

## Chapter 9 Sewers and Drains

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## Chapter 9 Sewers and Drains

### Article 1 Definitions

#### **SEC. 9-101 Terms Defined**

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

ASTM shall mean American Society for Testing and Materials.

Benefited Users shall mean all owners of real estate which are either connected to the public sewer or, if not connected, have buildings within two hundred (200) feet of the public sewer.

Builder shall mean any person, persons, or corporation who undertakes to construct, either under contract or for resale, a 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 five (5) feet outside the inner face of the building wall.

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

Combined Sewer shall mean a sewer receiving both surface runoff and sewage.

DEP shall mean Maine Department of Environmental Protection.

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

Engineer shall mean an individual who is licensed to practice as a registered Professional Engineer in the State of Maine.

Governing Body shall mean the duly elected Town Council of the Town of Bucksport or its authorized deputy or representative.

Industrial Wastes shall mean the liquid wastes from industrial processes as distinct from sewage.

Maintenance of Building Sewer: Those trenchless actions needed to ensure that wastewater flows freely and securely through the building sewer to the public sewer, including the use of water jetters, augers or similar devices to clear obstructions, or the installation of pipe liners.

Manager shall mean the Town Manager of Bucksport or the individual designated by the Governing Body to perform this function, or the authorized deputy, agent, or representative of this individual.

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.

Property Line shall mean the property boundary 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 building sewers connect to the public sewer in a right-of-way.

Public Sewage Works Service Area—All buildings served by a public sewer and buildings within two hundred (200) feet of public sewer.

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

Rates shall mean charges for connection to the public sewer and charges for use thereof.

Replacement of Building Sewers: Those open trench actions needed to ensure that wastewater flows freely and securely through the building sewer to the public sewer, including securing loose fittings, reestablishing proper pitch, or replacing any or all sections of the building sewer.

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

Shall is mandatory; May is permissive.

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 to supervise and oversee the operation and maintenance of the municipal sewer system and treatment facilities.

Town shall mean the Town of Bucksport.

## **Article 2 Use of Public Sewers Required**

### **SEC. 9-201 Unlawful Discharges**

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

### **SEC. 9-202 Unlawful Sewage Disposal Facilities**

Except as hereinafter provided, it shall be unlawful to construct any privy, privy vault, septic tank, cesspool, leaching pit, or other facility intended or used for the disposal of sewage, in the public sewage works service area.

### **SEC. 9-203 Connection to Public Sewer Required**

The owner of any house, building, or property used for human occupancy, employment, recreation, or other purpose, situated within the Town and abutting on any street, alley, or right-of-way in which there is now located a public sanitary sewer of the Town 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 within two

hundred (200) feet of the building to be served by said sewer. Provided, however, that where excavation of the public highway is otherwise prohibited by state law or regulations, or where unusual hardship exists due to the presence of ledge, incompatible elevations, or other causes, the Governing body may grant exceptions upon specific application of the owner or lessee of such properties, with such conditions as the said Governing Body may impose.

### **Article 3 Private Sewage Disposal**

#### **SEC. 9-301 Public Sewer Unavailable; Private System Required**

Where a public sanitary or combined sewer is not available under the provisions of Section 9-202, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this Article and the State Plumbing Code.

#### **SEC. 9-302 Compliance with State Plumbing Code; Notice of Installation**

Construction of a private sewage disposal system shall comply in all respects with requirements of the State Plumbing Code.

#### **SEC. 9-303 Compliance with Regulations of Department of Human Services**

The type, capacities, location, and layout of a private sewage disposal system shall comply with all regulations of the Department of Human Services, State of Maine.

#### **SEC. 9-304 Sanitary Maintenance Required**

The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the Town.

#### **SEC. 9-305 Availability of Public Sewer**

At such time as a public sewer becomes available, as provided in Section 9-203, to a property served by a private sewage disposal system, connection shall be made to the public sewer in compliance with this chapter.

#### **SEC. 9-306 Malfunctioning Facilities**

Any private sewage disposal facility which malfunctions shall be repaired or replaced in compliance with the State Plumbing Code. To minimize safety hazards, any septic tank or cesspool which is abandoned shall be filled with suitable material.

### **Article 4 Building Sewers and Connections to Public Sewers**

#### **SEC. 9-401 Relation to State Plumbing Code**

The provisions of this article shall be deemed to supplement the provisions of the State Plumbing Code with respect to building sewers and connections thereof to public sewers. In the event of conflicts between this article and the State Plumbing

Code, the provisions of this article shall be deemed to apply. Permits and fees stipulated hereunder are additional to any permits or fees, or both, required under the State Plumbing Code.

**SEC. 9-402 Installation and Connection of Building Sewers**

1. All building sewers must be connected directly to a public sewer, except as otherwise allowed by this Chapter. The cost to install a building sewer shall be the responsibility of the Owner. The installation of a building sewer in a public right of way or public easement must be done by a qualified contractor approved by the Superintendent.
2. The Owner shall indemnify the Town from any loss or damage that may directly or indirectly be caused by the installation and connection of the building sewer.

