BY-LAW NO. W-3

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

BE IT ENACTED by the Council of the Town of Nackawic as follows:

1. <u>Interpretation</u>

In this by-law,

"Biochemical oxygen demand" means the quantity of oxygen utilized in the biochemical oxidation of matter in five (5) days at twenty (20) degrees Celsius.

"Building drain" means that part of the lowest horizontal piping within a building that conducts wastewater to a building sewer.

"Building sewer" or "sanitary sewer service connection" means the extension from the building drain 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.

"Colour" means any dissolved solids that impart a visible hue to water.

"Domestic wastewater" means the wastewater discharging from a residential building and wastewater of a like nature discharging from other buildings.

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

"Municipal sewage works" means the sewage works owned and/or operated by the Town of Nackawic.

"pH" means the logarithm, to the base 10 of the reciprocal of the concentration of hydrogen ions expressed in grams per litre of solution.

"Phenolic compounds" means those derivatives of aromatic hydrocarbons which have a hydroxyl group directly attached to the ring.

"Public Works Foreman" means the Public Works Foreman for the Town of Nackawic duly appointed by Council.

"Sanitary sewer" means for the collection and the transmission of sewage from residential, commercial, industrial and institutional uses, or any combination of them.

"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 Local Government and Environment.

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

"Sewage works" means all sewers, sewer systems, sewage pumping stations, sewage treatment plants and other works for the collection, acceptance, transmission, treatment and disposal of sewage or for any one or more of them.

"Sewer" means drainage, storm water, commercial wastes, industrial wastes, and domestic wastewater.

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

"Standard methods" means, unless the context otherwise requires, the methods and procedures from time to time approved by the New Brunswick Department of Environment or those set out in the latest edition of *Standard Methods for the Examination of Water and Wastewater* published by the American Public Health Association (APHA), and current at the time of any examination of any waste water.

"Storm sewer" means any sewers intended for the collection and transmission of rain water or water resulting from the melting of snow and ice, emanating from the drainage of building foundations, or surface drainage, or any combination thereof.

"Suspended solids" means the quantity of material removed from wastewater in a laboratory test as prescribed in *Standard Methods for the Examination of Water and Wastewater*.

"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. <u>General</u>

(a) The Town may construct, operate and maintain the municipal sewage works over Town-owned lands or over lands upon which the Town has an easement or other right, and the Public Works Foreman shall be responsible for the administration of said municipal sewage works.

(b) No person shall, unless authorized by the Public Works Foreman, uncover, break, damage, destroy, deface, tamper with, make any connections to or use any municipal sewage works of the Town of Nackawic.

(c) No person shall operate an auto mechanic garage, gasoline service station, vehicle and equipment washing establishment, food preparation establishment or a restaurant without installing an interceptor suitable for the proper filtering of sewage containing grease, oil, flammable wastes or sand. Said interceptor is to be located so as to be accessible for cleaning and inspection and shall be maintained in working condition.

(d) Where any repair or maintenance to municipal sewage works is occasioned by any act or omission of any person, such person shall be liable for the cost of any such repair or maintenance.

(e) Notwithstanding the provisions of this by-law, the Town may enter into an agreement for the discharge of sewage that would otherwise be prohibited by this by-law under such terms and conditions as may be necessary to compensate for any additional costs of collection and/or treatment of same.

(f) 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 Public Works Foreman.

(g) A person who has entered into an agreement with the Town with respect to the discharge or deposit of wastewater shall not be prosecuted under this by-law for the discharge or deposit of wastewater in accordance with the terms of that agreement.

(h) 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.

3. <u>Discharge Into Sanitary or Combined Sewage Works</u>

No person shall discharge or deposit or cause to be discharged into any sanitary sewer or combined sewer, any of the following:

(a) sewage containing more than 150 milligrams per litre of oil, fat or grease of animal or vegetable origin,

(b) sewage containing more than a total of 15 milligrams per litre of oil, grease, tar or mineral or synthetic origin, gasoline, benzene, naphtha, fuel oil, acetone or other solvents of a flammable or combustible nature,

(c) ashes, cinders, sand, straw, mud, shavings, metal, glass, rags, feathers, plastic, wood, cellulose, tar, animal wastes, hair, wool, fur, garbage, except adequately ground garbage from household disposal grinders or any food waste which has not been properly shredded, or any other matter that has not been dissolved in a liquid at the time of its discharge or deposit into the sewage works,

(d) sewage containing hydrogen sulphide, carbon disulphide, ammonia, trichloroethylene, sulphur dioxide, formaldehyde, chlorine, bromine, or pyridine, in such quantities that an offensive odour emanates from the sewage works,

(e) any pesticides or herbicides,

(f) radioactive materials, except as may be permitted under federal and provincial statutes,

(g) except for combined sewers, storm runoff, ground water, subsurface drainage, foundation drains, unpolluted industrial waters, sewage derived from the drainage of land or roofs or water used for heating or cooling purposes, and

(h) sewage containing a concentration, expressed in milligrams per litre, in excess of any one or more of the limits in *Table I* of this by-law entitled "*Limits for Sanitary and Combined Sewers*".

