

# TOWN OF STEWIACKE

## BY-LAW NUMBER 2001 – 09

### 1. Short Title

This By-law may be cited as the “*Sewer Discharge By-law*”.

### 2. Interpretation

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

- a) “Biochemical Oxygen Demand (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 centigrade as determined in procedures set forth in “Standard Methods”.
- b) “Chemical Oxygen Demand (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) “Colour of liquid” means the appearance of a liquid from which the suspended solids have been removed;
- d) “Combined Sewer” means a sewer that is intended to conduct wastewater and stormwater;
- e) “Council” means the Town Council of the Town of Stewiacke;
- f) “Domestic Waste” means waste derived principally from dwellings;
- g) “Effluent” means treated wastewater flowing out of a treatment plant;
- h) “Engineer” means the Engineer for the Town of Stewiacke as appointed by Council;
- i) “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;
- j) “Industrial Premises” means an area of land with or without buildings or structures on which activities pertaining to industry, manufacturing, commerce, trade, business, or institutions as distinguished from domestic dwellings;

- k) “Inspector” means a person authorized by the Town of Stewiacke to carry out observations and inspections and to take samples as prescribed by this By-law;
- l) “Matter” includes any solid, liquid, or gas;
- m) “Natural Outlet” is any outlet from a natural watercourse into another watercourse, pond, ditch or lake, or other body of surface or groundwater;
- n) “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;
- o) “Person” shall mean any individual, firm, company, association, society, corporation or group;
- p) “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”;
- q) “Phenolic Compounds” means hydroxyl derivatives of benzene and its condensed nuclei, concentrations of which shall be determined by “Standard Methods”;
- r) “Professional Engineer” means a registered member in good standing of the Association of Professional Engineers of Nova Scotia;
- s) “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;
- t) “Sanitary Sewer” means a sewer for the collection and transmission of domestic, commercial and industrial wastewater or any of them, and to which uncontaminated or cooling water, storm, surface, and groundwater are not intentionally admitted;
- u) “Sewage” means wastewater;
- v) “Sewer” means a pipe, conduit, drain, open channel, or ditch used for the collection and transmission of wastewater, stormwater, or uncontaminated process or cooling water;

- w) “Sewerage System” means all pipes, mains, equipment, buildings and structures for collecting, pumping or treatment of wastewater and operated by the Town of Stewiacke, but does not include a storm sewer;
- x) “Standard Methods for examination of Water and Wastewater (Standard Methods)” means the analytical and examination procedures provided in the edition current at the time of testing, published jointly by the American Public Health Association and the American Water Works Association or any publication by or under the authority of the Canadian Standards Association deemed appropriate by the Town of Stewiacke;
- y) “Storm Sewer” means a sewer and all related structures designed exclusively for the collection and transmission of uncontaminated water, stormwater, drainage from land or from any watercourse or any of them;
- z) “Stormwater” means runoff water from rainfall or other natural precipitation, groundwater or water from the melting of snow or ice and shall include roof drainage and footing drainage;
- aa) “Suspended Solids” means insoluble matter that can be removed by filtration through a standard glass fibre filter as provided by “Standard Methods”;
- bb) “Town of Stewiacke” means the Town of Stewiacke or the area contained within its municipal boundaries, as the context requires;
- cc) “True Colour Units” means the measure of the colour of the water from which turbidity has been removed;
- dd) “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;
- ee) “Waste” means any material discharged into the sewerage system;
- ff) “Wastewater” means any liquid waste containing animal, vegetable, mineral, or chemical matter in solution or suspension carried from any premises; and
- gg) “Watercourse” means the bed and shore of every river, stream, lake, creek, pond, spring, lagoon, swamp, marsh, wetland, ravine, gulch or other natural body of water and the water therein, and any channel, ditch, reservoir, drain, land drainage works or other man-made surface feature, whether it contains or conveys water or not.

### 3. Use of Sewers

#### 3.1 Disposal of Waste:

No person shall discharge matter of any type or at any temperature or in any quantity which:

- a) may be or may become a health or safety hazard to a sewerage system's employee; or
- b) may be or may become harmful to a sewerage system; or
- c) may cause the sewerage system effluent to contravene any requirements of any applicable federal or provincial legislation; or
- d) may interfere with the proper operation of a sewerage system; or
- e) may impair or interfere with any sewage treatment process; or
- f) which is or may result in a hazard to any person, animal, property, or vegetation.