**SEC. 9-403 Permit Required**

1. A permit from the Superintendent shall be required for the following:
  - A. To install a building sewer and connect it to a public sewer.
  - B. To repair, replace, alter or extend any portion of a building sewer in an open trench.
  - C. To extend a public sewer by a private party.
  - D. To make a substantial change in the volume or character of wastewater being discharged to a public sewer.
2. A permit from the Superintendent shall not be required for any work performed by the town.

**SEC. 9-404 Application for Building Sewer Permits; Fees**

1. The Owner or his agent shall make application for a building sewer permit on a special form furnished by the Town. The Superintendent may require supplemental plans, specifications, or other information needed to conduct a complete review of the application.
2. A building sewer permit fee shall be charged as follows:
  - A. For a new building sewer installation and connection to a public sewer: Fifteen dollars (\$15.00)
  - B. For an open trench repair, replacement, alteration or extension of a building sewer: Fifteen dollars (\$15.00)
  - C. To extend a public sewer by a private party: (No fee)
  - D. To make a substantial change in the volume or character of wastewater being discharged to a public sewer: (No fee)

**SEC. 9-405 Separate Sewers Required**

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.

**SEC. 9-406 Use of Existing Sewers**

Existing building sewers may be used in connection with new buildings only when they are found, on examination and test, to meet all requirements of this Chapter.

**SEC. 9-407 Size, Slope of Building Sewer**

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 a four (4) inch pipe shall not be less than one-quarter ( $\frac{1}{4}$ ) inch per foot, except as permitted in the State Plumbing Code.

**SEC. 9-408 Connections to Buildings**

Whenever possible, the building sewer shall be brought to the building at an elevation that is no less than one (1) foot above 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.

**SEC. 9-409 Artificial Lifting of Sanitary Sewage**

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 means and discharged to the building sewer.

**SEC. 9-410 Prohibited Connections**

No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff to a building sewer or building drain which in turn is connected directly or indirectly to a public sanitary sewer, unless such connection is approved by the Superintendent for purposes of disposal of polluted surface drainage.

**SEC. 9-411 Excavations**

All excavations required for the installation of a building sewer shall be open trench work unless otherwise approved by the Superintendent. Pipe laying and backfill shall be performed in accordance with ASTM Specification C12, except that no backfill shall be placed until the work has been inspected.

**SEC. 9-412 Joints and Connections**

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 Water Pollution Control Federation Manual of Practice No. 9. All such connections shall be made gastight and watertight and verified by proper testing. Any deviation from the prescribed procedures and materials must be approved by the Superintendent before installation.

**SEC. 9-413 Plans Required**

After the completion of all sewers, and before final acceptance, as-built drawings shall be furnished to the Town consisting of a set of reproducibles.

**SEC. 9-414 Compliance Required**

All work shall comply with all federal, state and local laws, ordinances and regulations.

**SEC. 9-415 Town Property**

All sewer extensions constructed at the Property Owner's, Building Contractor's, or Developer's expense, after final approval and acceptance by the Engineer, shall become the property of the Town and shall thereafter be maintained by the Town. Said sewers, after their acceptance by the Town, shall be guaranteed against defects in material or workmanship for twelve (12) months. The guarantee shall be in a form provided for by the Town; at the sole discretion of the Town, a maintenance bond or certified check may be demanded as part of the guarantee.

**SEC. 9-416 Inspection by Superintendent**

The applicant for the building sewer permit shall notify the Superintendent when the building is ready for inspection and connection to the public sewer. No public sewer shall be disturbed except under the supervision of the Superintendent. The Superintendent shall be available to supervise and inspect the connection within forty-eight (48) hours of notification of readiness.

**SEC. 9-417 Safeguards Required; Restoration**

All excavations for building sewer installations 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.

**SEC. 9-418 Manholes**

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.

**SEC. 9-419 Special Situations**

The Town will consider any special situation. The Owner shall request a review of any special situation in writing, to the Superintendent. The Superintendent's approval or disapproval shall be in writing.

**SEC. 9-420 Maintenance of Building Sewers**

1. Every Owner shall maintain their building sewer to ensure proper operation. All costs and expenses for the maintenance of ~~the~~ any building sewer shall be borne by the Owner, with the following exception:
  - A. The Superintendent shall authorize payment not to exceed two hundred (200) dollars for maintenance to remove a root obstruction in a building sewer that is connected to a public sewer. No more than one such authorization may be given for the same building sewer in a ten (10) year period.
2. The Owner shall indemnify the Town from any loss or damage that may directly or indirectly be caused by the maintenance of the building sewer.

**SEC. 9-421 Replacement of Building Sewers**

1. In the event any active building sewer malfunctions and maintenance efforts cannot reestablish the proper operation of the sewer, the sewer must be replaced to the extent necessary. All costs and expenses for the replacement shall be borne by the Owner, with the following exception:
  - A. The Superintendent shall authorize payment to replace any portion of a building sewer that is malfunctioning as a result of damage caused by an excavation activity conducted by the Town.
2. Any open-trench work involving the replacement of a building sewer in a public right of way or public easement must be done by a qualified contractor approved by the Superintendent.
3. The Owner shall indemnify the Town from any loss or damage that may be directly or indirectly caused by the replacement of the building sewer.

