

# MUNICIPALITY OF THE COUNTY OF KINGS

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## BY-LAW # 91

### SEWER DISCHARGE BY-LAW

#### A BY-LAW RESPECTING THE REGULATION OF DISCHARGING TO THE SEWERS OF THE MUNICIPALITY OF THE COUNTY OF KINGS

#### SHORT TITLE

1.1 This By-law may be cited as the “**Sewer Discharge 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 Municipality 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 Municipality;
- (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 Municipality 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 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 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;
- (n) **“Hauled Waste”** means any industrial waste which is transported to and deposited into wastewater facilities, excluding hauled wastewater;
- (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 Municipality;
- (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 than can be removed by filtration through a standard glass fibre filter as provided by “Standard Methods”;
- (bb) **“TKN”** means total kjeldahl nitrogen;
- (cc) **“Municipality”** means the Municipality of the County of Kings, 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.

## **USE OF SEWERS**

### **Discharges to Wastewater Facilities and/or Stormwater System**

- 3.1 No person shall permit the discharge into wastewater facilities or a stormwater system controlled by the Municipality, or into wastewater facilities or a stormwater system or building service connection connecting with the wastewater facilities or stormwater system controlled by the Municipality, 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 pas 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 discolor the effluent from such facilities;

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

Aluminum (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 Milligram/Litre
Cyanide (HCN)	1 Milligram/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 Milligram/Litre
Phosphorus (P)	12 Milligrams/Litre
Sulphates (SO <sub>4</sub> )	1500 Milligrams/Litre
Sulphide (H <sub>2</sub> S)	0.3 Milligrams/Litre
Selenium (Se)	0.82 Milligrams/Litre
Silver (Ag)	0.29 Milligrams/Litre
Tetrachloroethane	0.04 Milligrams/Litre
Tetrachloroethylene	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;

- (m) Wastewater containing more than two hundred (200) milligrams per litre of suspended solids;
- (n) Wastewater of which the COD exceeds one thousand (1000) milligrams per litre;
- (o) Wastewater containing more than fifty (50) 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;
- (p) Wastewater containing more than sixty (60) milligrams per litre of TKN.

3.2 Compliance with any limit is not attainable simply by dilution.

3.3 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.

#### **Discharge to Storm Sewers**

3.4 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.

3.5 Notwithstanding subsection 3.4, 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**

4.1 Where sampling is done by the Municipality 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) 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; and

- (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.

- 4.2 All costs associated with the sampling and analyzing 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**

- 5.1 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 immediately.
- 5.2 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.
- 5.3 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.
- 5.4 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 all property upon which the spill occurred, shall be jointly and severally liable for all costs incurred by the Municipality 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**

- 6.1 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 annually. This applies to approvals granted both prior to as well as after the effective date of this By-law.

- 6.2 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 expected maximum waste discharge rates, total monthly flows and contaminant concentrations, hours of operation and plans and reports certified by a professional engineer indicating proposed expansion, addition, new construction, or proposed pre-treatment works; and
  - (c) a schematic process diagram indicating waste discharge points and waste descriptions.
- 6.3 The Waste Survey Report shall be in the form specified by the Engineer.
- 6.4 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 and total monthly wastewater flow rates, in a form approved by the Engineer, as required by the Engineer on a basis or at such other intervals as the Engineer determines.
- 6.5 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".
- 6.6 All costs associated with the production of the reports in subsection 6.4 shall be borne by the owner of the property discharging the industrial waste.

### **MAINTENANCE ACCESS POINTS**

- 7.1 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 (12) 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 were installation of a maintenance access point is not possible, an alternative device or facility may be substituted with written approval of the Engineer.
- 7.2 All commercial food establishments shall have grease and oil separators installed and maintained on a schedule so as not to allow fat, grease or oil to enter the sewage collection system. The owner of said establishments shall



allow the engineer or designate to inspect separators as required for confirmation of operation and maintenance.

- 7.3 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.
- 7.4 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 their expense. 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.
- 7.5 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.

### **DISCONNECTION**

- 8.1 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 (10) days prior notice to the owner of the property.
- 8.2 Revocation of a connection permit by the Engineer may be appealed to Committee of the Whole within ten (10) days of the communication of the Engineer's decision to the owner of the property affected, by filing notice of appeal with the Clerk. Notice of appeal shall specify the basis for the appeal and the relief sought.
- 8.3 Committee of the Whole shall provide the appellant with an opportunity to be heard prior to any decision.
- 8.4 Committee of the Whole may uphold or reverse the Engineer's decision or amend it to include terms or conditions.

### **OFFENCES**

- 9.1 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 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**

- 10.1 All costs and penalties chargeable under this By-law shall be due and payable from the date they are assessed.
- 10.2 The Clerk shall notify anyone liable for the costs or penalties 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.
- 10.3 All costs or penalties remaining unpaid for more than thirty (30) days subsequent to being due and payable shall bear interest at the same rate as charged by the Municipality for unpaid rates and taxes.
- 10.4 All costs or penalties and interest thereon may be sued for and collected in the name of the Municipality in the same manner as the ordinary rates and taxes payable to the Municipality 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.
- 10.5 All costs or penalties and interest thereon shall be a first lien on the property in respect of which it is payable.

**Schedule "A"****Spills**

The costs described in this Schedule are based on a thirty (30) day period. The amount billed shall be established by dividing the applicable costs by thirty (30) to derive a daily rate and multiplying the daily rate by the actual number of days in the billing period.

The formula for determining the cost is:

$$Z = \frac{PT}{30Q}$$

Z is the cost in cents.

P is the total of R1 + R2 + R3....

$R = (0.55B + OS + OG)$  and R must be established for each test that takes place within the thirty (30) day period.

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

S is the amounts of milligrams per litre by which the suspended solids of the sewage exceeds two hundred (200) milligrams per litre.

G is the amount expressed in milligrams per litre by which the grease content of the sewage exceeds fifty (50) milligrams per litre.

T is the number of days in the billing period.

Y is the number of gallons of water used in the billing period, divided by 1000.

Q is the total number of tests performed in the 30 day period.

History of this By-law

Enacted - December 4, 2007