#### THE TOWN OF ST. STEPHEN

#### BY-LAW NO. W-3

# A BY-LAW REGULATING THE DISCHARGE OF WATER OR WASTEWATER INTO DRAINS, STORM AND SANITARY SEWER SYSTEMS

#### BE IT ENACTED BY THE COUNCIL OF THE TOWN OF ST. STEPHEN AS FOLLOWS:

## 1. <u>INTERPRETATION</u>

In this bylaw,

"biochemical oxygen demand" means the quantity of oxygen, expressed in parts per million by weight, utilized in the biochemical oxidation of organic matter under standard laboratory conditions for five (5) days at a temperature of twenty (20) degrees Celsius,

"building drain" means the horizontal piping, including any vertical offset that conducts sewage, clear water waste or storm water to a building sewer,

"building sewer" or "sanitary sewer service connection" means a pipe that is connected to a building drain and that leads to a public sewer or private sewage disposal system,

"building storm drain" means that part of the lowest horizontal piping within a building that conducts water or storm water to a building storm sewer,

"building storm sewer" or "storm sewer service connection" means the extension from the building storm drain to the storm sewer main,

"chief administrative officer" means the Chief Administrative Officer appointed by the Council pursuant to subsection 74(1) of the *Municipalities Act*,

"colour" means any dissolved solids that impact a visible hue to water,

"council" means the Mayor and Councillors of the Town of St. Stephen,

"director of operations" means that person so appointed by Council to that position, and is accountable to Council through the Chief Administrative Officer.

"domestic wastewater" means the wastewater discharging from a residential building and wastewater of a like nature discharging from other buildings,

"grease" means an oily substance such as animal fat used in restaurants or lubricant used to make machinery run smoothly,

"interceptor" means a receptacle that is installed to prevent oil, grease, sand or other materials from passing into the sewer system,

"manhole" means a structure atop an opening in a gravity sewer to permit entry, "matter" includes any solid, liquid or gas,

"pH" means the logarithm, to the base 10, of the reciprocal of the concentration of hydrogen ions expressed in grams per litre of solution and denotes alkalinity or acidity,

"petroleum" means a wide variety of commercially important petrochemicals, such as gasoline and kerosene, consisting mainly of hydrocarbons,

"phenolic compounds" means those derivatives of aromatic hydrocarbons which have a hydroxyl group directly attached to the ring as determined by procedures in Standard Methods,

"sanitary sewage" means liquid wastes from residential, commercial, industrial and institutional premises, including groundwater where permitted but not including surface or storm water,

"sanitary sewer" means a sewer for the conveyance, treatment and disposal of sanitary sewage,

"separator" means tanks with capacity exceeding 2000 litres using density variations to separate insoluble petroleum from water as regulated by the New Brunswick Department of Environment,

"sewer" means a drain, pipe or conduit intended to convey wastewater or storm water,

"sewer system" means all of the property involved in the operation of the Town of St. Stephen sewer utility, and includes land, wastewater lines and appurtenances, pumping stations, treatment works, and general property,

"standard methods" means the analytical and examination procedures set forth in the current edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association (APHA), the American Water Works Association (AWWA), and the Water Environment Federation (WEF), or any publication by or under the authority of the Canadian Standards Association (CSA) deemed appropriate by the Director of Operations,

"storm sewer" means a sewer and all related structures designed exclusively for the collection and which carries storm and surface waters and drainage but excludes sanitary sewage or other wastewaters which do not meet standards for the waste water as established by the Province of New Brunswick or the Town of St. Stephen for discharge into a watercourse or storm drainage system,

"storm water" means waste water that is discharged from a surface as a result of rainfall or snowfall,

"storm water drainage system" means a system to collect, convey, channel, hold, inhibit, retain, detain, infiltrate, or divert storm water run-off,

"suspended solids" means solids that either flow on the surface of, or are in suspension in water, or waste water and which are removable by a laboratory filter device. Quantitative determination of suspended solids shall be made in accordance with the procedures set forth in Standard Methods for the Examination of Water and Wastewater,

"town" means the Town of St. Stephen

"uncontaminated water" means water to which no matter has been added as a consequence of its use, or to modify its use, by any person,

"wastewater" includes any industrial waste water or domestic waste water, whether treated or untreated, containing human, animal, vegetable or mineral matter in liquid or solid form, in suspension or in solution.

## 2. SANITARY AND COMBINED SEWER REQUIREMENTS

No discharge shall cause or permit the deposit or discharge of sewage into a sanitary or combined sewer in any of the circumstances set out in subsections 2.01 to 2.04.