**Article 5 Sewer Extension**

**SEC. 9-501 Construction by Town; Costs**

Sewer extensions including individual building sewers from the sewer to the property line, may be constructed by the Town under public contract, if in the opinion of the Council, the number of properties to be served by such extension warrants its cost. Under this arrangement, the Property Owner shall pay for the installation of the building sewer from the public sewer to his residence or place of business in accordance with the requirements of Article 4. Developers will pay the total cost of all sewer extensions as called for in the Subdivision Standards. Property owners may propose sewer extensions within the Town by drafting a

written petition, signed by a majority of the benefiting property owners, and filing it with the Town. The cost of such extensions may be assessed to the benefited property owners in the following manner, if the Council elects to participate in the construction of the petitioned sewer extension:

1. Town will pay up to fifty percent (50%) of the project cost of public sewer (construction, engineering, legal, etc.) but not to exceed one thousand five hundred dollars (\$1,500) per connector on any existing accepted street.
2. The connectors will pay the remaining cost based on each connector being equivalent to a single-family home.
3. Town will make refunds without interest, if and when additional sewers are connected to the requested sewer. The refunds will be made to the Property Owner of record at the time of the refund.
4. Refunds will be equal to the number of additional connectors added to the number of original connectors, divided into the connectors' public sewer cost (any Town subsidy not included in this cost) and subtracted from the original individual connectors' cost or any changes thereafter.
5. No refunds will be made after a period of ten (10) years from the date of acceptance of the sewer extension by the Town.
6. Connections after the ten (10) year refund period shall be as called for in Article 4 or hereinafter set forth.
7. New connectors to sewer extensions which have been approved and installed for less than ten (10) years, shall be assessed a portion of the original cost of sewer extension. This portion shall be assessed by adding the number of new connectors to the number of existing connectors, and dividing into the cost of the original project borne by the connectors for cost of public sewer only. All cost of original project borne by the Town shall not be included.

**SEC. 9-502 Private Construction**

If the Town does not elect to construct a sewer extension under public contract, the property owner, building contractor, or developer may construct the necessary sewer extension, if such extension is approved by the Council in accordance with the requirements. He or they must pay for the entire installation, including all expenses incidental thereto. Each building sewer installed must be installed and inspected during construction as previously required in Section 9-411; and the permit connection inspection fee shall be fifteen dollars (\$15.00). Design of sewers shall be as specified in the attached Guidelines for Design and Construction of Sewer Mains. The installation of the sewer extension shall be subject to periodic inspection by the Engineer, and the expense for this inspection shall be paid for by the Owner, Building Contractor, or Developer. The Engineer's decisions shall be final in

matters of quality and methods of construction. The sewer, as constructed, shall pass all leakage tests required by the Guidelines before it is to be used. The cost of sewer extension thus made shall be absorbed by the developers or the property owners, including all building sewers.

**SEC. 9-503 Design Standards**

All extensions to the sanitary sewer system owned and maintained by the Town shall be properly designed in accordance with Design and Construction of Sanitary and Storm Sewers, ASCE Manuals and Report on Engineering Practice No. 37 (WPCF Manual of Practice No. 9); Gravity Sanitary Sewer Design and Construction, ASCE Management & Reports on Engineering Practice no. 60 (WPCF, Manual of Practice No. FD-5); and the Town of Bucksport Guidelines for Design and Construction of Sewer Mains. Plans and specifications for sewer extensions shall be submitted for the approval of the Engineer before construction may proceed. The design of sewers must anticipate and allow for flows from all possible future extensions or developments within the immediate drainage area.

**Article 6 Use of Public Sewers**

**SEC. 9-601 Storm Water; Industrial Cooling Water**

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, as approved in writing by the Manager. Industrial cooling water or unpolluted process waters may be discharged, upon written approval of the Manager, to a storm sewer or natural outlet, provided that such discharge shall be in accordance with all State and Federal regulations, and M.R.S.A. Title 38, Chapter 3, Section 413.

**SEC. 9-602 Certain Discharges Prohibited**

Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers.

1. Any liquid or vapor having a temperature higher than one hundred fifty (150) degrees F.
2. Any water or waste which may contain more than one hundred (100) parts per million, by weight, of fat, oil, or grease.
3. Any gasoline, benzene, naphtha, fuel oil, lubricating oils, or other flammable or explosive liquids, solids, or gasses.
4. Any garbage that has not been properly shredded.
5. 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.

6. 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.
7. Any waters or wastes containing a toxic or poisonous substance in sufficient 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.
8. 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.
9. Any noxious or malodorous gas or substance capable of creating a public nuisance.

**SEC. 9-603 Interceptors**

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

Grease and oil interceptors or traps shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight, and equipped with easily removable covers which, when bolted in place, shall be gastight and watertight.

**SEC. 9-604 Maintenance of Interceptors**

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.

