

SEWER USE BY-LAW No. 1803 -2006

**for the Control of Discharges
to Municipal Sewers
in the County of Prince Edward**

TABLE OF CONTENTS

	<u>Page No.</u>
Part 1 - Definitions	1
Part 2 - Sanitary and Combined Sewer Requirements	5
Table 1 - Limits for Discharge into Sanitary Sewers	9
Part 3 - Prohibition of Dilution	11
Part 4 - Storm Sewer Requirements	11
Table 2 - Limits for Discharge into Storm Sewers	13
Part 5 - Reporting Requirements	14
Part 6 - Discharge Self-Monitoring	14
Part 7 - Extra Strength Surcharge Agreement	14
Part 8 - Compliance Program	15
Part 9 - Maintenance Access Points	16
Part 10 - Sampling and analytical Requirements	17
Part 11 - Spills	17
Part 12 - Grease/Sediment Interceptors	18
Part 13 - Pretreatment and Self-Monitoring and Reporting	19
Part 14 - General	19
Part 15 - Sewer Connections	20
Part 16 - Offences	24
Part 17 - Repeal	25

BY-LAW NUMBER 1803 -2006

OF THE CORPORATION OF THE COUNTY OF PRINCE EDWARD

BEING A BY-LAW TO CONTROL DISCHARGES TO THE
MUNICIPAL SEWER SYSTEM PURSUANT TO SECTION 11(1)4
AND 87 OF THE MUNICIPAL ACT 2001, S.O. 2001, C.25

WHEREAS Section 11(1) 4 of the Municipal Act, 2001, permits a Municipality to pass by-laws respecting matters concerning public utilities, which includes the collection of sewage; and

WHEREAS the Council of the Corporation of the County of Prince Edward deems it necessary to regulate and inspect discharges to any sewer, sewer system or sewage works;

NOW THEREFORE the Council of the Corporation of the County of Prince Edward hereby enacts as follows:

Part 1 - DEFINITIONS

1. In this by-law:
 - (1) "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);
 - (2) "biochemical oxygen demand (B.O.D.)" means the quantity of oxygen utilized in the biochemical oxidation of organic matter in five (5) days at twenty (20) degrees Celsius as determined in accordance with Standard Methods and expressed in milligrams per litre.
 - (3) "blowdown water" means recirculating 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;
 - (4) "combined sewer" means a sewer intended to function simultaneously as a storm sewer and a sanitary sewer;

- (5) "combustible liquids" means a liquid that has a flash point not less than 37.8 degrees Celsius and not greater than 93.3 degrees Celsius;
- (6) "Commissioner" means the Commissioner of Public Works of the County of Prince Edward and his/her successors or his/her duly authorized representatives.
- (7) "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;
- (8) "connection" or "drain" means that part of those parts of any pipe or system of pipes leading directly to a sewage works;
- (9) "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;
- (10) "Discharger" means an owner or operator of an industrial, commercial or institutional premises who is discharging sewage, stormwater, cooling water or uncontaminated water into a sewage works;
- (11) "double municipal sewer connection" means a municipal sewer connection servicing two or more premises;
- (12) "fuels" means alcohol, gasoline, naphtha, diesel fuel, fuel oil or any other ignitable substance intended for use as a fuel;
- (13) "grab sample" means a portion of the discharge from or deposit to the sewage works, that is collected at one instant in time;
- (14) "groundwater" means water beneath the earth's surface accumulating as a result of seepage;
- (15) "hailed holding tank sewage" means waste removed from a sewage holding tank.
- (16) "hailed septic sewage" means waste removed from a sewage system, including a cesspool, a septic tank system, a privy vault or privy pit, a chemical toilet or a portable toilet;
- (17) "hailed waste" means any industrial waste which is transported to and deposited into any location in the sewage works excluding hauled sewage;
- (18) "hazardous industrial waste" means hazardous industrial 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);