- 2.01 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, and repair or otherwise work on sewage works.
  - (b) An obstruction or restriction to the flow of the sanitary sewer or combined sewer.
  - (c) An offensive odour to emanate from the sanitary sewer, combined sewer or sewage works.
  - (d) Damage to the sanitary or combined sewer works infrastructure.
  - (e) Interference with the operation and maintenance at a sewage works.
  - (f) Effluent from geothermal heat extraction systems.
- 2.02 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 separate liquid layers
  - (c) Having a temperature greater than sixty (60) degrees Celsius
- 2.03 Sewage containing one or more of the following:
  - (a) biomedical waste,
  - (b) combustible liquids,
  - (c) fuels,
  - (d) hauled sewage,
  - (e) hauled waste,
  - (f) ignitable waste,
  - (g) PCB waste,
  - (h) Pesticides,
  - (i) reactive waste,
  - (j) waste radioactive prescribed substances waste,

- (k) waste disposal site leachate,
- (l) solvents including, but not limited to, dry cleaning fluids and degreasers.
- 2.04 Sewage containing a concentration, expressed in milligrams per litre, in excess of any one or more of the limits in *Table I* of this bylaw entitled "Limits for Sanitary and Combined Sewers".
- 2.05 Discharge of cooling water, storm water and uncontaminated water is prohibited to a sanitary sewer except where,
  - discharges which have been permitted by the municipality or its predecessor prior to the enactment of this bylaw or discharges which have been regularly made since the enactment date of this bylaw are identified to the municipality by the discharger by September 30, 2001 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.
- 2.06 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) 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.

## 3. **PROHIBITION OF DILUTION**

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 Section 2 is prohibited.

# 4. STORM SEWER REQUIREMENTS

- 4.01 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 result in any hazard or other adverse impact to any person, animal, property, or vegetation.

- (e) The discharge does not impair the quality of the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse.
- (f) The discharge does not contravene or result in the contravention of a certificate or provisional certificate issued under the Province of New Brunswick's Clean Water Act or the Canadian Environmental Protection Agency.
- (g) The discharge does not have one or more the following characteristics:
  - (i) two or more separate layers
  - (ii) a pH less than 6.5 or greater than 8.5
- (h) The discharge does not contain one or more of the following:
  - (i) biomedical waste,
  - (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 waste,
  - (xi) waste disposal site leachate,
  - (xii) solvents including, but not limited to, dry cleaning fluids and degreasers.
- (i) The discharge does not contain contaminants from raw materials, intermediate or final products or wastewater from an industrial operation.
- 4.02 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.

## 5. REPORTING REQUIREMENTS

5.01 Prior to any discharge of sewage, storm water, cooling water, uncontaminated water or any combination thereof, to a sewage works, an industrial discharger is required to complete and return to the municipality the a "Discharger Information Report" under the following conditions:

- (i) where in the sole opinion of the municipality the discharger may have a significant impact on the sewage works and the municipality has provided notice to complete the report, or
- (ii) the discharger has or may require an extra strength surcharge agreement with the municipality.
- 5.02 If a discharger was discharging to the sewage works prior to the enactment of this by-law, the discharger shall comply with the requirements of subsection 5.01 on or before twelve (12) months of enactment.
- 5.03 The requirements in subsection 5.02 do not apply to the discharger if, in the opinion of the municipality, adequate information has been provided to and accepted by the municipality prior to the date of enactment of this by-law.
- 5.04 The discharger shall provide written notification to the municipality of any change to the information required under subsections 5.01, 5.02 or 5.03 within ten (10) days of the change.

### 6. **DISCHARGE SELF-MONITORING**

- 6.01 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. The municipality may sample itself.
- 6.02 The obligations set out in or arising out of subsection 6.01 shall be completed at the expense of the discharger unless the municipality has agreed in writing to share the expense with the discharger.

#### 7. EXTRA STRENGTH SURCHARGE AGREEMENT

- 7.01 The Town 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 I* referred to in subsection 2.04 for the following where sewage is discharged to a sanitary sewer or combined sewer:
  - (a) Biochemical Oxygen Demand,
  - (b) Phenolics (4AAP),
  - (c) Solvent Extractable animal or vegetable in origin,
  - (d) Kjeldahl Nitrogen, Total,
  - (e) Phosphorus, Total, or
  - (f) Suspended Solids, Total.
- 7.02 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.

- 7.03 During the term of the agreement, the discharger is exempt from meeting the limits set out in the Table referred to in subsection 2.04 for the parameters included in the agreement if all conditions stipulated by the municipality in the agreement are met.
- 7.04 Notwithstanding the conditions in subsection 5.04 where a discharger has entered into an extra strength surcharge agreement, any change in the information required in section 5 must be submitted to the municipality prior to the change to allow sufficient assessment of the impact of the change on the agreement.
- 7.05 The municipality will terminate the agreement at any time and the termination will be effective within thirty (30) days of the delivery of a written notice to the discharger's site or head office.