**Article 7 Preliminary Treatment Facilities**

**SEC. 9-701 Acceptable Levels of BOD and Total Suspended Solids**

Any waste discharged to the sewer system containing a five (5) day Biochemical Oxygen Demand (BOD) greater than three hundred (300) parts per million by weight, or containing more than three hundred fifty (350) parts per million by weight of suspended solids, or containing any quantity of substances having the characteristics described in Section 9-602, or having an average daily flow greater

than two percent (2%) of the average daily flow of the Town shall be subject to a review and approval of the Superintendent. Where necessary in the opinion of the Superintendent, the Owner shall provide, at his own expense, such preliminary treatment as may be necessary to:

1. reduce the BOD to three hundred (300) parts per million, or
2. reduce the suspended solids to three hundred fifty (350) parts per million by weight, or
3. reduce objectionable characteristics or constituents to within the maximum limits provided for in Sections 9-602 and 9-603, or
4. 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.

**SEC. 9-702 Maintenance of Preliminary Treatment Facilities**

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.

**SEC. 9-703 Monitoring of Discharges; Records**

All industries discharging into a public sewer shall perform such monitoring of their discharges as the Superintendent and/or other duly authorized employees of the Town may reasonably require, including installation, use, and maintenance of monitor equipment, keeping records and reporting the results of such monitoring to the Superintendent. Such records shall be made available upon request by the Superintendent to other agencies having jurisdiction over discharges to the receiving waters.

**SEC. 9-704 Measurement Test and Analyses Standards**

All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in Sections 9-602 and 9-701, shall be determined in accordance with "Standard Methods for the Examination of Water and Sewages," and shall be determined at the control manhole provided for in Section 9-418, or upon suitable samples taken at said control structure.

**SEC. 705 Unusual Wastes**

For industrial wastes of unusual volume, strength, or character, special agreements shall be required between the Town and the industry concerned providing for the acceptance of such wastes in the municipal system.

## **Article 8 Protection from Damage**

### **SEC. 9-801 Actions Prohibited**

No 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 Municipal Sewage Works. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

### **SEC. 9-802 Liability Insurance**

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.

## **Article 9 Powers and Authority of Inspectors**

### **SEC. 9-901 Authority to Inspect**

The Superintendent and other duly authorized employees of the Town bearing proper credentials and identification shall be permitted to enter upon all properties, at reasonable times, for the purpose of inspection, observation, and measurement, sampling, and testing in accordance with the provisions of this Chapter.

## **Article 10 Penalties**

### **SEC. 9-1001 Notice of Violations**

Any person found to be violating any provision of this Chapter except Section 9-801, 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.

### **SEC. 9-1002 Penalty**

Any person who fails to comply with the provisions of this Chapter other than those provisions pertaining to the payment of charges for service established herein, shall upon conviction, be subject to a fine not exceeding one hundred dollars (\$100) for each offense. The continued violation of any provision of any section of this Chapter, 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.

### **SEC. 9-1003 Other Appropriate Action**

As an alternative, upon violation of this Chapter, the proper authorities of the Town, 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 violations, or to prevent the occupancy of any building, structure, or land where said violations of this Chapter are found.

**SEC. 9-1004 Liability to the Town**

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

**Article 11 Sewer Service Charge**

**Section 9-1101 Sewer Fee System Established**

The Town Council shall establish a sewer fee system in accordance with appropriate federal and state laws, rules and regulations and shall further the equitable allocation of the capital and operating costs of the public sewage system among municipal users, private users and owners of properties that may be connected to the system. Subject to these requirements, such charges and any classification thereof shall be fair and reasonable, and shall bear a substantial relationship to the cost of providing sewage facilities and services to the Town. Such charges shall be at a rate sufficient to generate approximately 100% of the total annual cost of providing sewage facilities and services to the Town, unless the Town Council elects to offset some capital costs from general town funds. Such charges shall include adequate revenues for renewal and replacement of the wastewater facilities.

**Section 9-1102 Sewer Fee Requirements**

1. The Town Council is hereby authorized to establish sewer user fees, industrial waste discharge fees, and readiness to serve fees. The Town Council is authorized to levy such fees upon persons owning buildings located within two hundred (200) feet of any public sewer whether or not the buildings are connected to such sewer, or upon persons owning land or buildings located within two hundred (200) feet of a future public sewer. A public hearing shall be held prior to implementation by the Town Council of any sewer user fee, industrial waste discharge fee, and readiness to serve fee.
2. Sewer user fees shall be based on the amount of estimated or measured water provided to the sewer user during the previous billing period, as documented by the public water provider. Where water is obtained from a source other than the public water provider, the fee may be set as a flat rate or it may be determined by metering water sources or sewer outflow. The Town may require metering to accurately measure the volume of wastewater entering the sewer system or it may be installed as the user's preference. The cost of meter installation and maintenance shall be the responsibility of the user.
3. Readiness to serve fees, in addition to the standard user fee, shall be charged to properties located within two hundred (200) feet from a new public sewer if the



extension is approved by at least 75% of the property owners to be affected. Such fees can be used only for payment of fixed costs that are not related to flow.

4. Each benefited user shall pay a minimum fee regardless of actual usage. The minimum fee shall be based on the payment of fixed costs that are not related to flow, and shall be established by the Town Council.
5. An industrial waste surcharge shall be charged to users that have or may have industrial wastes discharging to the public sewer system. Such fees shall be based on measured or estimated quantities of material exceeding the limits as follows: total suspended solids (TSS) of three hundred fifty (350) parts per million by weight of suspended solids, or containing a five (5) day biochemical oxygen demand (BOD) greater than three hundred (300) parts per million by weight.
6. The current schedule of user fees, the method of measurement and collection, and all other regulations pertaining thereto shall be available for public inspection at the Bucksport Town Office.