- (19) "ignitable waste" means a substance that,
- (a) is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has a flash point less than 61 degrees Celsius, as determined by the Tag Closed Cup Tester (ASTM D-56-97a), the Setaflash Closed Cup Tester (ASTM D-3828-97 or ASTM D-3278-96e1), the Pensky-Martens Closed Cup Tester (ASTM D-93-097), or as determined by an equivalent test method,
 - (b) 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;
 - (c) is an ignitable compressed gas (Class 2, Division D) as defined in the regulations under the Transportation of Dangerous Goods Act, 1992 S.C. 1992, as amended, or,
 - (d) 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;
- (20) "industrial" means of or pertaining to industry, manufacturing, commerce, trade, business, or institutions as distinguished from domestic or residential;
- (21) "inspector" means the Commissioner of Public Works or his or her designate and includes such municipal employees operating under the Commissioner's authority;
- (22) "maintenance access point" means an access point in a private sewer connection, large enough for a man to enter to allow for observation, sampling and flow measurement of the sewage, uncontaminated water or storm water therein;
- (23) "matter" means any solid, liquid or gas;
- (24) "municipal sewer connection" means that part of any drain leading from the private sewer connection to the municipal sewer and located within the limits of the public road allowance, or other public lands or public land interests held for sewage purposes;
- (25) "Municipality" means the Corporation of the County of Prince Edward;
- (26) "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);
- (27) "PCB" means any monochlorinated or polychlorinated biphenyl or any mixture of them or mixture that contains one or more of them;

- (28) "pH" means the logarithm of the reciprocal of the concentration of hydrogen ions in grams per litre of solution.
- (29) "person" includes an individual, association, partnership, corporation or municipality and includes an agent or employee of such person.
- (30) "pesticide" means a pesticide regulated under the Pesticides Act, R.S.O. 1990, c.P.(PA);
- (31) "private sewer connection" means that part of any drain or system of drains, including drains or subsurface drainage pipe for surface or subsurface drainage of the land in or adjacent to a building, lying within the limits of the private lands and leading to a municipal sewer connection;
- (32) "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;
- (33) "sanitary sewer" means a sewer for the collection and transmission of domestic or industrial sewage or any combination thereof;
- (34) "severely toxic waste" means 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. 1990 c.E.19 (EPA);
- (35) "sewage" means any liquid, solid or gas containing organic, inorganic, animal, vegetable or mineral matter in solution or in suspension and includes things that float but does not include storm water or uncontaminated water;

- (36) "sewage works" means any works for the collection, transmission, treatment or disposal of sewage, storm water or uncontaminated water, including a combined sewer, sanitary sewer or storm sewer, or any part of such works, but not include plumbing or other works to which the Building Code Act, 1992 applies;
- (37) "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;
- (38) "spill" means a direct or indirect discharge into 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;
- (39) "Standard Methods" means a procedure or method 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;
- (40) "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;
- (41) "storm water" means water from rainfall or other natural precipitation or from the melting of snow or ice;
- (42) "subsurface drainage pipe" means a pipe that is installed underground to intercept and convey surface water, and includes foundation drain pipes;
- (43) "suspended solids" means solids that either float on the surface of or are in suspension in waste water and which are easily removable by laboratory filtering in accordance with Standard Methods;
- (44) "uncontaminated water" means potable water supplied by the Municipality that has not had any matter added to it after it has been supplied and any water to which no matter has been added intentionally or unintentionally;
- (45) "waste disposal site leachate" means the liquid containing dissolved or suspended contaminants which emanates from the waste and is produced by water percolating through the waste or by liquid in the waste;
- (46) "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 by regulation designate as being capable of releasing atomic energy or as being requisite for the production, use or application of atomic energy; and

- (47) "watercourse" means an open channel, ditch or depression either natural or artificial, in which flow of water occurs either continuously or intermittently.

