determined in accord 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 analysis involved will determine whether a twenty-four (24) hour composite of all out falls of a premise is appropriate or whether a grab sample or samples should be taken.) Normally, but not always, BOD and suspended solids analysis are obtained from 24-hour composites of all out falls where as pH's are determined from periodic grab samples.

- 20-6.12 That any industry held in violation of the provision of this ORDINANCE may have its disposal authorization terminated.
- 20-6.13 No statement contained in this Article shall be construed as preventing any special agreement or arrangement between the Town of Bennington and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the Town for treatment, subject to payment, therefore, by the industrial concern. Provided that such agreements do not contravene any requirements of existing Federal lays and are compatible with any user charge and industrial cost recovery system in effect.

#### Article 20-7 Protection from Damage

20-7.01 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 Public Sewerage Disposal System. Any person violating this provision shall be subject to immediate arrest under the charge of unlawful mischief as set forth in Title 13, Section 3701 of the Vermont Statutes Annotated.

#### Article 20-8 Powers and Authority of Inspectors

- The Commissioners and other duly authorized employees of the Town of Bennington 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 provision of this ORDINANCE. The Commissioners or their representative 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.
- While performing the necessary work on private properties referred to in Article 20-8.01 above, the Commissioners or duly authorized employees of the Town of Bennington 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 loss or damage to its property by Town employees and against liability claims and demands for personal injury or property damage asserted against the company and growing out of the gauging and sampling operation, except as such may be caused by negligence or failure of the company to maintain safe conditions.

The Commissioners and other duly authorized employees of the Town of Bennington 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. All entry and subsequent work, if any, on said easement, shall be done in full accordance with the terms of the duly negotiated easement pertaining to the private property involved.

#### Article 20-9 Penalties

- 20-9.01 Any person found to be violating any provision of this ORDINANCE except Article 20-7, shall be served by the Town of Bennington with written notice stating the nature of the violation and providing not more than seven (7) days to correct the violation or cease operation, except that additional time may be granted by the Town at its discretion.
- Any person who shall continue any violation beyond the time limit provided for in Article 20-9.01 shall be guilty of a misdemeanor and on conviction thereof shall be fined not less than one hundred (100) dollars nor more than twenty-five hundred (2500) dollars for each violation. Each day in which such violation continues shall constitute a separate offense.
- 20-9.03 Any person violating any of the provisions of this ORDINANCE shall become liable to the Town of Bennington for any expense loss, or damage occasioned the Town by reason of such offense.
- 20-9.04 Not withstanding any of the foregoing provisions, the Town of Bennington may institute any appropriate action including injunction or other proceeding to prevent, restrain or abate violations hereof.

#### Article 20-10 Rates

20-10.01 The Board of Selectmen shall establish the user charge system in accordance with appropriate Federal and State rules and regulations, to be called sewage disposal charges, to be paid at such times and

in such manner as the Selectmen may prescribe. The owner of any tenement, house, building, or lot shall be liable for the sewage disposal charge as hereinafter defined. Such sewage disposal charge shall constitute a lien upon such real estate in the same manner and to the same effect as taxes constitute a lien upon real estate. The user charge system shall supersede any previous agreements or contracts between the Town and any contributors to the sewer system.

The Board of Selectmen shall, in establishing the rates referred to in Article 20-10.01 above, make specific reference to the sewer use rate structure in force at the time of any connection. The sewer use rate structure shall incorporate the requirements of 40 CFR § 35.2140 and Chapter 101 of Title 24, Vermont Statutes Annotated.

#### 20-10.03 Rate Structure

- a. The purpose of the charge system as herein defined is to allow the Town, acting through its Board of Selectmen, to receive sufficient revenues to pay all expenses associated with construction, operation and maintenance of the municipal wastewater system.
- b. The system is established to provide a fair and equitable means of charging all users based on the nature and volume of wastewater discharged to the system. The operation and maintenance costs will be paid by the users of the treatment facility. The retirement of the debt will be paid by all property owners in the Town of Bennington as an additional rate on the grand list.
- c. The factors applied to the various classes of users are based on actual metered data, when available. In the absence of metered data, estimates are based on U.S. Public Health data or other suitable engineering references which are generally accepted for this purpose.
- d. The single family residential unit (with an assigned value of 1.0) serves as a base for determining equivalent charge units for other user classes.

#### 20-10.04 Definition of User Classes

The various classes of users shall be broadly defined as follows:

a. Unmetered Connections: includes all users which have no

reliable and continuous means of measuring either the water supply to the building plumbing or the wastewater flow from the building plumbing.

- 1) Residential: includes each building (or portion thereof) which houses an individual family unit, such as houses, apartments, mobile homes.
- Commercial: includes each building (or portion thereof) in which business activity occurs, such as stores, offices, food or lodging establishments, shops, private clubs.
- 3) Institutional: includes each building (or portion thereof) in which public, government, or non-profit activities are conducted, such as schools, public libraries, armories, churches.
- b. Industrial Connections: includes any building (or portion thereof) in which manufacturing, processing, or other activities occur which results in a discharge to the public sewer, part or all of which is different from sewage characteristically found in "normal" domestic sewage. Consideration must be given to the strength and rate (both average and peak) factors of the discharge. Further definition shall be as provided in the Sewer Use Ordinance
- c. Other Metered Connections: includes any building (or portion thereof) which has a suitable device for accurate and continuous metering of the water supply or wastewater discharge from said building. Such building can be of the type defined previously except for those classified as "Industrial Connections."