#### **Section 9-1103 Application of Sewer Rates**

1. Metered single-family residential users shall be charged a quarterly sewer fee based on the quarterly consumption of water, at a rate per hundred cubic feet of water as set by the Town Council. The quarterly fee shall be no less than the fee for 1,800 cubic feet of water consumed.
2. Non-metered single-family residential users shall be charged a quarterly sewer fee based on a quarterly consumption of 2,160 cubic feet of water, at a rate per hundred cubic feet of water as set by the Town Council.
3. Metered multi-family residential users shall be charged a quarterly sewer fee based on the quarterly consumption of water, at a rate per hundred cubic feet of water as set by the Town Council. A minimum quarterly fee shall be charged based on a quarterly consumption of 900 cubic feet of water per unit.
4. Non-metered multi-family residential users shall be charged a quarterly sewer fee based on a quarterly consumption of 2,160 cubic feet of water per unit, at a rate per hundred cubic feet of water as set by the Town Council.
5. Metered commercial, institutional and industrial users shall be charged a quarterly sewer fee based on the quarterly consumption of water, at a rate per hundred cubic feet of water as set by the Town Council. A minimum quarterly fee for commercial and institutional users shall be charged based on the size of the building sewer serving the property as follows:
  - 4" service equals 1,800 cubic feet of water per quarter
  - 5" service equals 3,000 cubic feet of water per quarter
  - 6" service equals 4,500 cubic feet of water per quarter

8" service equals 6,000 cubic feet of water per quarter

A minimum quarterly fee for industrial users shall be charged based on a quarterly consumption of 1,800 cubic feet of water per quarter for each equivalent unit. An equivalent unit is equal to the average annual water use per quarter divided by 2,160 cubic feet.

6. Non-metered commercial, institutional and industrial users shall be charged a quarterly sewer fee based on a quarterly consumption of water determined by applying the applicable wastewater design flows identified in the Maine Subsurface Waste Water Disposal Rules, as adopted. Design flows will be converted to cubic feet and users will be charged a fee at a rate per hundred cubic feet of water as set by the Town Council.
7. Industrial surcharge fees shall be charged as follows:  
TSS mg/L to be disposed by user= Rate Multiplier  
350 mg/L

Annual User Flow \_\_\_\_\_ = % of Bucksport Flow  
Annual Plant flow less Verona and Orland

Total Operating cost less Verona and Orland's share, less Debt Service and Contingency Account+ Net Adjusted Budget

Adjusted Budget X Percent Flow X Rate multiplier =User Rate

8. Upon notification by the owner that their building has been vacant for more than six (6) consecutive months, a minimum quarterly sewer fee shall be charged. The quarterly fee shall be no less than the fee for 1,800 cubic feet of water consumed.

#### **Section 9-1104 Payment of Fees**

All sewer fees are due from the owner of the premises and such owner shall be held responsible. The Town may send the bill to the occupant, if requested to do so by the owner and occupant. To secure payment of fees for sewer services furnished or to be furnished, procedures established by Title 30-A M.R.S.A. Section 3406 (1996) shall be followed, as the same may be amended from time to time. All fees that are current or in arrears shall be due and payable at the Bucksport Town Office. Bills shall be due the first day of each quarter, such being January 1, April 1, July 1 and October 1, unless it is a final reading at which time the due date shall be the day of the final meter reading or when there is no meter, the day the final bill is issued. Failure of the consumer to receive a bill does not relieve the consumer of its payment nor from the consequences of non-payment.

#### **Section 9-1105 Interest on Unpaid Bills**

Interest shall start on arrears the first day of the following quarter that the bill was issued for. The interest rate shall be set by the Bucksport Town Council.

### **Section 9-1106 Abatements**

An abatement of sewer fees for wastewater which does not enter the public sewer and which is not required to enter the public sewer may be made on application to the Town Council. The adjusted billing 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 any one calendar year.

## **Article 12 License**

### **SEC. 9-1201 Bond**

As part of the application for license to do work in the Town, the applicant may be required to present a license bond written by an indemnity or bonding company lawfully doing business in the State of Maine in a form provided by the Governing Body.

### **SEC. 9-1202 Prohibition of License**

If, in the opinion of the Governing Body, the work performed by the contractor within the Town violates the provisions of this chapter or any other ordinance of the Town, or if the contractor's work is, in the opinion of the Governing Body, substandard, then in that event, the Governing Body may prohibit the contractor from doing such work within the Town of Bucksport.

## **Article 13 Validity**

### **SEC. 9-1301 Validity**

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.

## **Article 14**

*No language in this article exists.*

## **Article 15 Guidelines for Design and Construction of Sewer Main**

### **SEC. 9-1501 Sewer Design Standards**

1. Sewer design shall be in accordance with the following:
  - a. Pipe material shall be PVC made from virgin plastic conforming to ASTM D 1784, Type 1, Grade 1, and manufactured in accordance with ASTM D 3034, SDR 35 or ASTM F-789; ductile iron conforming to ANSI Specification A 21.51, with iron Grade 60-42-10, and cement lining meeting ANSI Specification A 21.4, but twice the thickness specified; or other material approved by the Superintendent.