Part 2 - SANITARY REQUIREMENTS

2. (1) No person shall discharge or deposit or cause or permit the discharge or deposit of sewage or any other material into or in land drainage works, private branch drains or connections to any sanitary sewer in circumstances where,
- (a) to do so may cause or result in,
- (i) a health or safety hazard to a person authorized by the Commissioner to inspect, operate, maintain, repair or otherwise work on a sewage works;
 - (ii) an offence under the Ontario Water Resources Act or the Environmental Protection Act, as amended from time to time, or any regulation made thereunder from time to time;
 - (iii) biosolids from the sewage works to which either sewage discharges, directly or indirectly, to fail to meet the objectives and criteria as listed 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;
 - (iv) interference with the operation or maintenance of a sewage works, or which may impair or interfere with any treatment process;
 - (v) a hazard to any person, animal, property or vegetation;
 - (vi) an offensive odour to emanate from the sanitary sewer or combined sewer, 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;
 - (vii) damage to sewage works infrastructure; or
 - (viii) an obstruction or restriction to the flow in the sanitary sewer.
- (b) the sewage has one or more of the following characteristics:
- (i) a pH less than 6.0 or greater than 10.5;
 - (ii) two or more separate liquid layers; or
 - (iii) a temperature greater than sixty degrees Celsius

- (2) No person shall discharge or deposit or cause or permit the discharge or deposit of sewage or any other material into or in land drainage works, private branch drains or connections to any sanitary sewer in circumstances where the sewage contains:
- (a) acute hazardous waste chemicals;
 - (b) combustible liquids;
 - (c) dyes or colouring materials which pass through a sewage works and discolour the sewage works;
 - (d) fuel;
 - (e) hauled septic sewage and hauled holding tank 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 of approval 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 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 of approval or provisional certificate and any amendment is provided to the Municipality; and
 - (iii) hauled waste meets the conditions set out in Clauses 23(3)(c) and 25(5)(b) of O.Reg. 347, R.R.O. 1990, 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) hazardous industrial waste;
 - (i) hazardous waste chemicals;
 - (j) pathological waste;
 - (k) PCBs, except where:

- (i) the person has a certificate of approval for a mobile site or PCB mobile waste disposal system issued under the EPA or where the person is claiming exemption under a regulation;
 - (ii) the person has demonstrated to the Municipality that the conditions of the exemption are met;
 - (iii) a copy of the most recent certificate of approval or provisional certificate and any amendment is provided to the Municipality; and
 - (iv) the person has written approval from the Municipality for the discharge of the PCBs to the sewage works;
- (l) pesticides;
 - (m) reactive waste;
 - (n) severely toxic waste;
 - (o) 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;
 - (p) waste disposal site leachate, except where:
 - (i) the person has written approval from the Municipality which authorizes the discharge or deposit of the waste disposal site leachate to the sewage works; and
 - (ii) in the case 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 person is claiming as exemption, the person has demonstrated to the Municipality that the conditions of the exemption are being met.
 - (q) 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 Discharge into Sanitary Sewers".
 - (r) wastewater generated by steam cleaning, except where:
 - (i) such wastewater has first been discharged into a condensing tank; and
 - (ii) the design, construction and installation of such tank has been approved by the Chief Building official; and

- (iii) the temperature of the wastewater prior to discharge has been reduced to 60 degrees Celsius or lower.
- (s) solid or viscous substances in quantities of such size to be capable of causing obstruction to the flow in a sewer, including but not limited to ashes cinders, sand, mud, soil, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, bones, fish scales, animal or fish parts or tissues and paunch manure.
- (3) No person shall discharge storm water, groundwater, non-contact cooling water or uncontaminated water to a sanitary sewer except where the Municipality has provided by written notice of exemption to the person and so long as the person to whom the notice is directed is complying with any terms and conditions set out in the notice of exemption by the Commissioner.

3.

Table 1 - Limits for Discharge Into Sanitary Sewers

Parameter	Limit (mg/L)
Biochemical Oxygen Demand	300
Cyanide, Total	2
Kjeldahl Nitrogen, Total	100
Phosphorus, Total	10
Suspended Solids, Total	350
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
Antimony, Total	5
Arsenic, Total	1

Selenium, Total	5
Mercury, Total	0.05
Phenolics (4AAP)	1.0
Chloroform	0.04
1,4 - dichlorobenzene	0.47
Methylene chloride	0.21
1,1,2,2 - Tetrachloroethane	0.04
Tetrachloroethylene	0.05
Trichloroethylene	0.07
Benzene	0.01
Ethylbenzene	0.16
Toluene	0.27
o-Xylene	0.52
Solvent Extractables - mineral or synthetic in origin	15
Solvent Extractables - animal or vegetable in origin	150
Fluoride	10

Part 3 - PROHIBITION OF DILUTION

3. No person shall discharge directly or indirectly or deposit or cause or permit the discharge or deposit of sewage into a sanitary sewer, storm sewer, municipal sewer connection or private sewer connection to any sanitary sewer or storm sewer in circumstances where water has been added to the discharge for the purposes of dilution to achieve compliance with this by-law.

