

# THE CORPORATION OF THE CITY OF BELLEVILLE

## BY-LAW NUMBER 2002-12

**A BY-LAW TO CONTROL THE DISCHARGE OF SEWAGE INTO THE SEWAGE SYSTEM OF THE CITY OF BELLEVILLE PURSUANT TO PARAGRAPHS 83 AND 150 OF SECTION 210 OF THE MUNICIPAL ACT, R.S.O. 1990, CHAPTER M.45.**

**WHEREAS** it is expedient to prohibit and regulate the discharge of domestic sewage and industrial wastes into drains, sewers, sewer systems and sewage works.

**NOW, THEREFORE, THE COUNCIL OF THE CORPORATION OF THE CITY OF BELLEVILLE ENACTS AS FOLLOWS:**

### PART 1

#### DEFINITIONS

1. In this by-law:
  - (a) “acute hazardous waste chemicals” means acute hazardous waste chemicals within the meaning of O.Reg. 347, as amended from time to time, made under the Environmental Protection Act, R.S.O. 1990 c. E. 19 (EPA);
  - (b) “biochemical oxygen demand” means carbonaceous oxygen demand (biochemical) as determined by Method 507 in Standard Methods when an inhibiting chemical has been added to prevent ammonia oxidation;
  - (c) “biomedical waste” means biomedical waste as defined in the Ontario Ministry of the Environment Guideline C-4 entitled “The Management of Biomedical Waste in Ontario” dated April 1994, as amended from time to time;
  - (d) “blowdown water” means water that is discharged from a cooling or heating water system for the purpose of controlling the level of water in the system or for the purpose of discharging from the system materials contained in the system, the further build-up of which would impair the operation of the system;
  - (e) “combined sewer” means a sewer intended to function as a storm sewer and a sanitary sewer designed to carry sewage, storm water, or uncontaminated water;
  - (f) “combustible liquid” means a liquid that has a flash point not less than 37.8 degrees Celsius and not greater than 93.3 degrees Celsius;

- (g) “composite sample” means a volume of sewage, storm water, uncontaminated water, or effluent made up of three or more grab samples that have been combined automatically or manually and taken at intervals during the sampling periods;
- (h) “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 process materials and that has been circulated through the cooling device, but does not include blowdown water;
- (i) “discharger” means an individual, association, partnership, corporation, municipality, or an agent or employee thereof, in occupation or having the charge, management, or control of a plant, sewage, storm water, uncontaminated water or any combination thereof, to which this by-law applies;
- (j) “fuel” means alcohol, gasoline, naphtha, diesel fuel, fuel oil or any other ignitable substance intended for use as a fuel;
- (k) “hailed sewage” means waste removed from a cesspool, a septic tank system, a privy vault or privy pit, a chemical toilet, a portable toilet, or a sewage holding tank;
- (l) “hailed waste” means any industrial waste which is transported to and deposited into any location in the sewage works excluding hailed sewage;
- (m) “ignitable waste” means a substance that,
- i) is a liquid, other than an aqueous solution containing less than 24 per cent alcohol by volume and has a flash point less than 61 degrees Celsius, as determined by the Tag Closed Cup Tester (ASTM D-56-79), the Setaflash Closed Cup Tester (ASTM D-3243-77 or ASTM D-3278-78), the Pensky-Martens Closed Cup Tester (ASTMD-93-79), or as determined by an equivalent test method,
  - ii) is a solid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a danger;
  - iii) is an ignitable compressed gas as defined in the regulations under the Transportation of Dangerous Goods Act, 1992, S.C. 1992, as amended,
  - iv) is an oxidizing substance (Class 5, Divisions 1 and 2) as defined in the regulations under the Transportation of Dangerous Goods Act, 1992, S.C. 1992, as amended;
- (n) “industrial” means of or pertaining to industry, manufacturing, commerce, trade, business, or institutions as distinguished from domestic or residential;
- (o) “pathological waste” means pathological waste within the meaning of O.Reg. 347. as amended from time to time, made under the Environmental Protection Act, R.S.O. 1990 c.E.19 (EPA);
- (p) “PCB” means any monochlorinated or polychlorinated biphenyl or any mixture of them or mixture that contains one or more of them;