#### 3.2 Discharges to Combined and/or Sanitary Sewers:

3.2.1 Except as otherwise provided in this By-law, no person shall discharge, release, suffer or cause to be discharged into any sanitary sewer, combined sewer, public or private connections to any sanitary sewer or combined sewer any of the following:

- a) Matter of a type or quantity that has or may emit a toxic or poisonous vapour or a chemical odour that may interfere with the proper operation of the sewerage system, constitute a hazard to humans, animals or property, or create any hazards or become harmful in the receiving waters of the sewerage system;
- b) Noxious or malodorous gases or substances capable of creating a public nuisance except human wastes, including, but not limited to, hydrogen sulphide, mercaptans, carbon disulphide, other reduced sulphur compounds, amines and ammonia;
- c) 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 the sewerage system;

- d) Wastewater which consists of two or more separate liquid layers;
- 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 (1/4) inch screen;
- g) Gasoline, benzene, naphtha, fuel oil or other flammable or explosive matter or wastewater containing any of these in any quantity;
- h) Waste which, either by itself or upon the reaction with other material, becomes highly colored;
- i) Wastes containing herbicides, pesticides or xenobiotics including, but not limited to, polychlorinated biphenols (PCB's);
- j) Atomic wastes and radioactive materials except as may be permitted under the Atomic Energy Control Act (Canada) currently in force and regulations thereunder;
- k) Wastewater or uncontaminated water having a temperature in excess of sixty (60) degrees Celsius;
- l) Wastewater having a pH less than 5.5 or greater than 9.5 or having any other corrosive or scale forming properties capable of causing damage or hazard to the sewerage system or personnel of the sewerage system;
- m) Wastewater that will create tastes or odours in drinking water supplies, making such waters unpalatable after conventional water purification treatment;
- n) Matter of any type or at any temperature or in any quantity which may cause the sludge from the sewerage system to fail to meet the criteria relating to contaminants for spreading the sludge on agricultural lands, under Nova Scotia guidelines for sewage sludge utilization on agricultural lands;
- o) Stormwater, water from drainage of roofs or footing drains or land, or water from a watercourse or uncontaminated water, except in the case of discharge to any combined sewer;

- p) Sewage containing dyes or colouring materials which pass through a sewage works and discolour the sewage works effluent;
- q) Wastewater containing any of the following in excess of the indicated concentrations:
- Aluminum (Al) 50 Milligrams/Litre
  - Antimony (Sb) 5 Milligrams/Litre
  - Arsenic (As) 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 expressed as Cl 1500 Milligrams/Litre
  - Chromium (Cr) 4 Milligrams/Litre
  - Cobalt (Co) 5 Milligrams/Litre
  - Copper (Cu) 1 Milligram/Litre
  - Cyanide expressed as HCN 2 Milligrams/Litre
  - Fluorides expressed as F 10 Milligrams/Litre
  - Iron (Fe) 50 Milligrams/Litre
  - Lead (Pb) 2 Milligrams/Litre
  - Manganese (Mn) 5 Milligrams/Litre
  - Mercury (Hg) 0.1 Milligrams/Litre
  - Molybdenum (Mo) 5 Milligrams/Litre
  - Nickel (Ni) 2 Milligrams/Litre
  - Phenolic Compounds 1 Milligram/Litre
  - Phosphorus (P) 30 Milligrams/Litre
  - Sulphates expressed as SO<sub>4</sub> 1500 Milligrams/Litre
  - Sulphide expressed as H<sub>2</sub>S 2 Milligrams/Litre
  - Selenium (Se) 5 Milligrams/Litre
  - Silver (Ag) 2 Milligrams/Litre
  - Tin (Sn) 5 Milligrams/Litre
  - Zinc (Zn) 3 Milligrams/Litre.
- r) Wastewater of which the BOD exceeds three hundred (300) milligrams per litre;
- s) Wastewater containing more than three hundred fifty (350) milligrams per litre of suspended solids;
- t) Wastewater of which the COD exceeds one thousand (1000) milligrams per litre;

- u) Wastewater containing more than one hundred (100) milligrams per litre of fat, grease, or oil, and, in the case of mineral oils, in concentrations exceeding fifteen (15) milligrams per litre;
- v) Any matter in such quantities which exert excessive chlorine requirements so as to constitute a significant load on the wastewater treatment works;
- w) Wastewater containing fish offal or pathologic wastes;
- x) Septic tank sludge, wastes from marine vessels or vehicles or sludge from sewage treatment plants;
- y) Any waters or wastes containing substances for which special treatment or disposal practices are required by applicable provincial or federal legislation.