- b. All joints shall be prepared and installed in accordance with the manufacturer's recommendations, and shall be gastight and watertight. Joint materials shall be as follows:
  - 1. PVC - ASTM D 3212
  - 2. Ductile Iron - ANSI Specification A 21.11.
- c. Minimum internal pipe diameter shall be eight (8) inches.
- d. Branch fittings for house services shall be PVC wyes or tee-wyes, or ductile iron saddles with stainless steel straps and "O-ring" seal set in mastic to affect a watertight connection.
- e. Minimum slope of sewer pipe shall be as in the following table:

Pipe Diameter	Minimum Slope in Feet Per 100 Feet
8"	0.40
10"	0.28
12"	0.22
14"	0.17
15"	0.15
16"	0.14

- f. PVC pipe shall be laid on six (6) inches of screened gravel bedding material, and the screened gravel shall be shaped to a height of one-fourth ( ¼) of the pipe diameter so as to give uniform circumferential support to the pipe. Unless bedding material is required for ductile iron pipe due to unsuitable conditions, the existing excavated bottom shall be shaped to a height of one-eighth (1/8) of the pipe diameter so as to give uniform circumferential support to the pipe.
- g. Screened gravel shall have the following gradation:

Sieve Size	% By Weight Passing
1 inch	100
¾ inch	90-100
⅜ inch	20-55
#4 mesh	0-10
#8 mesh	0-5

- h. The screened gravel shall be brought to the pipe mid-diameter.
- i. Trench sand shall be placed over PVC pipe to a height one (1) foot over the top of the pipe. Trench sand shall be hard, durable particles of granular material with one hundred percent (100%) passing the one-half (½) inch sieve and zero to fifteen percent (0-15%) passing the #200 sieve. (Percentages are by weight.)
- j. Backfill material shall then be placed and compacted. Suitable backfill material shall be the following or a combination of the following:
  - 1. Excavated material that will compact to the compaction requirements.
  - 2. Material that does not contain rocks larger than six (6) inches in any dimension.

3. Dry clay backfill free from lumps.
4. Wet clay that alone would pump, but when mixed with sand and/or gravel will be stable and will compact.
- k. Compaction densities specified herein shall be the percentage of the maximum density obtainable at optimum moisture content as determined and controlled in accordance with AASHTO T-99, Method C, depending on the material size. Field density tests shall be made in accordance with AASHTO T-191. Each layer of backfill shall be moistened or dried as required, and shall be compacted to the following densities:
  1. Bedding material and trench sand .....95%
  2. Suitable backfill under paved or shoulder areas .....95%
  3. Gravel base:
    - (a) Under paved areas .....95%
    - (b) In shoulder areas .....95%
  4. Loam areas .....90%
  5. All other areas .....85%
- l. Pipe classes shall be determined according to W.P.C.F. Manual of Practice No. 9 or No. FD-5.

Pipe thickness shall be calculated on the following criteria:

Safety Factor -----	2.0
Load Factor-----	1.7
Weight of Soil -----	120 lbs./cu. ft.
Wheel Loading-----	16,000 lbs.

- m. All excavations required for the installation of sewer extensions shall be open trench work unless approved by the Superintendent. No backfill shall be placed until the work has been inspected.
- n. Manholes shall be constructed at all changes in slope or alignment or at intervals not exceeding four hundred (400) linear feet, unless acceptable to the Superintendent, and shall be pre-cast concrete.
  - (1) Pre-cast manhole sections shall conform to ASTM C 478; cement shall be Type II with a minimum compressive strength of 4,000 psi.
  - (2) Pre-cast base and barrel sections shall have tongue and groove joints, with butyl base joint sealant that permits installation in temperatures from minus twenty (-20) degrees F to one hundred twenty (120) degrees F, and meets Federal Specification SS-S-00210.
  - (3) Each section of the pre-cast manhole shall have two (2) holes for the purpose of handling and setting. These holes shall be tapered and shall be plugged with non-shrink mortar or grout in combination with concrete plugs after installation.
  - (4) Pipe to manhole joints shall be Lock-Joint flexible manhole sleeve, Kor-N-Seal joint sleeve, or equivalent.