- (q) “PCB waste” means a PCB waste within the meaning of O.Reg.352, as amended, made under the Environmental Protection Act, R.S.O. 1990 c.E. 19 (EPA);
- (r) “pesticides” means a pesticide regulated under the Pesticides Act, R.S.O. 1990, c.P. 11;
- (s) “pH” means the logarithm to the base 10 of the reciprocal of the concentration of hydrogen ions in moles per litre of solution;
- (t) “plant” means any site capable of discharging to a sewage works covered by this bylaw;
- (u) “reactive waste” means a substance that,
  - (a) is normally unstable and readily undergoes violent changes without detonating,
  - (b) reacts violently with water,
  - (c) forms potentially explosive mixtures with water,
  - (d) when mixed with water, generates toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment,
  - (e) is a cyanide or sulphide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment,
  - (f) is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement,
  - (g) is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure,
  - (h) is an explosive (Class 1) as defined in the regulations under the Transportation of Dangerous Goods Act, 1992, S.C. 1992, as amended;
- (v) “sanitary sewer” means a sewer for the collection and transmission of domestic, residential, commercial, institutional and industrial sewage or any combination thereof;
- (w) “severely toxic waste” means waste containing any contaminant listed in Schedule 3 of O.Reg. 347, as amended from time to time, made under the Environmental Protection Act, R.S.O. 1990c.E. 19 (EPA);
- (x) “sewage” means any liquid, solid or gas containing organic, inorganic, animal, vegetable or mineral matter in solution or in suspension but does not include storm water or uncontaminated water;
- (y) “sewage works” means any works for the collection, transmission, treatment and disposal of sewage, storm water or uncontaminated water, including a combined sewer, sanitary sewer or storm sewer, or any part of such works, but does not include plumbing or other works to which the Building Code Act, 1992 applies;
- (z) “sewer” means a pipe, conduit, drain, open channel, or ditch for the collection and transmission of sewage, storm water and/or uncontaminated water, or any combination thereof;

- (aa) “single grab sample” means a portion of the discharge from or deposit to the sewage works taken at a particular time and place;
- (bb) “spill” means a direct or indirect discharge or deposit to the sewage works storm sewer or the natural environment which is abnormal in quantity or quality in light of all the circumstances of the discharge;
- (cc) “Standard Methods” means a procedure set out in Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, American Water Works Association and the Water Environment Federation latest edition;
- (dd) “storm sewer” means a sewer for the collection and transmission of uncontaminated water, storm water, drainage from land or from a watercourse or any combination thereof;
- (ee) “storm water” means rainwater runoff, water runoff from roofs, flow from foundation drains, snow melt, and surface runoff;
- (ff) “uncontaminated water” means potable water as supplied by the municipality or any other water to which no matter has been added as a consequence of its use;
- (gg) “waste disposal site leachate” means the liquid containing dissolved or suspended contaminants which emanates from waste and is produced by water percolating through waste or by liquid in waste;
- (hh) “waste radioactive prescribed substances” means uranium, thorium, plutonium, neptunium, deuterium, their respective derivatives and compounds and such other substances as the Atomic Energy Control Board may designate as being capable of releasing atomic energy or as being requisite for the production, use or application of atomic energy.