3.2.2 No person shall connect a sump pump to a sanitary sewer.

3.2.3 The presence in wastewater of any one of the matters in Section 3.2.1 in a concentration in excess of its limits constitutes a separate offence.

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

### 3.3 Discharges to Storm Sewers:

Except as otherwise provided in this By-law, no person shall discharge, release, place or cause to be placed, any substance other than stormwater or uncontaminated water into a storm sewer.

## 4. Sampling and Analysis

- 4.1 The owner or operator of industrial premises with one or more connections to a sewage works shall install and maintain in good repair in each connection a suitable manhole to allow observation and sampling of the wastewater and measurement of the flow of wastewater therein, provided that where installation of a manhole is not possible, an alternate device or facility may be substituted with the written approval of the Engineer.
- 4.2 The manhole or alternate device shall be located on the property of the owner or operator of the premises, unless the Engineer has given written approval for a different location.

- 4.3 Every manhole device or facility installed as required by subsection 4.1 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 or operator of the premises at his expense.
- 4.4 The owner or operator of industrial premises shall at all times ensure that every manhole device or facility installed as required by subsection 4.1 is at all times accessible for purposes of observing and sampling the wastewater and measuring the flow of wastewater therein.
- 4.5 Where a sample is required for the purpose of determining the characteristics or contents of the wastewater, uncontaminated water or stormwater to which reference is made in this By-law:
- a) 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;
  - 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 the By-law the analysis shall be for the quantity of total metal, which includes all metal both dissolved and particulate.
- 4.6 Where testing of a sample is required for the purpose of determining the characteristics or contents of the wastewater, uncontaminated water or stormwater to which reference is made in this By-law, said testing shall be conducted in accordance with the method hereinafter described or by mechanical sampling devices:
- a) A minimum of seven (7) grab samples shall be taken, one (1) each day at different days in any thirty (30) day period;
  - b) Analyses shall be conducted separately on each day's grab sample; and
  - c) The final results of these tests shall be averaged for this period to determine the characteristics and concentration of the effluent being discharged into the sewerage system or storm sewer system.



- 4.7 The Inspector may from time to time conduct such tests as are deemed necessary at the manhole, or may enter the industrial premises and conduct the tests as deemed necessary.

## **5. Spills**

- 5.1 Every person who discharges or deposits or causes or permits the discharge or deposit of any matter in any sewer that in nature or quantity is not in the ordinary course of events, shall forthwith notify the ***Town of Stewiacke***.
- 5.2 For any of the discharges in subsection 5.1 for which the person is required to forthwith notify the Town of Stewiacke, the notification shall include the following:
- a) The name of the company and the address of the spill;
  - b) The name of the person reporting the spill and telephone number where that person can be reached;
  - c) The time of the spill;
  - d) The type and volume of material discharged and any associated hazards; and
  - e) The corrective actions being taken to control the spill.
- 5.3 Within five (5) days following a spill, the person shall submit to the Town of Stewiacke a detailed written report describing the cause of the spill and the actions taken or to be taken to prevent a recurrence.

## **6. Waste Survey Report**

- 6.1 Any person who deposits, intends to deposit or permits or intends to permit the deposit of any waste except domestic wastes into a sanitary or combined sewer shall file a Waste Survey Report with the Engineer.
- 6.2 The Waste Survey Report shall contain the following information and shall be signed by an authorized representative of the owner or operator:
- a) The name and address of the premises, and the names of its owner and operator;

- b) Description of process operations, including waste discharge rates and contaminant concentrations, hours of operation and plans and reports certified by a professional engineer indicating proposed industrial 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 attached as Schedule “A”
- 6.4 Where a change occurs in the information contained in a Waste Survey Report, the owner or operator of the premises shall submit the new information within thirty (30) days of the change.
- 6.5 Where a change occurs in any information described in a Waste Survey Report, the owner or operator of the premises shall submit a new Waste Survey Report setting out the changes.
- 6.6 No person shall deposit any wastes other than domestic waste in any sanitary or combined sewer until:
- a) A Waste Survey Report has been filed with the Engineer; and
  - b) The Engineer has confirmed that the wastes will comply with the requirements of this By-law.

