



SEWERS BY-LAW

CHAPTER 72

A BY-LAW RESPECTING THE REGULATION OF CONNECTING AND DISCHARGING TO THE SEWERS OF THE TOWN OF KENTVILLE

SHORT TITLE

1.1 This By-law may be cited as the “**Sewers By-law**”.

DEFINITIONS

2.1 In this By-law, unless the context otherwise requires:

- (a) “**Biochemical Oxygen Demand**” or “**BOD**” means the quantity of oxygen utilized, expressed in milligrams per litre, in the biochemical oxidation of matter within a one hundred and twenty hour period at a temperature of twenty degrees Celsius as determined in procedures set forth in “Standard Methods”;
- (b) “**Chemical Oxygen Demand**” or “**COD**” means the quantity of oxygen utilized in the chemical oxidation of organic matter under standard laboratory procedure, expressed in milligrams per litre, according to “Standard Methods”;
- (c) “**Clerk**” means the clerk of the Town and includes a person acting under the supervision and direction of the clerk;
- (d) “**colour of liquid**” means the appearance of a liquid from which the suspended solids have been removed;
- (e) “**cooling water**” means water that is used in a process for the purpose of removing heat and that has not, by design, come into contact with any raw material, intermediate product, waste product or finished product;

- (f) “**Council**” means the Council of the Town;
- (g) “**Council Advisory Committee**” means the committee of Council designated as such;
- (h) “**domestic waste**” means waste typically derived from dwellings, which complies with the discharge requirements of this By-law without treatment prior to discharge into wastewater facilities;
- (i) “**effluent**” means treated wastewater flowing out of a treatment plant;
- (j) “**Engineer**” means the engineer for the Town and includes a person acting under the supervision and direction of the engineer;
- (k) “**grab sample**” means a volume of wastewater, uncontaminated water or effluent which is collected from the wastewater stream over a period not exceeding ten (10) minutes;
- (l) “**grease**” means total fat, oil and grease extracted from aqueous solution or suspension according to the laboratory procedures set forth in “Standard Methods”, and includes, but is not limited to, hydrocarbons, esters, oils, fats, waxes and high molecular fatty acids;
- (m) “**hauled waste**” means any industrial waste which is transported to and deposited into wastewater facilities, excluding hauled wastewater;
- (n) “**hauled wastewater**” means domestic waste removed from a cesspool, septic tank system, a privy vault or privy pit, a chemical toilet, a portable toilet, or a holding tank, which is transported to and deposited into wastewater facilities;
- (o) “**industrial waste**” includes waste typically derived from manufacturing, commerce, trade, business or institutions, and includes all waste which is not domestic waste;
- (p) “**institution**” means a facility, usually owned by a government, operated for public purposes such as a school, university, medical facility, museum, prison, government office, or military base;
- (q) “**maintenance access point**” means an access point, such as a chamber, in a private sewer connection to allow for observation, sampling and flow measurement of the wastewater, uncontaminated water or storm water therein;
- (r) “**matter**” includes any solid, liquid, or gas;

- (s) **“pathologic waste”** means waste generated in a hospital or similar institution which contains human or animal tissue altered or affected by disease, and instruments or other materials which may have come in contact with diseased tissue;
- (t) **“person”** includes a corporation and the heirs, executors, administrators or other legal representatives of a person, but specifically excludes the Town;
- (u) **“pH”** means the measure of the intensity of the acid or alkaline condition of a solution determined by the hydrogen ion concentration of the solution in accordance with the “Standard Methods”;
- (v) **“phenolic compounds”** means hydroxyl derivatives of benzene and its condensed nuclei, concentrations of which shall be determined by “Standard Methods”;
- (w) **“professional engineer”** means a registered member in good standing of the Association of Professional Engineers of Nova Scotia;
- (x) **“Provincial Regulations”** means the requirements and provisions of the Province of Nova Scotia contained in any Provincial Statute or in any Regulation or order made pursuant to the authority of any Statute of Nova Scotia;
- (y) **“spill”** means the deposit or discharge of matter into wastewater facilities or a storm sewer in a quality or quantity that is not in compliance with this By-law;
- (z) **“Standard Methods for the Examination of Water and Wastewater”** (herein referred to as **“Standard Methods”**) means the analytical and examination procedures provided in the edition of the publication of the same name current at the time of testing, published jointly by the American Public Health Association and the American Water Works Association;
- (aa) **“suspended solids”** means insoluble matter that can be removed by filtration through a standard glass fibre filter as provided by “Standard Methods”;
- (bb) **“TKN”** means total kjeldahl nitrogen;
- (cc) **“Town”** means the Town of Kentville, a body corporate pursuant to the *Municipal Government Act*, or the area contained within the boundaries of such body corporate as the context requires;