## **PART 2**

### **SANITARY & COMBINED SEWER REQUIREMENTS**

- 2.1 No discharger shall cause or permit the deposit or discharge of sewage into a sanitary or combined sewer in any of the circumstances set out in Sections 2.1.1 to 2.1.4.
- 2.1.1 Sewage which causes or may cause or results or may result in any one or more of the following conditions:
  - (a) a health or safety hazard to a sewage works person authorized to operate, maintain, repair or otherwise work on a sewage works;
  - (b) a breach of the Ontario Water Resources Act or the Environmental Protection Act, as amended from time to time, or any regulation made there under from time to time;
  - (c) failure to meet, either directly or indirectly as a result of a sewage discharge, the objectives and criteria as set out in the Ministry of the Environment publication

entitled “Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land” dated March 1996, as amended from time to time;

- (d) an obstruction or restriction to the flow of the sanitary sewer or combined sewer;
- (e) an offensive odour to emanate from sewage works, and without limiting the generality of the foregoing, sewage containing hydrogen sulphide, carbon disulphide, other reduced sulphur compounds, amines or ammonia in such quantity as may cause an offensive odour;
- (f) damage to the sanitary or combined sewer works infrastructure;
- (g) interference with the operation or maintenance of the sewage works, or which may impair or interfere with any sewage treatment process;
- (h) an obstruction or restriction to the flow in sewage works.

2.1.2 Sewage with any one or more of the following characteristics:

- (a) a pH less than 6.0 or greater than 10.5;
- (b) consisting of two or more Environmental Protection Act rate liquid layers;
- (c) having a temperature greater than 60 degrees Celsius.

2.1.3 Sewage containing one or more of the following:

- (a) biomedical waste, except where the sewage meets the conditions for discharge as listed in the Ontario Ministry of the Environment Guideline C-4 entitled “The Management of Biomedical Waste in Ontario” dated April 1994, as amended from time to time;
- (b) combustible liquid;
- (c) fuel;
- (d) acute hazardous waste chemicals;
- (e) hauled sewage, except where:
  - i. the carrier of the hauled sewage is a waste management system operating under a certificate of approval or provisional certificate of approval issued under the Environmental Protection Act or is exempt from the requirement to have a certificate or provisional certificate of approval;
  - ii. a copy of the most recent certificate or provisional certificate and any amendment is provided to the municipality; and
  - iii. the carrier meets all conditions for discharge that are or may be required from time to time by the municipality;
- (f) hauled waste, except where:
  - i. the carrier of the hauled waste is a waste management system operating under a certificate of approval or provisional certificate of approval issued under the Environmental Protection Act or is exempt from the requirement to have a certificate or provisional certificate of approval;
  - ii. a copy of the most recent certificate or provisional certificate and any amendment is provided to the municipality;
  - iii. hauled waste meets the conditions set out in sections 23(3)(c) and 25(5)(b) of O.Reg. 347, R.R.O. 1990 made under the Environmental Protection Act, as amended from time to time; and
  - iv. the carrier meets all conditions for discharge that are or may be required from time to time by the municipality;

- (g) ignitable waste;
- (h) PCB waste, except where:
  - i. the discharger has a certificate of approval for a mobile site or PCB mobile waste disposal system issued under the Environmental Protection Act or where the discharger is claiming an exemption, the discharger has demonstrated to the municipality that the conditions of the exemption are met;
  - ii. a copy of the most recent certificate or provisional certificate and any amendment is provided to the municipality;
  - iii. the discharger has written approval from the municipality for the discharge of the PCB waste to the sewage works; and
  - iv. all requirements of O.Reg. 352 made under the Environmental Protection Act are met;
- (i) pesticides;
- (j) reactive waste;
- (k) waste radioactive prescribed substances, except where:
  - i. the waste radioactive prescribed substances are being discharged under a valid and current licence issued by the Atomic Energy Control Board or its successor; and
  - ii. a copy of the licence has been provided to the municipality.
- (l) waste disposal site leachate, except where:
  - i. the discharger has written approval from the municipality which authorizes the discharge or deposit of the waste disposal site leachate to the sewage works; and
  - ii. where a certificate of approval or order has been issued which includes a provision for the disposal of waste disposal site leachate to the sewage works, a copy of the certificate of approval or order is provided to the municipality or where the discharger is claiming an exemption, the discharger has demonstrated to the municipality that the conditions of the exemption are being met and has received notice in writing from the municipality approving such discharge to the sewage works.
- (m) solid or viscous substances in quantities or of such size to be capable of causing obstruction to the flow in a sewer, including but not limited to ashes, bones, cinders, sand, mud, soil, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, animal parts or tissues, and paunch manure;