#### **20-10.05** Method of Determining User Charges

- a. The user charge system as herein described shall be reviewed annually by the Board of Selectmen to ensure that the revenue meets the costs of the system. Adjustments, additions, omissions or other changes shall be made to any portion of the schedule to ensure that charges remain equitable.
- b. Following is the procedure to be followed in establishing specific user charges:
  - 1) Review the User Charge Schedule to ensure that the number and type of users are correct and that the

estimated flow rate for each connection is reasonable.

- 2) Determine the total number of equivalent users for all unmetered and non-industrial metered connections. An equivalent user is defines as the ratio of estimated flow from a particular connection to the estimated flow from a "Residential-Regular" connection. Obtain equivalent users for unmetered connections from Article 20-10.05.
- 3) Determine the total revenue required to meet all expenses of the system. Include operating and maintenance costs. Do not include debt retirement of capital costs.
- 4) Subtract any revenues received from surplus from the preceding year. Surpluses which are identifiable with a particular user or class of user shall be credited to them prior to crediting the surplus to all the users in general.
- 5) Subtract revenue from industrial users. The user charge for industrial users is calculated from Table 4 Annual Industrial Charge Determination.
- 6) Divide the balance (of required revenue) by the number of equivalent users. The result shall be the annual charge to be assessed each equivalent user. Those connections which are more than one equivalent user, Article 20-10.05 User Charge Schedule, shall be assessed at the equivalent user rate times the number of equivalent users.
- c. An assessment on the grand list shall be used to pay for debt retirement for this project. The annual bond payment should be included in the amount to be raised by general taxes and should be billed and paid as part of the general taxes.

#### 20-10.05 User Charge Schedule

- a. Metered Connections: All connections which have meters or subsequently install (water or sewage) meters and are not charged under the requirements of "Industrial Connections" specified below shall be charged as follows:
  - Determine the average daily flow rate for the preceding period. If wastewater flows discharged to the public sewer are not metered, rates shall be based directly on

water meter readings.

- 2) Divide that rate by the value established as the average daily flow for the user class "Residential-Regular," which has an equivalent value of 1.0. The resulting value, rounded to the nearest whole unit, shall be the number of equivalent users for each metered connection.
- 3) Multiply the number of equivalent users by the prevailing rate for an equivalent user.
- b. Industrial Connections: All industrial users shall be metered. If wastewater flows discharged to the public sewer are not metered, rates shall be based directly on water meter readings.

#### **III Unmetered Connections:**

	Estimated Flow GPD	Equivalent users per Connection	Total Equivalent Users
1. Residential <sup>(1)</sup> a. Regular	325	1	3,741
Commercial     a. Stores, offices and banks <sup>(2)</sup> (15 gpd per employee)	7,500		23
b. Movie Theater (1.5 gpd per seat)	750		2
c. Guest House (50 gpd per room)	550	***	2
d. Beauty parlors (15 gpd per chair)	210	pare)	1
e. Restaurants (35 gpd per sea)	5,775		18
Institutional     a. Churches	4,800	1	15
<ul> <li>b. Library, Rescue Squad, Fire Stations, Juvenile Home</li> </ul>	2,500	1	8
4. Metered Connections (3)	Water Usa (gal per 6 mo		
Paradise Restaurant, Inc. Putnam Memorial Hospital Vermont Veterans Home Others	1,428,350 30,642,900 2,981,300		24 517 50 329
Bennington Convalescent Center 1,3 Ramada Inn	820,250 2,085,950	31	35
		Total Equivalent Users	4,796
5. Industrial Connections	Estimated Flo Gals per Da		
Union Carbide Corporation Globe Battery Division Fairdale Farms, Inc. Bijur Lubrication Corporation BenMont Paper Inc Others  Total:	231,000 34,000 24,000 19,000 24,900 30,000	00	

#### Notes:

- (1) Includes each individual residence, apartment, and mobile home as a single unit (i.e., a building with three apartments is three equivalent users.)
- (2) A particular office would multiply the number of employees by 15 gpd per employee, then divide by 325 gpd to obtain the number of equivalent users (i.e., 40 employees x 15 gpd per employee ÷ 325 per equivalent user = 2 equivalent users).
- (3) Divide the water meter reading by 59,300 (gallons per equivalent user in six months) to obtain the number of equivalent users.
  - IV. <u>Toxic Pollutants:</u> Any user discharging toxic pollutants which cause an increase in the cost of managing the effluent or sludge from the treatment works shall pay for the increased cost.

#### **20-10.06** Billing Frequency

The Board of Selectmen may, at their discretion, revise the billing frequency provided that the total amount of charges assessed shall conform to this schedule.

Unless otherwise approved by the Commissioners, bills will be submitted to all users on a semi-annual basis in the first year and in ensuing years, on an annual basis, except that industrial users will be billed quarterly.