- (dd) **“true colour units”** means the measure of the colour of the water from which turbidity has been removed;
- (ee) **“uncontaminated water”** means any water, including water from a public or private water works, to which no matter has been added as a consequence of its use, or to modify its use, by any person, and may include cooling water;
- (ff) **“waste”** means any material discharged into wastewater facilities;
- (gg) **“wastewater”** means any liquid waste containing animal, vegetable, mineral or chemical matter in solution or suspension carried from any premises;

CONNECTIONS

- 3.1 Every owner of a building, the nearest part of which is not more than one hundred feet from any portion of wastewater facilities, is required, at the owner’s expense, to connect and keep connected to wastewater facilities any facilities in the building discharging sewage.
- 3.2 No person shall make a connection to, or a disconnection from, wastewater facilities or a storm sewer without the written approval of the Engineer.
- 3.3 Every person who seeks to make a connection to wastewater facilities shall provide written notice to the Engineer of whether they will deposit or permit the deposit of domestic waste and/or industrial waste into the wastewater facilities, in addition to any other information that the Engineer requires.
- 3.4 The Engineer’s approval of a connection to wastewater facilities or a storm sewer shall take the form of a connection permit authorizing the discharge of the matter described in the permit.
- 3.5 The owner of a building connected to the wastewater facilities is responsible for the design, maintenance and construction of that part of the building service connection that is on the owner’s property.
- 3.4 No person shall discharge any matter into wastewater facilities or a storm sewer without a connection permit authorizing the discharge of that matter.
- 3.5 No person shall deposit industrial waste into wastewater facilities until:
 - (a) a Waste Survey Report has been filed with the Engineer; and
 - (b) the Engineer has issued a connection permit.

- 3.6 A connection to, or a disconnection from, wastewater facilities or a storm sewer shall comply with the Nova Scotia Road Builders Association Consulting Engineers of Nova Scotia Standard Specifications for Municipal Services, as amended from time to time, and/or such other specifications as adopted by Council by policy.

USE OF SEWERS

Discharges to Wastewater Facilities and/or Stormwater System

- 4.1 No person shall permit the discharge into wastewater facilities or a stormwater system controlled by the Town, or into wastewater facilities or a stormwater system or building service connection connecting with the wastewater facilities or stormwater system controlled by the Town, of:
- (a) Hydrogen sulphide, mercaptans, carbon disulphide, other reduced sulphur compounds, amines and ammonia;
 - (b) Ashes, cinders, sand, potters clay, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood or other solid or viscous substances capable of causing obstruction to the flow of sewers or other interference with the proper operation of wastewater facilities;
 - (c) Wastewater which consists of two or more separate liquid layers;
 - (d) Hauled waste or hauled wastewater;
 - (e) Paunch manure or intestinal contents from horses, cattle, sheep or swine, hog bristles, pig hooves or toenails, animal intestines or stomach casings, bones, hides or parts thereof, manure of any kind, poultry entrails, heads, feet or feathers, eggshells, fleshing and hair resulting from tanning operations;
 - (f) Animal fat or flesh in particles larger than will pass through a quarter inch screen;
 - (g) Gasoline, benzene, naphtha, or fuel oil, or wastewater containing any of these in any quantity;
 - (h) Wastewater or uncontaminated water having a temperature in excess of sixty (60) degrees Celsius;
 - (i) Wastewater having a pH less than 5.5 or greater than 9.5;
 - (j) Sewage containing dyes or colouring materials which pass through

wastewater facilities and discolour the effluent from such facilities;

- (k) Wastewater containing any of the following in excess of the indicated concentrations:

Aluminium (Al)	50 Milligrams/Litre
Antimony (Sb)	5 Milligrams/Litre
Arsenic (As)	0.1 Milligram/Litre
Barium (Ba)	5 Milligrams/Litre
Beryllium (Be)	5 Milligrams/Litre
Bismuth (Bi)	5 Milligrams/Litre
Cadmium (Cd)	0.1 Milligram/Litre
Chlorides (Cl)	1500 Milligrams/Litre
Chloroform	0.01 Milligrams/Litre
Chromium (Cr)	0.37 Milligrams/Litre
Cobalt (Co)	5 Milligrams/Litre
Copper (Cu)	1 Milligrams/Litre
Cyanide (HCN)	1 Milligrams/Litre
Dichlorobenzene	0.09 Milligrams/Litre
Ethylbenzene	0.057 Milligrams/Litre
Fluorides (F)	10 Milligrams/Litre
Hexachlorobenzene	0.055 Milligrams/Litre
Iron (Fe)	50 Milligrams/Litre
Lead (Pb)	0.1 Milligrams/Litre
Manganese (Mn)	5 Milligrams/Litre
Mercury (Hg)	0.1 milligrams/Litre
Methylene Chloride	0.0981 Milligrams/Litre
Molybdenum (Mo)	5 Milligrams/Litre
Nickel (Ni)	0.55 Milligrams/Litre
Phenolic Compounds	1 Milligrams/Litre
Phosphorus (P)	12 Milligrams/Litre
Sulphates (SO ₄)	1500 Milligrams/Litre
Sulphide (H ₂ S)	0.3 Milligrams/Litre
Selenium (Se)	0.82 Milligrams/Litre
Silver (Ag)	0.29 Milligrams/Litre
Tetrachloroethane	0.04 Milligrams/Litre
Tetracholoethylene	0.05 Milligrams/Litre
Tin (Sn)	5 Milligrams/Litre
Toluene	0.08 Milligrams/Litre
Trichloroethylene	0.054 Milligrams/Litre
Zinc (Zn)	0.03 Milligrams/Litre

- (l) Wastewater of which the BOD exceeds:
- two hundred (200) milligrams per litre for domestic waste; and
 - twelve hundred (1200) milligrams per litre for industrial waste produced by pie manufacturing plants;

- iii. five hundred and fifty (550) milligrams per litre for industrial waste produced by value added food manufacturers or processors;
 - (m) Wastewater containing more than two hundred (200) milligrams per litre of suspended solids.
 - (n) Wastewater containing more than eighty-five (85) milligrams per litre of animal fat, grease, or vegetable oil, in liquid or solid form, and, in the case of mineral oils, in concentrations exceeding fifteen (15) milligrams per litre;
 - (o) Wastewater containing more than sixty (60) milligrams per litre of TKN.
- 4.2 Compliance with any limit is not attainable simply by dilution or through the use of enzymes.
- 4.3 Where there is a storm sewer or other method or means of carrying stormwater situate in the portion of the street on which the property immediately abuts, no person shall discharge, or permit the discharge of, stormwater from the property into wastewater facilities. Despite the foregoing, no person shall discharge, or permit the discharge of, stormwater into wastewater facilities if the stormwater, or some portion of the stormwater, was collected from a roof.

Discharges to Storm Sewers

- 4.4 No person shall discharge, release, place, or cause to be placed, any substance other than stormwater, uncontaminated water, or cooling water into a storm sewer.
- 4.5 Notwithstanding subsection 4.4, no person shall discharge, or permit the discharge of, uncontaminated water or cooling water that is greater than sixty (60) degrees Celsius into a storm sewer.

SAMPLING AND ANALYSIS

- 5.1 Where sampling is done by the Town for the purposes of determining the characteristics or contents of the wastewater, uncontaminated water, or stormwater, to which reference is made in this By-law, which is suspected not to be in compliance with this By-law:
- (a) one composite sample alone is sufficient and, without limiting the generality of the foregoing, the sample may be comprised of three (3) or