- (5) Manhole invert bricks shall conform to ASTM C 32, Grade SS hard brick (made from clay or shale).
- (6) Dampproofing for concrete shall be semi-mastic type Horn "Dehydratine #4," "RIW Marine Emulsified Liquid" by Toch Bros., Inc., "Hydrocide 600" by Sonneborn, or equivalent.
- (7) Manhole rungs shall be copolymer polypropylene steps reinforced with three-eighths ( $\frac{3}{8}$ ) inch Grade 60 steel rebar throughout. Rungs shall be placed twelve (12) inches on center in concrete and shall not be subjected to any loads for a minimum of seven (7) days.
- (8) After the excavation has been done and leveled, one (1) foot of bedding material shall be placed in the bottom of the excavation, leveled, and thoroughly compacted.
- (9) Pre-cast concrete manhole sections shall be set so as to be vertical and with sections in true alignment, one-fourth ( $\frac{1}{4}$ ) inch maximum tolerance to be allowed.
- (10) The top of the pre-cast reinforced concrete unit shall be set at a grade that will allow a minimum of two (2) courses and a maximum of five (5) courses of brick and mortar before setting the cast iron frame and cover. Mortar for brick masonry shall be Portland cement mixed in the proportion of one part cement to two parts sand, worked to the proper consistency.
- (11) The inside and outside of the masonry work of all manholes shall be plastered with a 1:2 Portland cement mortar. The thickness of the mortar shall be one-half ( $\frac{1}{2}$ ) inch, and the mortar shall be carefully spread and thoroughly troweled, leaving a smooth, substantially waterproof surface. The mortar shall be extended to completely cover the outside and inside surfaces of all masonry work.
- (12) The concrete manholes shall have a channel passing through the bottom which corresponds in shape with the lower two-thirds ( $\frac{2}{3}$ ) of the pipe. Side inverts shall be curved and main inverts (where direction changes) shall be laid out in smooth curves of the longest possible radius. The top of the shelf shall slope to drain towards the flowing through channel. Where concrete is used for manhole inverts, it shall be three thousand (3,000) psi concrete.
- (13) Manholes shall be constructed as the sections of the pipelines between them are completed, and, unless this is done, the Superintendent shall have the authority to stop trenching and pipe laying until manhole construction is brought up properly. All ground water shall be kept away from any newly placed concrete or freshly laid masonry work until new cement has properly set and a watertight job is obtained.
- (14) All surfaces to be dampproofed shall be clean, smooth, dry, and free from loose material. Brush the dampproofing onto the outside concrete manhole surface and fill all voids. Apply in two (2) coats and conform to the covering capacity of the material used in strict accordance with the manufacturer's recommendations and directions and applied by the

- manufacturer of the manholes. Contractor shall apply dampproofing to masonry. Do not apply dampproofing in freezing or wet weather.
- (15) Iron castings for manhole frames and covers shall be the same as used on the Town's existing interceptor sewer system and shall be Quality Water Products Class 400, or equivalent.
- (a) Manhole frames and covers shall be ductile iron free from cracks, holes, swells, and cold shuts. The quality shall be such that a blow from a hammer will produce an indentation on an edge of the casting without flaking the metal. Frames and covers shall be machine seated and provided with a gasket so as to provide a tight, even fit.
  - (b) Covers shall be solid and shall have the word "SEWER" (three (3) inches high) cast on the top. Frames and covers shall be certified as meeting H-20 loading and shall be compatible with existing frames and covers.
  - (c) Casting shall be given one (1) coat of cold-tar pitch varnish at the factory before shipment, and said coating shall be smooth and tough and not brittle.
  - (d) Frames shall be set concentric with the top of the masonry and in full bed of mortar so that the space between the top of the manhole masonry and the bottom flange of the frame shall be completely filled and made watertight. A thick ring of mortar extending to the outer edge of the masonry shall be placed all around and on the top of the bottom flange. Mortar shall be smoothly finished and have a slight slope to shed water away from the frame.
2. All sewers shall satisfy requirements of a leakage test before they are accepted by the Town. The leakage test shall be as follows:
- a. For each size of pipeline, an initial leakage test shall be made on the first section of the pipeline complete between two adjacent manholes. Thereafter, the leakage tests shall be made on sections of approved lengths of completed pipeline, which in no case shall exceed one thousand (1,000) feet.
  - b. Each section shall be tested upon its completion.
  - c. Air checking of sewer lines shall be as follows:
    - (1) After backfilling sewer line from manhole to manhole, the Contractor shall conduct an air leakage test in the presence of the Engineer, using low pressure air.
    - (2) The equipment used shall meet the following minimum requirements:
      - (a) Pneumatic plugs shall have a sealing length equal to or greater than the diameter of the pipe to be inspected.
      - (b) Pneumatic plugs shall resist internal test pressures without requiring external bracing or blocking.
      - (c) All air used shall pass through a single control panel.
      - (d) Three individual hoses shall be used for the following connections:
        - (i) From control panel to pneumatic plugs for inflation.

- (ii) From control panel to sealed line for introducing the low pressure air.
  - (iii) From sealed line to control panel for continually monitoring air pressure rise in the sealed line.
- (3.) Procedures:
- (a) All pneumatic plugs shall be seal tested before being used in the actual test installation. One length of pipe shall be laid on the ground and sealed at both ends with the pneumatic plugs to be checked. Air shall be introduced into the plugs to 25 psig. The sealed pipe shall be pressurized to 5 psig. The plugs must hold against this pressure without having to be braced.
  - (b) After a manhole to manhole reach of pipe has been backfilled and cleaned, and the pneumatic plugs are checked by the above procedure, the plugs shall be placed in the line at each manhole and inflated to 25 psig. Low pressure air shall be introduced into this sealed line until the internal air pressure reaches 4 psig greater than the average back pressure of any ground water that may be over the pipe. At least two (2) minutes shall be allowed for the air pressure to stabilize.
  - (c) After the stabilization period (3.5 psig minimum pressure in the pipe), the air hose from the control panel to the air supply shall be disconnected. The portion of line being tested shall be termed "Acceptable" if the time required in minutes for the pressure to decrease from 3.5 to 2.5 psig (greater than the average back pressure of any ground water that may be over the pipe) shall not be less than:

$$T = 0.085 \frac{DK}{Q}$$

Where:

T = Shortest time, in seconds, allowed for the air pressure to drop 1.0 psig,

K = 0.000419 DL, but not less than 1.0,

Q = 0.0015 cubic feet/minute/square feet of internal surface,

D = Nominal pipe diameter in inches, and

L = Length of pipe being tested in feet.