Each user will be notified of the rate and charges for wastewater services in conjunction with their regular bill on an annual basis.

#### Article 20-11 Validity

- **20-11.01** All ordinances or parts of ordinances in conflict herewith are hereby repealed.
- 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 given effect without such invalid part or parts.
- **20-11.03** These rules may be amended at any time by the Board of Selectmen of the Town of Bennington as provided by law.

#### Article 20-12 Ordinance in Force

2	20-12.01	This ORDIN passage, ap	IANCE sh proval, re	all be cord	e in full foi ing and pu	rce a ublica	nd effect f ation as pro	rom and ovided b	d after by law.	its
. 2	0-12.02	Passed and Bennington,	l adopted State	by of	the Board Vermont	of 8 on	Selectmen the	of the	Town day	0
		(Month)			(Year)					
								-40		

## Town of Bennington, Vermont Sewer Use Ordinance

#### Appendix A

The following table list the limiting concentrations of objectionable or toxic wastes which may be discharged to the wastewater collection system. In the event an objectionable or toxic waste not listed is proposed for discharge, the Board of Sewer Commissioners shall determine an allowable value.

<u>Substance</u>	Limiting Concentrations
Chromium (Hexavalent)	.15
Copper	.04
Cyanide	.25
Lead	.04
Magnesium	40.00
Nickel	.20
Sulfate	400.00
Zinc	.08
Phenol	4.00
Cresol	4.00
204 Dinitro Phenol	120.00

# FY2013

# RATE PROPOSAL (12%, 3%) WATER & (11%,11%) SEWER WATER & SEWER RATE CALCULATION

DOLLARS GENERATED	11% Increase 11% Increase 11% Increase	851,544	606,430 230,906	1,688,879	1,687,140	1,739	
FY12 Rates	75.22 67.77 2.62 2.36 16.74 42.11	Per Person Yrlv Increase 00.90 29.82	2.62 0.26 86.97 18.52	] <del>∾</del> [	₩	<del>07</del>	
PROPOSED QUARTERLY RATES	FLAT: PER 1,000 GALLONS METER SURCHARGE	N/A 3	231,497,098				
NUMBER OF	UNITS	2830	1235				
		ANNUALIZED FLAT RATE	UNITS X PER 1,000 GALLONS ANNUAL TOTAL SURCHARGE	TOTAL DOLLARS GENERATED	BUDGETED EXPENDITURES NET OF OTHER REVENUES	SURPLUS OVER BUDGET	
DOLLARS	12% Increase 12% Increase 12% Increase	1,093,546	740,068 266,314	\$ 2,099,929	\$ 2,092,860	\$ 7,069	•
FX12	96.98 86.59 3.58 3.20 58.30 52.05	Per Person Yrly Increase 387.92 41.56	3.58 0.38 233.20 <u>25.00</u>	1 11			
PROPOSED QUARTE RATES	FLAT: PER 1,000 GALLONS: METER SURCHARGE	NIA	206,722,909				
NUMBER	UNITS	2849 8	1142		4144-11-11-11-11-11-11-11-11-11-11-11-11		
	ER PROPOSED QUARTERLY FY12 Rates DOLLARS DOLLARS OF RATES GENERATED OF RATES	PROPOSED QUARTERLY         FY12 Rates         DOLLARS         DOLLARS         NUMBER         PROPOSED QUARTERLY         FY12 Rates           RATES         GENERATED         OF         RATES         FATE         67.77           PER 1,000 GALLONS:         3.58         3.20         12% Increase         2.36           METER SURCHARGE         58.30         72% Increase         46.74         42.11	PROPOSED QUARTERLY   FY12 Rates   DOLLARS   DOLLARS	PROPOSED QUARTERLY   FY12 Rates   DOLLARS   DOLLARS	PROPOSED GUARTERLY   FY12 Rates   DOLLARS   CENERATED   COF   RATES   DOLLARS   DOLLARS   CENERATED   COF   RATES   DOLLARS   DOLLARS   DOLLARS   DOLLARS   DOLLARS GENERATED   COF   RATES   DOLLARS GENERATED   DOLLARS GENERATED   COF   RATES   DOLLARS GENERATED   DOLLARS GE	PROPOSED GUARTERLY   FY12 Rates   DOLLARS   CENERATED   COF   PROPOSED GUARTERLY   FY12 Rates   DOI DLARS   DOI DLARS   DOI DLARS   DOI DLARS   DOI DLARS   DOI DLARS GENERATED   CUMITS   PER 1,000 GALLONS   2.62   175,11   175	PROPOSED QUARTERLY   FY12 Rates   DOLLARS   DOLLARS

\$113	\$2,315	\$12
FLAT:	PER 1,000 GALLONS:	METER SURCHARGE
THE ANNUAL IMPACT OF INCREASING EACH RATE BY A PENNY WOULD	INCREASE REVENUE BY THE AMOUNTS SHOWN FOR	✓ WATER AND SEWER
\$113	\$2,067	\$11
FLAT:	PER 1,000 GALLONS:	METER SURCHARGE