4. <u>Discharge Into Storm Sewage Works</u>

No person shall discharge or deposit or cause to be discharged into any storm sewage, any of the following:

(a) sewage at a temperature in excess of 65 degrees Celsius,

(b) sewage containing more than a total of fifteen (15) milligrams per litre of fat, oil, grease, freon "trichorotrifluoroethane" extractable matter, gasoline, benzene, naphtha, fuel oil, acetone or solvents or flammable or combustible nature,

(c) ashes, cinders, garbage, sand, straw, mud, shavings, metal, glass, rags, feathers, plastics, wood, cellulose, tar, animal wastes or other matter which is not dissolved in a liquid at the time of its discharge or deposit into the sewage works,

(d) sewage containing a pH less than 6 or greater than 10.5 or which due to its nature or content becomes less than 6 or greater than 10.5 during transmission through the sewage works,

(e) sewage in which suspended solids content exceeds fifteen (15) milligrams per litre or sewage containing any suspended solids which are incapable of passing through a screen having openings not larger than 6.35 mm or 25 mm square,

(f) sewage containing hydrogen sulphide, carbon disulphide, ammonia, trichloroethylene, sulphur dioxide, formaldehyde, chlorine, bromine or pyridine, in such quantity that an offensive odour emanates from the sewage works,

(g) sewage containing colour matter which would require dilution in excess of four (4) parts of distilled water to one (1) part of such sewage to produce a mixture of which is not distinguishable from that of distilled water which tested in accordance with a visual comparison as outlined in "Standards Methods",

(h) radioactive materials except as may be permitted under federal and provincial statutes,

(i) any pesticides or herbicides,

(j) sewage, which consists of two or more separate liquid layers,

(k) sewage containing toxic or poisonous matter in sufficient quantity to constitute a hazard to persons, property or animals.

5. <u>Spills</u>

5.01 In the event of a spill to 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.

5.02 The discharger shall provide a report on the spill to the municipality within fortyeight (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.

6. <u>Interceptors and Separators</u>

6.01 <u>Petroleum</u>

(a) Petroleum interceptors and separators shall be installed so that the wastewater effluent discharges to the 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 Public Works Foreman.

(c) Each and any separator shall be approved by the New Brunswick Department of Local Government and 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 Public Works Foreman annually for each petroleum interceptor and separator installed.

6.02 <u>Grease</u>

(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 Public Works Foreman, 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 Public Works Foreman annually for each grease interceptor and separator installed.

7. <u>Manholes</u>

7.01 The owner or occupant of commercial or industrial premises with one or more connections to a sanitary sewer system, where required by the Public Works Foreman, 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 Public Works Foreman.

7.02 Every manhole, device or facility installed as required by subsection 7.01 shall be designed and constructed in accordance with good engineering practice 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 or her expense.

7.03 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.

8. <u>Enforcement</u>

8.01 The Public Works Foreman is hereby designated as the person authorized for the purposes of enforcement of this by-law.

9. <u>Penalty Provision</u>

9.01 Any person who violates any provision of this by-law is guilty of an offence and is liable on conviction to a minimum fine of Fifty Dollars (\$50.00), and a maximum fine of Five Hundred Dollars (\$500.00).

ATG	PARAMETER	LIMIT (MG/L)
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
	Chromium, Total	5
	Cobalt, Total	5
	Copper, Total	3
	Lead, Total	2
	Molybdenum, Total	5
	Nickel, Total	3
	Silver, Total	5
	Zinc, Total	3
10	Antimony, Total	5
	Arsenic, Total	1
	Selenium, Total	5
12	Mercury, Total	0.05
14	Phenolics (4AAPO	1.0
16	Chloroform	0.04
	1,4 – Dichlorobenzene	0.47
	Methylene Chloride	0.21
	1,1,2,2, - Tetrachloroethane	0.04
	Tetrachlorethylene	0.05
	Trichlorethylene	0.07
17	Benzene	0.01
	Ethylbenzene	0.16
	Toluene	0.27
	O-Xylene	0.52
25	Solvent Extractables – mineral or synthetic in origin	15
	Solvent Extractables – animal or vegetable in origin	150
30	Fluoride	10

Table 1 – Limits for Sanitary and Combined Sewers

DULY PASSED AND ENACTED BY THE COUNCIL OF THE TOWN OF NACKAWIC ON APRIL 19, 2004.

Robert G. Connors, Mayor

Nancy Cronkhite, Chief Administrative Officer

First Reading:April 5, 2004Second Reading:April 19, 2004Third Reading:April 19, 2004