# 8. COMPLIANCE AGREEMENT

- 8.01 The Town may authorize a compliance agreement with a discharger to eliminate a noncompliance situation where the discharger is out of compliance with one or more conditions in Section 2.
- 8.02 The agreement shall have the following characteristics:
  - (a) Be for a fixed term,
  - (b) Contain reporting requirements to the municipality on significant stages in the progress towards compliance as determined by the municipality, and
  - (c) List the condition or conditions identified in subsection 8.01 and include a maximum interim limit for the parameter or parameters covered by the agreement.
- 8.03 During the term of the compliance agreement, the discharger shall be exempt from those parts of Section 2 specified in the compliance agreement provided that the discharger meets all of the conditions of the agreement.
- 8.04 The agreement provided for in subsection 8.01 may be terminated without notice by the municipality at any time where in the opinion of the municipality there is an immediate threat or danger to any person, animal, property, vegetation, or in any hazard or other adverse impact to a sanitary sewer, a combined sewer or a sewage works and the discharger is required to immediately comply with Section 2 of this by-law.

## 9. **SAMPLING**

9.01 The sampling and analysis required by this bylaw shall be done in accordance with the procedures described in the "Protocol for the Sampling and Analysis for the Municipal Sewer Use Bylaw in the Municipality of St. Stephen dated (month day year), as amended from time to time.

- 9.02 Non-compliance with this bylaw may be established through the analysis of a single grab sample done in accordance with subsection 9.01.
- 9.03 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 of determining compliance with subsection 2.02 or subsection 2.04 of this by-law.
- 9.04 A discharger is responsible for any requirements set out in this bylaw 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.

## 10. MAINTENANCE ACCESS POINTS

- 10.01 The Director of Operations 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 subsection 9.04.
- 10.02 Maintenance access points required under subsection 10.01 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 and as approved by the Director of Operations, in consultation with the Chief Administrative Officer,
  - (d) maintained to ensure access and structural integrity, and
  - (e) maintained and constructed at the expense of the discharger.

#### 11. SPILLS

- 11.01 In the event of a spill into a sewage works, the discharger shall immediately notify the municipality and shall provide any information with respect to the spill, which the municipality advises it requires and shall complete any work the municipality requires to mitigate the spill.
- 11.02 The discharger shall provide a written report on the spill to the municipality within forty-eight (48) hours after the spill, which shall contain the following information:
  - (a) location where spill occurred,
  - (b) name, phone number and location of person who reported the spill,
  - (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 do not occur again.

## 12. <u>INTERCEPTORS AND SEPARATORS</u>

#### 12.01 Petroleum

- (a) Petroleum interceptors and separators shall be designed and installed to the satisfaction of the Director of Operations so that the wastewater effluent discharges to the sanitary storm sewer and sanitary sewer system. Wastewater effluent from each device shall not display visible free-floating petroleum and total influent shall not exceed the maximum design flow for the unit.
- (b) Petroleum interceptors shall be of obvious watertight construction with a secondary storage area to collect separated petroleum. A direct connection of any part of a petroleum interceptor and a waste oil storage system, which will under any circumstances allow overflow, or backflow of the waste oil to enter the interceptor shall not be permitted. Petroleum interceptors shall be designed for the particular installation by an engineer, and shall be approved by the Director of Operations.
- (c) Each and any separator shall be approved by the New Brunswick Department of Environment.
- (d) All petroleum interceptors and separators shall be maintained according to manufacturers' recommendations.
- (e) A maintenance schedule and monthly record of maintenance shall be submitted to the Director of Operations annually for each petroleum interceptor and separator installed. Disposal of such slop from the separator shall be conducted according to Provincial environmental regulations.

#### 12.02 Grease

- (a) Grease interceptors and separators shall be installed at any commercial or industrial business that manufactures, uses or disposes of grease products which includes food preparation or dishwashing facilities. Wastewater effluent from each device shall not display visible free-floating grease and total influent shall not exceed the maximum design flow for the unit.
- (b) Units shall be designed by an engineer and be approved by the Director of Operations, and shall be installed to the satisfaction of a licensed plumbing inspector engaged by the Town for such installations.
- (c) Grease interceptors and separators shall be of obvious watertight construction.
- (d) All grease interceptors and separators shall be maintained according to manufacturers' recommendations.

(e) A maintenance schedule and monthly record of maintenance shall be submitted to the Director of Operations annually for each grease interceptor and separator installed. Disposal of such slop from the separator shall be conducted according to Provincial environmental regulations.

