

SEWER DISCHARGE BY-LAW

A BY-LAW RESPECTING THE REGULATION OF DISCHARGES TO THE PUBLIC SEWER SYSTEMS

1. This By-law may be cited as the "Sewer Discharge By-law", 1994 .

DEFINITIONS

2. In this By-law, unless the context otherwise requires, the expression:
 - (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 centigrade as determined in procedures set forth in "Standard Methods";
 - (b) "Town" means the "Town" of "Mahone Bay" or the area contained within its municipal boundaries as the context requires;
 - (c) "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";
 - (d) "Colour of liquid" means the appearance of a liquid from which the suspended solids have been removed;
 - (e) "Combined Sewer" means a sewer that is intended to conduct wastewater and stormwater;
 - (f) "Council" means the "Town" Council of the Town of Mahone Bay;
 - (g) "Domestic Waste" means waste derived principally from dwellings;
 - (h) "Effluent" means treated wastewater flowing out of a treatment plant;
 - (i) "Engineer" means the Engineer for "Town" and includes the Superintendent of Works or the Building Inspector for the "Town";

- (j) "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;
- (k) "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;
- (l) "Inspector" means a person authorized by the "Town" of "Mahone Bay" to carry out observations and inspections and to take samples as prescribed by this By-law;
- (m) "Matter" includes any solid, liquid, or gas;
- (n) "Natural Outlet" is any outlet from a natural watercourse into another watercourse, pond, ditch or lake, or other body of surface or groundwater;
- (o) "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;
- (p) "Person" shall mean any individual, firm, company, association, society, corporation or group;
- (q) "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";
- (r) "Phenolic Compounds" means hydroxyl derivatives of benzene and its condensed nuclei, concentrations of which shall be determined by "Standard Methods";
- (s) "Professional Engineer" means a registered member in good standing of the Association of Professional Engineers of Nova Scotia;
- (t) "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;

- (u) "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;
- (v) "Sewage" means wastewater;
- (w) "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;
- (x) "Sewerage System" means all pipes, mains, equipment, buildings and structures for collecting, pumping or treatment of wastewater and operated by the "Town", but does not include a storm sewer;
- (y) "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 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";
- (z) "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;
- (aa) "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;
- (ab) "Suspended Solids" means insoluble matter than can be removed by filtration through a standard glass fibre filter as provided by "Standard Methods";
- (ac) "True Colour Units" means the measure of the colour of the water from which turbidity has been removed;
- (ad) "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;
- (ae) "Waste" means any material discharged into the sewerage system;

- (af) "Wastewater" means any liquid waste containing animal, vegetable, mineral, or chemical matter in solution or suspension carried from any premises;
- (ag) "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.

USE OF SEWERS

3.1 Disposal of Waste:

- 3.1.1 No person shall discharge matter of any type or at any temperature or in any quantity which may be or may become a health or safety hazard to a sewerage system's employee, or which may be or may become harmful to a sewerage system, or which may cause the sewerage system effluent to contravene any requirements of any applicable federal or provincial legislation, or which may interfere with the proper operation of a sewerage system, or which may impair or interfere with any sewage treatment process, or 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 coloured;
- (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 hazards 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 connected prior to Oct. 1/94; or a storm 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 Milligrams/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 Milligrams/Litre
Phosphorus (P)	30 Milligrams/Litre
Sulphates expressed as SO ₄	1500 Milligrams/Litre
Sulphide expressed as H ₂ 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 or a combined 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:

3.3.1 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.

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 alternative 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 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 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 this Bylaw 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 of 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:

Method of Sampling and Analysis

- 4.6.1 (i) A minimum of seven (7) grab samples shall be taken, one (1) each day at different days in any thirty (30) day period;
- (ii) Analyses shall be conducted separately on each day's grab sample;
- (iii) 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.

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 or the Inspector.
- 5.2 For any of the discharges in subsection 5.1 for which the person is required to forthwith notify the municipality, the notification shall include the following information:
- (a) name of the company and the address of location of 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.
- 5.4 Within five days following a spill, the person shall submit to the municipality a detailed written report describing the cause of the spill and the actions taken or to be taken to prevent a recurrence.

REPORTS

- 6.1 Any person who deposits, intends to deposit or permits or intends to permit the deposit of any wastes 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) name and address of the premises, and 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 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.

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;
or
 - (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 Municipal Engineer.
- 7.4.1 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.
- 7.4.2 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 the Council.

CONNECTIONS

8.1 No person shall connect any roof drain, subsoil drainage pipe, storm building drain or storm building sewer to any sewerage system.

DRAINS, DITCHES AND WATER COURSES

9.1 No person being the owner or occupier of real property shall permit any cinders, sand, pottery clay, mud, straw, shavings, metal, glass, ashes, feathers, tar, plastics, wood or other solid or viscous substances capable of causing obstruction to the flow of any water course, ditch or drain or other interference with the proper operation of any ditch, water course or drain to escape from the property owned or occupied by that person.

OFFENSES

10.1 Any person who contravenes any section of this By-law is liable on conviction to a penalty of not less than \$100.00 and not more than \$1,000.00 and in default of payment to imprisonment for a term of not more than three (3) years.

THIS IS TO CERTIFY that the foregoing By-law was duly passed at a duly called meeting of Council of the Town of Mahone Bay held the 13th day of *September*, A.D., 1994.

[Signature]
Municipal Clerk-Treasurer

DEPARTMENT OF MUNICIPAL AFFAIRS

Recommended for approval of the Minister

[Signature]
Deputy Minister

APPROVED this *27th* day of *October* 19*94*

[Signature]
Minister of Municipal Affairs