2.1.4 Sewage containing a concentration, expressed in milligrams per litre, in excess of any one or more of the limits in Table 1 of this by-law entitled “Limits for Sanitary and Combined Sewers Discharge”.

2.2 Discharge of cooling water, ground water, storm water and uncontaminated water is prohibited to a sanitary sewer except where:

- (a) discharges which have been permitted by the municipality or its predecessor prior to the enactment of this by-law or discharges which have been regularly made since the enactment date of this by-law are identified to the municipality by the discharger by (month day year) and the municipality has provided exemption in writing to the discharger; or

(b) the discharger has entered into an agreement with the municipality regarding the discharge prior to any discharge and the discharger is complying with the agreement.

2.3 Discharge of water which originates from a source separate from the potable water supplied by the municipality is prohibited to a combined sewer or sanitary sewer except where the following is met:

(a) the amount of water, location of the water source, and address of discharger where the water is being used is provided to the municipality;

(b) in the case where the amount of water taken is greater than 50,000 litres per day and a copy of the Permit to Take Water issued under the ONTARIO WATER RESOURCES ACT is required, a copy of the Permit to Take Water is provided to the municipality;

(c) in the case where the discharger is claiming exemption from the requirement to have a certificate of approval, the discharger has demonstrated to the municipality that the conditions are met; and

(d) the discharger has entered into an agreement with the municipality regarding the discharge prior to any discharge and the discharger is complying with the agreement.

**LIMITS FOR SANITARY & COMBINED SEWERS DISCHARGE**

<b>PARAMETER</b>	<b>LIMIT mg/L</b>	<b>PARAMETER</b>	<b>LIMIT mg/L</b>
Mercury (total)	0.05	Benzene	0.01
Cadmium (total)	0.7	Ethylbenzene	0.16
Arsenic	1	Chloroform	0.04
Phenolics	1	1,4 Dichlorobenzene	0.47
Lead (total)	2	Methylene Chloride	0.21
Cyanide (total)	2	1,1,2,2 Tetrachloroethane	0.04
Copper (total)	3	Tetrachloroethylene	0.05
Nickel (total)	3	Trichloroethylene	0.07
Zinc (total)	3	Toluene	0.27
Chromium (total)	5	O-Xylene	0.52
Cobalt (total)	5		
Molybdenum (total)	5		
Silver (total)	5		
Antimony (total)	5		
Selenium (total)	5		
Bismuth	5		
Manganese (total)	5		
Tin (total)	5		
Titanium (total)	5		
Vanadium (total)	5		
Phosphorus (total)	10		
Fluoride	10		
Oil & Grease - mineral or synthetic in origin	15		
Aluminum (total)	50		
Iron	50		
Kjeldahl Nitrogen (total)	100		
Oil & Grease - animal or vegetable in origin	150		
Biochemical Oxygen Demand	300		
Suspended Solids (total)	350		
Chlorides	1500		
Sulphates	1500		

### **PART 3**

#### **PROHIBITION OF DILUTION**

- 3.1 The addition of water or any other material from any source which is added to sewage for the purposes of dilution to achieve compliance with Part 2 is prohibited.