### 13. GENERAL

- 13.01 The owner or occupant of commercial or industrial premises with one or more connections to a sanitary sewer system, where required by the Director of Operations, shall install and maintain in good repair in each connection a suitable manhole to allow observation, sampling and measurement of the flow of wastewater therein, provided that where installation of a manhole is not possible, an alternative device or facility may be substituted with the approval of the Director of Operations.
- 13.02 Every manhole, device or facility installed as required by subsection 13.01 shall be designed and constructed in accordance with APEGNB recommended standards and the requirements of the Town, and shall be constructed and maintained on the lands of the owner or occupant of the premises at his expense.
- 13.03 The owner or occupant of commercial or industrial premises shall at all times ensure that every manhole, device or facility installed as required by this bylaw is at all times accessible for the purposes of observing, sampling and measuring the flow of wastewater therein.
- 13.04 The Town may require the owner or occupant of commercial or industrial premises to install devices to monitor wastewater discharges and to submit regular reports regarding the discharge to the Director of Operations.
- 13.05 A person who has entered into an extra strength surcharge agreement with the Town with respect to the discharge or deposit of wastewater shall not be prosecuted under this bylaw for the discharge or deposit of wastewater in accordance with the terms of that agreement.
- 13.06 For the purpose of the administration of this bylaw, an agent of the Town may, upon production of proper identification, enter any commercial or industrial premises to observe, measure and sample the flow of water or wastewater to any sewer.
- 13.07 No person shall break, damage, destroy, deface or tamper with,
  - (i) any part of a storm sewer or sanitary sewer system, or
  - (ii) any device whether permanently or temporarily installed in a storm sewer or sanitary sewer system for the purpose of measuring, sampling and testing water or wastewater.
- 13.08 All plumbing in connection with any house, building or other premises, which shall be connected with any sanitary sewer, must be made to conform with the provisions of the *Plumbing Code* of the Province of New Brunswick.

#### 14. PENALTY PROVISION

- 14.01 A person who violates any provision of this bylaw commits an offence and is liable on conviction to a fine of not less than Fifty Dollars (\$50.00) and not more than Two Hundred Dollars (\$200.00) for each offence.
- 14.02 Conviction of a person for a violation of a provision of this bylaw does not relieve the person from compliance with the bylaw and a Judge of the Provincial Court may, in addition to the fine imposed, order the person to do, within a specified time, any act or thing necessary for the proper observance of the bylaw or to remedy the violation thereof. A person who, after the expiry of such specified time, fails to comply with the order of the Judge of the Provincial court commits an offence punishable under Part II of the *Provincial Offences Procedure Act* as a category D offence.

# 15. <u>REPEAL PROVISION</u>

- 15.01 By-Law No. W-3, "A By-Law Regulating the Discharge of Water or Wastewater into Drains, Storm and Sanitary Sewer Systems", passed by Town Council on December 16, 2003, and amendments thereto, is hereby repealed.
- 15.02 The repeal of By-Law No. W-1, "A By-Law Regulating the Discharge of Water or Wastewater into Drains, Storm and Sanitary Sewer Systems" and amendments thereto, shall not affect any penalty, forfeiture or liability, incurred before such repeal or any proceeding for enforcing the same completed or pending at the time of repeal; nor shall it repeal, defeat, disturb, invalidate or prejudicially affect any matter or thing whatsoever completed, existing or pending at the time of repeal.

**IN WITNESS WHEREOF** the Town of St. Stephen has caused the corporate seal of the said Town to be affixed to this By-Law the 19<sup>th</sup> day of September, 2011.

First Reading:

August 22, 2011

Second Reading:

September 19, 2011

Third Reading and Enactment:

September 19, 2011

G. L. (Jed) Purcell, Mayor

Joan M. Flewelling, Town Clerk

TABLE 1
<u>LIMITS FOR SANITARY AND COMBINED SEWERS</u>

ATG	PARAMETER	LIMIT (Mg/I)
1a	Biochemical Oxygen Demand	300
2	Cyanide, Total	2
4a	Kjeldahl Nitrogen, Total	100
6	Phosphorus, Total	10
8	Suspended Solids, Total	350
9	Cadmium, Total	0.7
10	Chromium Total,	5
10	Cobalt, Total	5
10	Copper, Total	3
10	Lead, Total	2
10	Molybdenum, Total	5
10	Nickel, Total	3
10	Silver, Total	5
10	Zinc, Total	3
10	Alimony, Total	5
12	Arsenic, Total	1
12	Selenium, Total	5
12	Mercury, Total	0.05
14	Phenolies(4AAP)	1.0
16	Chloroform	0.04
17	1,4 - Dichlorobenzene	0.47
17	Methylene Chloride	0.21
17	1. 1.2,2, - Tetrachloroethane	0.04
17	Tetrachloroethylene	0.05
17	Trichloroethylene	0.07
17	Benzene	0.01
25	Ethylbenzene	0.16
25	Toluene	0.27
25	o-Xylene	0.52
25	Solvent Extractables - mineral or synthetic in origin	15
30	Solvent Extractables - animal or vegetable in origin	100
30	Fluoride	10