## **7. General**

- 7.1 For the purpose of the administration of this By-law, the Inspector may, upon production of his identification, enter any industrial premises and have free unimpaired access, to observe, to measure the flow of wastewater to any sewer and to collect any samples required at reasonable times upon reasonable notice.
- 7.2 No person shall break, damage, destroy, deface or tamper or cause or permit the breaking, damaging, destroying, defacing or tampering with:
- a) Any part of the sewerage system or storm sewer system; and
  - b) Any permanent or temporary device installed in the sewerage system or storm sewer system for the purpose of measuring, sampling and testing of wastewater.

- 7.3 No work shall be carried out on any sewer other than by the authority of the Engineer.
- 7.4 The Council shall have the power to stop and close up and prevent from discharging into the sewerage system, any private sewer or drain through which substances are discharged or into which substances are thrown, deposited, or supposed to be put, prohibited by this By-law or which are liable to injure the sewers or obstruct the flow of sewage.
- 7.5 The Council shall not cause any sewer to be closed up pursuant to this subsection unless the owner of the sewer is first notified and given an opportunity to be heard by Council.

## **8. Compliance Program**

- 8.1 A compliance program may be issued as set out in subsections 8.2 to 8.5 and 8.9 for the discharge of a non-complying effluent during the period of planning, design, construction or installation of facilities to eliminate the non-compliance with the limits prescribed in Sections 3 and 4.
- 8.2 The owner or operator of industrial premises may submit to the Town of Stewiacke a program to prevent or to reduce and control the discharge or deposit of wastewater into or in land drainage works, private branch drains or connections to any sanitary sewer or combination sewer from premises.
- 8.3 The owner or operator of industrial premises may submit to the Town of Stewiacke a program to eliminate the discharge or deposit of wastewater into or in land drainage works, private branch drains or connections to any storm sewer from the premises.
- 8.4 The Town of Stewiacke may issue an approval for a compliance program to the person who submitted the program.
- 8.5 Every compliance program shall be for a specified length of time during which the facilities are to be installed, and shall be specific as to the remedial actions to be implemented, the dates of commencement and completion, and the materials or other characteristics of the wastewater, uncontaminated water or stormwater to which it relates. The final activity completion date shall not be later than the final compliance date in the compliance program.
- 8.6 The compliance program shall be in the form attached as Schedule "B" and, upon recommendation of the Engineer, the person seeking an approval for a compliance program is authorized to execute such compliance programs under the authority of this By-law.

- 8.7 A person to whom a compliance program has been issued shall submit a compliance program progress report within 7 days after the scheduled completion date for each activity listed in the compliance program.
- 8.8 The compliance program progress report shall be in the form attached as Schedule "C".
- 8.9 Where the operating authority for the sewage treatment plant, land drainage work, or storm sewer which is receiving wastewater, uncontaminated water or stormwater from the premises identified in the letter of compliance program is not the Engineer, the compliance program does not become effective unless the operating authority has reviewed and approved the compliance program.
- 8.10 A person to whom a compliance program has been issued shall not be prosecuted under Sections 3 or 4 of this By-law so long as the compliance program is being fully complied with.

**9. Offenses**

Any person who contravenes any section of this By-law is liable on conviction to a penalty of not less than \$1,000.00 and not more than \$5,000.00 per occurrence and, in default of payment, to imprisonment for a term of not more than six (6) months, or both.

**10. Repeal**

This By-law repeals any and all By-laws regarding sewer discharge.

**Annotations for Official Bylaw Book**

Date of first reading: March 22, 2001

Date of advertisement of Notice of Intent to Consider: \_\_\_\_\_

Date of second reading: April 26, 2001

Date of advertisement of Passage of By-law: \_\_\_\_\_

Date of mailing to Minister a certified copy of By-law: \_\_\_\_\_

I certify that this ***Sewer Discharge By-law*** was adopted by Council and published as indicated above.

\_\_\_\_\_  
CAO / Clerk

\_\_\_\_\_  
Date