Part 4 - STORM SEWER REQUIREMENTS

4. (1) No person shall discharge or deposit or cause or permit the discharge or deposit of matter into or in land drainage works, private branch drains or connections to any storm sewer, matter of any type, which may:
- (a) interfere with proper operation of a storm sewer;
 - (b) obstruct or restrict a storm sewer or the flow therein;
 - (c) damage the storm sewer;
 - (d) result in any hazard or adverse impact, to any person, animal, property or vegetation;
 - (e) contravene or result in the contravention of a certificate of approval or provisional certificate of approval issued under the Ontario Water Resources Act or the Environmental Protection Act (Ontario) with respect to the storm sewer and or its discharge;
 - (f) have one or more of the following characteristics:
 - (i) visible film, sheen or discoloration;
 - (ii) Two or more separate layers;
 - (iii) A pH less than 6.0 or greater than 9.5;
 - (iv) A temperature greater than 40 degrees Celsius
 - (g) contain one or more of the following:
 - (i) acute hazardous waste chemicals;
 - (ii) blowdown;
 - (iii) combustible liquids;
 - (iv) floating debris;
 - (v) fuel;
 - (vi) hauled sewage;
 - (vii) hauled waste;
 - (viii) hazardous industrial waste;
 - (ix) hazardous waste chemicals;
 - (x) ignitable waste;
 - (xi) pathological waste;
 - (xii) PCBs;
 - (xiii) pesticides;

- (xiv) reactive waste;
 - (xv) severely toxic waste;
 - (xvi) sewage;
 - (xvii) waste radioactive prescribed substances;
 - (xviii) waste disposal site leachate;
 - (xix) a substance from raw materials, intermediate or final product, used or produced in, through or from an industrial process; or
 - (xx) a substance used in the operation or maintenance of an industrial site;
 - (xxi) oil, grease, or any petroleum based product;
 - (xxii) paint
- (h) contain E.coli colonies in excess of 200 per 100mL;
- (i) contain contaminants from raw materials, intermediate or final products or wastewater from an industrial operation; or
- (j) contain a concentration, expressed in milligrams per litre, in excess of any one or more of the limits in Table 2 of this By-law entitled "Limits for Discharge into Storm Sewers".
- (2) No person shall throw, deposit, or leave in or upon any sewer or any trap, basin, grating, manhole, or other appurtenance of any sewer any butcher's offal, garbage, litter, manure, rubbish, earth, gravel, dirt, hay, straw, twigs, leaves, rags, cinders, ashes or refuse matter of any kind.
- (3) A person may be required, by written notice from the Municipality to perform or undertake one or more of the following activities addressing storm water quality from the person's property:
- (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; or
 - (e) any other activity set out in the notice.
- (4) No person shall fail to comply with the requirements of a written notice as stipulated in Section 4(2) within the time lines specified in the notice.

Table 2 - Limits for Discharge into Storm Sewers

Parameter	Limit (mg/L)
Biochemical Oxygen Demand	15
Suspended Solids, Total	15
Cyanide, Total	0.02
Phenolics (4AAP)	0.008
Phosphorus, Total	0.4
Arsenic, Total	0.02
Cadmium, Total	0.008
Chromium, Total	0.08
Copper, Total	0.04
Lead, Total	0.12
Mercury, Total	0.0004
Nickel, Total	0.08
Selenium, total	0.02
Silver, Total	0.12
Zinc, Total	0.04
Benzene	0.002
1,4 - Dichlorobenzene	0.0068
Ethylbenzene	0.002
Methylene chloride	0.0052
1,1,2,2 - Tetrachloroethane	0.017
Tetrachloroethylene	0.0044
Toluene	0.002
Trichloroethylene	0.0076
Xylene, Total	0.0044