Table 1 indicates the time required for various lengths and pipe sizes.



**Table 1**

SPECIFICATION TIME Required for a 1.0 psig pressure drop for size and length of pipe indicated for Q = 0.0015

1 Pipe Diameter (in.)	2 Mini- mum Time (min: sec)	3 Length for Mini- mum time (ft.)	4 Time for Longer Length (sec)	Specification Time for Length (L) Shown (min: sec)								
				100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.	
4	3:46	597	.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24	
10	9:26	239	2.374 L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48	
12	11:20	199	3.418 L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38	
15	14:10	159	5.342 L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04	
18	17:00	133	7.692 L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41	
21	19:50	114	10.470 L	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31	
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33	
27	25:30	88	17.306 L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48	
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15	
33	33:10	72	25.852 L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53	
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46	

- (d) In areas where ground water is known to exist, the Contractor shall install a one-half (1/2) inch diameter capped pipe nipple, approximately ten (10) inches long, through the manhole wall on top of one of the sewer lines entering the manhole. This shall be done at the time the sewer line is installed. Immediately prior to the performance of the leakage test, the ground water shall be determined by removing the pipe cap, blowing air through the pipe nipple into the ground so as to clear it, and then connecting a clear plastic tube to the nipple. The plastic tube shall be held vertically and a measurement of the height in feet of water over the invert of the pipe shall be taken after the water has stopped rising in this plastic tube. The height in feet shall be divided by two and three tenths (2.3) to establish the pounds of pressure that will be added to all readings. (For example, if the height of water is eleven and one-half (11-1/2) feet, then the added pressure will be 5 psig. This increases the 3.5 psig to 8.5 psig, and the 2.5 psig to 7.5 psig. The allowable drop of one pound and the timing remain the same.)
  - (e) If the installation fails to meet this requirement, the Contractor shall, at his own expense, determine the source of the leakage. He shall then repair or replace all defective materials and/or workmanship.
- d. Manholes shall be tested by plugging the pipes and filling the manholes with water for an exfiltration test, or by an air vacuum test.

- (1) Water exfiltration test:
  - (a) Fill manhole to allow for concrete absorption, and leave overnight.
  - (b) Following morning, fill manhole to a level no less than one (1) foot above the beginning of the manhole taper, and test for eight (8) hours.
  - (c) Water level shall be carefully marked, and at end of following eight (8) hour period, sufficient water shall be added to bring water level back to mark. Water added shall be supplied from a metered source and quantity so added shall be converted to gallons per day lost through manhole leakage.
  - (d) The loss of water shall be less than one (1) gallon per day per foot of depth of manhole.
  - (e) If the measured exfiltration exceeds the allowable rate, the necessary repairs shall be made by the Contractor, to reduce the leakage.
  - (f) In areas with a high ground water table, the Engineer may require a visual infiltration test rather than an exfiltration test. In this case, all leaks or weepings visible from the inside of the manhole shall be repaired, and the manhole made watertight.
- (2) Air vacuum test:
  - (a) Manholes shall be tested by a vacuum test immediately after assembly of the manhole and connecting pipes and before any backfill is placed around the manholes, and again after backfilling.
  - (b) All lift holes shall be plugged with non-shrink grout and all pipes entering the manhole shall be plugged, taking care to securely brace the plugs and pipe.
  - (c) The test shall be made using an inflatable compression band, vacuum pump and appurtenances specifically designed for vacuum testing manholes. Test procedures shall be in accordance with the equipment manufacturer's recommendations.
  - (d) After the testing equipment is in place, a vacuum of ten (10) inches of Hg shall be drawn on the manhole. The manhole will be considered to have passed the test if the vacuum does not drop more than one (1) inch of Hg in one (1) minute.
  - (e) If the manhole fails the initial test, the contractor shall locate the leakage and make proper repairs as directed by the Engineer, and retest until a satisfactory test result is obtained.

*Chapter 9 Sewers and Drains was adopted on November 18, 1976 and amended on November 17, 1977.*

*Chapter 9 Sewers and Drains was adopted in conjunction with the Town Code on March 9, 1978, and was amended on the following dates:*

*March 13, 1980 (added article 14 Verona Supplement to Bucksport waste Water Treatment Facility Plan)*

*April 29, 1987*

*May 8, 1997. (amended section 9-1101)*

*June 12, 2008 (amended section 9-408, replaced sections 9-1101, 1102 & 1103, added sections 9-1104, 1105 & 1106)*

*August 14, 2008 (amended section 9-1104 regarding sewer bill due dates)*

*December 4, 2014 (amended Article 1, Article 4 Sections 9-402, 9-404, 9-420 and added 9-421, amended Article 13.)*