- (4) grab samples taken over a maximum ten (10) minute period, may contain additives for its preservation and may be collected manually or by using an automatic sampling device;
- (b) except as otherwise specifically provided in this By-law, all tests, measurements, analyses and examinations of wastewater, uncontaminated water and stormwater, shall be carried out in accordance with Standard Methods;
 - (c) for each of the metals whose concentration is limited in this By-law the analysis shall be for the quantity of total metal, which includes all metal both dissolved and particulate; and
 - (d) wastewater flow shall be the average daily flow determined by dividing the monthly flow by the number of days in the month, or the actual daily flow.
- 5.2 Where a common building service connection connects different premises in a building, any of which premises discharge industrial waste, but which premises have separate water meters, and only one maintenance access point is available, the results of tests performed or samples collected from the maintenance access point shall be used to determine compliance with this Bylaw by each of the premises connected to the common building service connection.
- 5.3 The Engineer may from time to time conduct tests at the maintenance access point, or, where there is no maintenance access point at a place determined by the Engineer to be satisfactory to test wastewater being discharged, the Engineer may enter upon the premises from which the wastewater originates and conduct the tests as the Engineer deems necessary.
- 5.4 For the purpose of determining compliance with section 4.1, the Engineer may test discrete wastewater streams within premises and each stream must comply with Section 4.1.
- 5.5 Where there is more than one maintenance access point for a building, the Engineer may add together the test results from all maintenance access points to determine compliance, but need not do so.
- 5.6 All costs associated with the sampling and analysing required to determine the characteristics and contents of wastewater, uncontaminated water or stormwater referred to in this By-law shall be paid by the owner or operator of the premises from which the water was discharged.

SPILLS

- 6.1 It is a condition of a connection permit for wastewater facilities or a storm sewer that every person who has a spill shall forthwith notify the Engineer by contacting the Town of Kentville 24-hour telephone number listed in the telephone book and available through directory assistance (currently 679-2500) and, if there is any chance of immediate danger to human health and/or safety, the person who has a spill shall forthwith notify the 911 emergency service.
- 6.2 For any spill for which the person is required to forthwith notify the Engineer, the notification shall include the following information:
- (a) name of the person who has the spill and the address of the location of the spill;
 - (b) name of person reporting the spill and telephone number where that person can be reached;
 - (c) time of the spill;
 - (d) type and volume of material discharged and any associated hazards;
and
 - (e) corrective actions being taken to control the spill.
- 6.3 Within five days following a spill, the person responsible for the spill shall submit to the Engineer a detailed written report describing the cause of the spill and the actions taken, or to be taken, to prevent a recurrence.
- 6.4 For any spill, the person responsible for the spill, their employer, if the spill occurred while carrying out duties on behalf of the employer, and the owner of the property upon which the spill occurred, shall be jointly and severally liable for all costs incurred by the Town as a result of the spill, which shall include the costs set out in Schedule "A" attached to and forming part of this By-law.

REPORTS

- 7.1 It is a condition of a connection permit for wastewater facilities that the owner of a property discharging industrial waste into wastewater facilities shall file a Waste Survey Report with the Engineer. This applies to connections made with or without a formal permit, installed both prior to as well as after the effective date of this By-law.
- 7.2 The Waste Survey Report shall contain the following information and shall be signed by an authorized representative of the owner or operator of the premises:

- (a) name and address of the premises, and names of its owner and operator;
- (b) description of process operations, including the type of waste to be discharged, waste discharge rates and contaminant concentrations, hours of operation and plans and reports certified by a professional engineer indicating proposed expansion, addition or new construction;
- (c) a schematic process diagram indicating waste discharge points and waste descriptions;
- (d) the daily volumes and peak discharges of wastewater from the premises;
- (e) the amount of total suspended solids, oil, grease or fat in the wastewater;
- (f) the proposed pre-treatment, flow equalization or mixing facilities to be utilized on the premises;
- (g) the location of test manholes for wastewater and storm drainage to be discharged from the premises;
- (h) the monitoring equipment to be utilized on the premises; and
- (i) such other information as the Engineer may request.

7.3 The Waste Survey Report shall be in the form specified by the Engineer.

7.4 Where a change occurs in any information contained in a Waste Survey Report, the owner or operator of the premises shall submit a new Waste Survey Report, setting out the changes, within thirty days of the change.

7.5 It is a condition of a connection permit for wastewater facilities that owners discharging, or permitting the discharge of, industrial waste into wastewater facilities provide reports of the content of that industrial waste, in a form approved by the Engineer, as required by the Engineer on a weekly basis or at such other intervals as the Engineer determines.