Part 5 - REPORTING REQUIREMENTS

5. (1) Prior to any discharge of sewage, storm water, cooling water, uncontaminated water or any combination thereof, to the sewage works or the storm sewer, a Discharger is required to complete and return to the Municipality the following reports:
 - (a) the "Short Version of the Discharger Information Report" attached as Schedule "A" to this by-law; and
 - (b) the "Complete Discharger Information Report" attached as Schedule "B" to this by-law; under the following conditions:
 - (i) where in the opinion of the Municipality, the Discharger may have a significant impact on the sewage works; or
 - (ii) the Discharger has or may require an extra strength agreement with the Municipality.
- (2) If a person discharging to the sewage works or the storm sewer prior to the enactment of this By-law, the Discharger shall comply with the requirements of 5(1) within 30 days after the passage of this By-law.
- (3) The conditions in 5(2) do not apply to an existing 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.
- (4) Written notification must be provided to the Municipality of any change to the information reported under 5(1) within 15 days of the change.

Part 6 - DISCHARGER SELF-MONITORING

6. (1) A Discharger shall complete any monitoring and sampling of a discharge to the sewage works as determined by the Municipality, and shall provide the results to the Municipality in a reporting format acceptable to the Municipality.
- (2) The duties of the Discharger as determined in 6(1) shall be completed at the expense of the Discharger unless the Municipality has made an agreement to share the expense with the Discharger.

Part 7 - EXTRA STRENGTH SURCHARGE AGREEMENT

7. (1) The discharge or deposit of sewage that would otherwise be prohibited by this By-law may be permitted into or in any connection to any sanitary sewer or combined sewer to an extent fixed by an Industrial Waste Surcharge Agreement

or a Sanitary Discharge Agreement with the Municipality under such conditions with respect to payment of additional sewage service rates or otherwise as may be deemed necessary by the Municipality to compensate for any additional costs of operation, repair and maintenance of the sewage works.

- (2) (a) The Municipality may authorize an Industrial Waste Surcharge Agreement to permit exceedences of the parameter limits as set out in Table 1 "Limits for Discharge Into Sanitary Sewers".
- (b) Upon recommendation of the Commissioner, the Municipality is authorized to execute such agreements under the authority of this By-law.
- (3) (a) A Sanitary Discharge Agreement shall be made for the discharge of sewage that contains water that has originated from a source separate from the municipal water supply system.
- (b) Upon recommendation of the Commissioner, the Municipality is authorized to execute such agreements under the authority of this By-law.
- (4) The agreements contemplated by Parts 7(2)(a) and 7(3)(a) may be terminated by the Municipality by written notice at any time where there is an emergency situation of immediate threat or danger to any person, property, plant or animal life, water or the sewage works.
- (5) A person who has entered into an agreement with the Municipality shall not be prosecuted under Part 2 of this By-law for the discharge or deposit of any matter specified in the agreement and in compliance with the agreement during the period within which the agreement is applicable and so long as the agreement is fully complied with.
- (6) An Industrial Waste Surcharge Agreement or a Sanitary Discharge Agreement shall be in the form and of the content as set out by the Commissioner from time to time.

Part 8 - COMPLIANCE PROGRAM

8. (1) The Municipality may issue a compliance program to address a non-compliance situation, where a Discharger is out of compliance with one or more conditions in Section 2 if, in the opinion of the Commissioner, there are no other practical options available to eliminate the non-complying discharge.
- (2) Every compliance program shall be for a specific length of time during which treatment facilities are to be installed and shall be specific as to the remedial actions to be implemented by the industry, the dates of commencement and completion, and the materials or other characteristics or the matter to which it

relates. The final activity completion date shall not be later than the final compliance date specified in the compliance program.