### **PART 4**

#### **STORM SEWER REQUIREMENTS**

- 4.1 Discharge to a storm sewer is prohibited unless all of the following are met:
- (a) the discharge is cooling water or storm water or uncontaminated water;
  - (b) the discharge does not interfere with the proper operation of a storm sewer;
  - (c) the discharge does not obstruct or restrict a storm sewer or the flow therein;
  - (d) the discharge does not damage a storm sewer;
  - (e) the discharge does not result in any hazard or other adverse impact, to any person, animal, property, or vegetation;
  - (f) the discharge does not impair the quality of the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse;
  - (g) the discharge does not contravene or result in the contravention of a certificate or provisional certificate issued under the Ontario Water Resources Act or the Environmental Protection Act;
  - (h) the discharge does not have one or more of the following characteristics:
    - i. two or more separate layers;
    - ii. a pH less than 6.5 or greater than 8.5;
    - iii. a temperature greater than 40 degrees Celsius;
    - iv. visible film, sheen or discoloration;
    - v. biochemical oxygen demand greater than 15 mg./L;
    - vi. suspended solids (total) greater than 15 mg/L;
  - (i) the discharge does not contain one or more of the following:
    - i. biomedical waste as defined in the Ontario Ministry of the Environment Guideline C-4 entitled "The Management of Biomedical Waste in Ontario" dated April 1994, as amended from time to time;
    - ii. combustible liquids;
    - iii. fuels;
    - iv. hauled sewage;
    - v. hauled waste;
    - vi. ignitable waste;
    - vii. PCB waste;
    - viii. pesticides;
    - ix. reactive waste;
    - x. waste radioactive prescribed substances;
    - xi. waste disposal site leachate;
    - xii. floating debris;
    - xiii. hazardous industrial waste;
    - xiv. hazardous waste chemicals;

- xv. sewage;
  - xvi. severely toxic waste;
  - xvii. pathological waste;
  - xviii. a substance used in the operation or maintenance of an industrial site;
  - xix. blowdown water;
  - xx. acute hazardous waste chemicals;
  - xxi. E.coli colonies in excess of 200 per 100 ml.
- (j) the discharge does not contain contaminants from raw materials, intermediate or final products or wastewater from an industrial operation.

- 4.2 A discharger may be required, upon receipt of notice from the municipality, to complete one or more of the following activities as stated in the notice addressing storm water from the discharger's site:
- (a) a study on storm water quality and/or quantity;
  - (b) modification and/or construction of storm water facilities;
  - (c) development and implementation of a best management plan;
  - (d) adoption and implementation of pollution prevention techniques and measures;
  - (e) development and adoption of an environmental management system; or
  - (f) any other requirement as specified by the municipality.

## **PART 5**

### **DISCHARGER SELF-MONITORING**

- 5.1 The discharger shall complete, any monitoring or sampling of any discharge to a sewage works, as required by the municipality, and provide the results to the municipality in accordance with written notification from the municipality.
- 5.2 The obligations set out in or arising out of Section 5.1 shall be completed at the expense of the discharger unless the municipality has agreed in writing to share the expense with the discharger.

## **PART 6**

### **EXTRA STRENGTH SURCHARGE AGREEMENT**

- 6.1 The municipality may authorize an extra strength surcharge agreement with a discharger to permit exceedances for any one or more of the following parameters set out in Table 1, referred to in Section 2.1.4, for the following, where sewage is discharged to a sanitary sewer or combined sewer:
- (a) Biochemical Oxygen Demand;
  - (b) Phenolics (4AAP);
  - (c) Solvent Extractables – animal or vegetable in origin;
  - (d) Kjeldahl Nitrogen, Total;
  - (e) Phosphorus, Total; or
  - (f) Suspended Solids, Total.

- 6.2 The agreement may contain terms and conditions including terms and conditions related to the calculation and payment for the discharge to the sanitary sewer or combined sewer.
- 6.3 During the term of the agreement, the discharger is exempt from meeting the limits set out in the Table referred to in Section 2.1.4 for the parameter(s) included in the agreement, if all conditions stipulated by the municipality in the agreement are met.
- 6.4 The municipality may terminate the agreement at any time and the termination will be effective within seven (7) days of the delivery of a written notice to the discharger's site or head office.