7.6 All samples used for reporting the content of industrial waste according to subsection 7.5 must be composite samples and all tests, measurements, analyses and examinations of wastewater, its characteristics or contents shall be carried out in accordance with "Standard Methods".

7.7 All costs associated with the production of the reports in subsection 7.5 shall be borne by the owner of the property discharging the industrial waste.

MAINTENANCE ACCESS POINTS

- 8.1 Every owner of premises connected to wastewater facilities, which premises produce industrial waste containing TKN, or grease, and that uses an average of over 36,400 litres of water per day in any twelve month period, must install and maintain a suitable maintenance access point to allow observation, sampling, and flow measurement of the wastewater, uncontaminated water or stormwater therein, provided that where installation of a maintenance access point is not possible, an alternative device or facility may be substituted with written approval of the Engineer.
- 8.2 The maintenance access point, or alternative device, shall be located on the property of the owner or operator of the premises, unless it is not physically possible and the Engineer has given written approval for a different location.
- 8.3 Every maintenance access point, device, or facility shall be designed and constructed in accordance with good engineering practice and the requirements of the Engineer, and shall be constructed and maintained by the owner and operator of the premises at the expense of the owner and operator. If the maintenance access point, device or facility is not installed as required, the Engineer may cause it to be installed at the expense of the owner and operator of the premises.
- 8.4 Where a maintenance access point, device, or facility is required, the owner shall ensure that every maintenance access point, device, or facility installed is at all times accessible for purposes of observing and sampling the wastewater, uncontaminated water and stormwater therein, and measuring the flow of wastewater, uncontaminated water, and stormwater therein.
- 8.5 All commercial food establishments shall have fat, oil and grease separators installed and maintained regularly so as not to allow fat, oil or grease to enter the wastewater facilities. The Engineer shall be permitted access to the commercial establishment to inspect the separators and to determine compliance with this Bylaw. Failure to install or maintain a working separator shall be an offence under this Bylaw.

DISCONNECTION

- 9.1 It is a condition of any connection permit that failure to comply with this By-law or Part XIV of the *Municipal Government Act* may result in revocation of approval by the Engineer upon ten days prior notice to the owner of the property.
- 9.2 Revocation of a connection permit by the Engineer may be appealed to Council Advisory Committee within ten days of the communication of the Engineer's decision to the owner of the property affected by filing a notice of appeal with the

Clerk. The notice of appeal shall specify the basis for the appeal and the relief sought.

- 9.3 Council Advisory Committee shall provide the appellant with an opportunity to be heard prior to any decision.
- 9.4 Council Advisory Committee may uphold or reverse the Engineer's decision or amend it to include terms or conditions.

INSPECTION

- 10.1 The Engineer may inspect, observe, measure, sample and test the wastewater and stormwater on any premises to determine compliance with this Bylaw.

FEES

Sanitary Sewer Service Charge

- 11.1 Every owner of land on which any building is connected with, or is required to connect with, wastewater facilities shall pay to the Town an annual Sanitary Sewer Service Charge for the construction, operation and maintenance of the wastewater facilities of the Town.
- 11.2 The Sanitary Sewer Service Charge shall be calculated as described in Schedule "B" attached to and forming part of this By-law.

Service Connection Charge

- 11.3 Every person who connects to wastewater facilities or a storm sewer shall pay to the Town a "Building Service Connection Charge" for each connection for the administration of the connection permit and inspection of the connection, in the amount specified in Schedule "C" attached to and forming part of this By-law.

OFFENCES

- 12.1 Any person who contravenes any section of this By-law is guilty of an offence and is liable on conviction to a penalty of not less than \$500.00 and not more than \$10,000 and in default of payment to imprisonment for a term of not more than one year. Every day during which a contravention of, or failure to comply with, this By-law continues is a separate offence.
- 12.2 Notwithstanding section 12.1, every person who contravenes section 4.1(n) of this By-law is guilty of an offence and is liable on conviction to a penalty of not less

than \$1,500 and not more than \$10,000 and in default of payment to imprisonment for a term of not more than one year. Every day during which a contravention of, or failure to comply with, this By-law continues is a separate offence.

COSTS

- 13.1 All costs and fees chargeable under this By-law shall be due and payable from the date they are assessed.
- 13.2 The Clerk shall notify anyone liable for the costs or fees of the basis for the costs or fees and the account payable by either mailing notice by regular post to the last known address of such persons or by posting it on the property in respect of which it is charged.
- 13.3 All costs or fees remaining unpaid for more than thirty days subsequent to being due and payable shall bear interest at the same rate as charged by the Town for unpaid rates and taxes.
- 13.4 All costs, fees and interest thereon may be sued for and collected in the name of the Town in the same manner as the ordinary rates and taxes payable to the Town may be sued for and collected, and at the option of the Clerk be collectable at the same time and by the same proceedings as taxes.
- 13.5 All costs, fees and interest thereon shall be a first lien on the property in respect of which it is payable.

REPEAL

- 14.1 Chapter 19 of the Town By-laws entitled Sewer By-law, Chapter 60 of the Town By-laws entitled Sanitary Sewer By-law, and Chapter 65 of the Town By-laws entitled Sanitary Sewer By-law Amendments are hereby repealed.

EFFECT

- 15.1 This By-law shall take effect on March 31, 2009.

Clerk's Annotation For Official By-Law Book

Date of first reading: September 10, 2008
Date of advertisement of Notice of Intent to Consider: September 16, 2008
Date of second reading: October 8, 2008
Date of advertisement of Passage of By-Law: _____
Date of mailing to Minister a certified copy of By-Law: _____

I certify that this **SEWERS BY-LAW (Chapter 72)** was adopted by Council and published as indicated above.

Clerk

Date

Schedule "A"

SPILLS

Cost recovery charges in schedule "A" for Spills and are in addition to the sanitary sewer charges outlined in Schedule "B".

$$Z = PT/Q$$

Z is the monthly cost in \$ for the monthly billing period.

P is the total cost in \$ of C1 + C2 + C3 of all daily costs in the billing period.

C = total cost in \$ per day for a particular test date as determined by the following formula;

$$C = [(R_{bod} \times Y \times B) + (R_{ss} \times Y \times S) + (R_{fog} \times Y \times G)] / 100,000$$

R_{bod} = rate in \$ per pound of BOD as approved by Council each year.

R_{ss} = rate in \$ per pound of suspended solids as approved by Council each year.

R_{fog} = rate in \$ per pound of fat, oil & grease as approved by Council each year.

B = is the concentration in milligrams per litre by which the BOD of the sewage tested exceeds the two hundred (200) milligrams per litre.

S = is the concentration in milligrams per litre by which the suspended solids of the sewage tested exceeds the two hundred (200) milligrams per litre.

G = is the concentration in milligrams per litre by which the grease content of the sewage tested exceeds eighty-five (85) milligrams per litre.

Y = flow (water consumption) in the average number of Imperial gallons per day, used in the billing period.

T = number of days in the billing period.

Q is the total number of tests performed in the monthly billing period.

RECOMMENDATION FOR 2009/2010

Rbod = rate in dollars per pound of BOD = \$0.10

Rss = rate in dollars per pound of suspended solids = \$.00

Rfog = rate in dollars per pound of fat, oil & grease = \$.30

Schedule “B”

Sanitary Sewer Service Charge

- A. Where the sole source of water supplied to the property is the Kentville Water Commission, the Sanitary Sewer Service Charge is the total of the monthly rate based on meter size and the monthly rate based on consumption, calculated as follows:

Meter Size Rate	Per Month
<u>Size (")</u>	
5/8	\$6.44
0.75"	\$9.65
1"	\$16.10
1 1/2	\$32.20
2	\$51.51
3	\$103.01
4	\$160.96
6	\$321.92
8	\$579.45
10	\$901.37
Consumption Rate	
Rate Per 10 cu.metres	\$3.67

- B. Where the property is supplied with water from a source other than the Kentville Water Commission, the Sanitary Sewer Service Charge shall be \$15 per month per dwelling unit.
- C. There will be no exemption from the sanitary sewer service charge for water metered and used in production premises, swimming pools, irrigation, or in any other manner, although such water is not discharged into wastewater facilities.

Schedule “C”

Sanitary Sewer Connection Charge

Domestic waste connection charge: \$75

Industrial waste connection charge: \$200