## **PART 7**

### **SAMPLING AND ANALYSIS**

- 7.1 One sample alone is sufficient and, without limiting the generality of the foregoing the sample may be a grab sample or a composite sample, may contain additives for its preservation and may be collected manually or by using an automatic sampling device.
- 7.2 Except as otherwise specifically provided in this by-law, all tests, measurements, analyses and examinations of sewage, uncontaminated water and storm water, shall be carried out in accordance with Standard Methods and at a laboratory accredited by the Canadian Association of Environmental Analytical Laboratories (CAEAL).
- 7.3 In the case of sampling a discharge to a combined sewer, any storm water or uncontaminated water which is discharged at the time of sampling, is not to be considered a component of the sample for determining compliance with Section 2.1.2 or Section 2.1.4 of this by-law.
- 7.4 A discharger is responsible for any requirements set out in this by-law in respect of discharges or deposits of sewage, storm water or uncontaminated water into that part of a sewage works over which the discharger has or could have control.

## **PART 8**

### **MAINTENANCE ACCESS POINTS**

- 8.1 The municipality may require in written notification, the installation of maintenance access points or the upgrading of existing maintenance access points, for each connection to the sewage works at the site of a discharger, for the purpose of monitoring or sampling discharges as set out in Section 7.4.
- 8.2 Maintenance access points required under Section 8.1 shall be:
- (a) located on the property of the discharger unless the municipality permits an alternative location;
  - (b) accessible at all times by the municipality;

- (c) constructed in a manner which meets the standards of the municipality;
- (d) maintained to ensure access and structural integrity; and
- (e) maintained and constructed at the expense of the discharger.

## **PART 9**

### **SPILLS**

- 9.1 In the event of a spill to a sewage works, the discharger shall immediately notify the municipality, provide any information with respect to the spill which the municipality advises it requires and complete any work the municipality requires to mitigate the spill.
- 9.2 The discharger shall provide a report on the spill to the municipality, within seven (7) days after the spill, containing the following information:
- (a) location where spill occurred;
  - (b) name and phone number of person who reported the spill and location where they can be contacted;
  - (c) date and time of spill;
  - (d) material spilled;
  - (e) characteristics of material spilled;
  - (f) volume of material spilled;
  - (g) duration of spill event;
  - (h) work completed and/or still in progress in the mitigation of the spill; and
  - (i) preventative actions being taken to ensure the situation does not occur again.

## **PART 10**

### **OFFENCES**

- 10.1 Any person who contravenes any provision of this By-Law is guilty of an offence and upon conviction is liable to a fine of \$10,000.00 for a first offence and upon subsequent convictions under this By-Law to a fine of \$25,000.00 for any subsequent offence.
- 10.2 Despite section 10.1 where a corporation is convicted of an offence under this By-Law, the maximum penalty that may be imposed upon such corporation is \$50,000.00 for the first offence and \$100,000.00 for any subsequent offence.

## **PART 11**

### **GENERAL PROVISIONS**

- 11.1 THAT By-Law Number 8420 and all other by-laws related hereto be and the same are hereby rescinded.

**THIS BY-LAW SHALL COME INTO FORCE AND TAKE EFFECT IMMEDIATELY ON AND AFTER THE PASSING THEREOF.**

**READ A FIRST TIME THIS 28<sup>TH</sup> DAY OF JANUARY, 2002.**

**READ A SECOND TIME THIS 28<sup>TH</sup> DAY OF JANUARY, 2002.**

**READ A THIRD TIME AND FINALLY PASSED THIS 28<sup>TH</sup> DAY OF JANUARY, 2002.**

**\_\_\_\_\_  
GEORGE A. ZEGOURAS      MAYOR**

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JARY PLAMONDON      CITY CLERK**