- (3) A person to whom a compliance program has been issued shall submit a compliance program progress report to the Commissioner within 14 days after the scheduled completion date of each activity listed in the compliance program.
- (4) A person to whom a compliance program has been issued shall not be prosecuted under Part 2 of this By-law for the discharge or deposit of any matter specified in the compliance program during the period within which the compliance program is applicable and so long as the person complies with the compliance program.
- (5) The Municipality may levy an extra strength sewage service rate as described in Section 7 for non-complying wastes specified in the compliance program during the period within which the compliance program is applicable.
- (6) The Commissioner may require the person to self-monitor for such parameters as specified in the compliance program for the duration in which the compliance program is applicable.
- (7) All costs associated with self-monitoring shall be the responsibility of the person to whom the approved compliance program is issued.
- (8) The Commissioner may terminate a compliance program at any time in the event that the person issued the compliance program fails or neglects to carry out or diligently pursue the activities required of it and the termination shall be effective within 30 days of a written notice of termination.
- (9) A compliance program may be terminated by the Commissioner by written notice at any time where there is an emergency situation of immediate threat or danger to any person, property, plant or animal life, waters or the sewage works, and the termination shall be effective immediately.

Part 9 - MAINTENANCE ACCESS POINTS

9. (1) The owner or operator of commercial, institutional or industrial premises or apartment/condominium building with one or more connections to a sewage works shall install and maintain in good repair in each connection a suitable maintenance access point to allow observation, sampling and flow measurement of the sewage, uncontaminated water or storm water therein, provided that where installation of a maintenance access point is not possible, an alternative device or facility may be substituted with the written approval of the Commissioner.
- (2) Where there is no maintenance access point meeting the requirements of this By-law, the Municipality may require in written notification, the installation of a

maintenance access point within a specified period of time or may permit the use of an alternate device or facility for the purpose of sampling a discharge to the sewage works.

- (3) Maintenance access points required under this by-law 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 with standards of the Municipality;
 - (d) maintained to ensure access and structural integrity; and
 - (e) maintained and constructed at the expense of the discharger.

Part 10 - SAMPLING AND ANALYTICAL REQUIREMENTS

10. (1) The sampling and analysis required by this By-law shall be in accordance with the procedures, modified or unmodified, as described in the Standard Methods or a document generated by the Municipality.
- (2) Non-compliance with this By-law may be determined by the analysis of
 - (a) a single grab sample, or
 - (b) a composite sample done in accordance with Section 10(1).
- (3) Conditions in this By-law are applicable to discharges as sampled at the last point of control prior to or after the discharge to the sewage works crosses the property boundary.
- (4) In the event that the person cannot provide a maintenance access point due to space limitations and the Municipality has agreed on an alternative sampling location, the conditions in the By-law are applicable to discharges as sampled at the agreed upon alternative sampling location.

Part 11 - SPILLS

11. (1) In the event of a spill to a sewage works, the person shall immediately notify the Municipality, provide any information with respect to the spill that the Municipality requires and complete any work the Municipality may require to mitigate the spill.
- (2) The person shall provide a report on the spill to the Municipality, within five 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, including MSDS sheets;
 - (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.
- (3) All costs incurred by the Municipality as a result of such spill shall be borne by the person responsible for the spill.

Part 12 - GREASE/SEDIMENT INTERCEPTORS

12. (1) Every owner or operator of a restaurant or other industrial, commercial or institutional premises where food is cooked, processed or prepared, which premises is connected directly or indirectly to a sewer, shall take all necessary measures to ensure that oil and grease are prevented from entering the sewer. In particular, the owner or operator shall install, operate and properly maintain a grease interceptor in any piping system at its premises that connects directly or indirectly to a sewer. Such grease interceptors shall be adequately sized so as to provide effective removal of oil and grease.
- (2) Every owner or operator of a commercial, industrial or institutional premises at which floor drains of a service garage are connected directly or indirectly to a sewer shall install and maintain an oil interceptor designed to prevent motor oil and lubricating grease from passing into drainage piping which is connected directly or indirectly to a sewer.
- (3) Every owner or operator of a premises from which sediment may directly or indirectly enter a sewer, including but not limited to premises using a ramp drain or area drain, car and vehicle wash establishments, shall take all necessary measures to ensure that such sediment is prevented from entering the drain or sewer.
- (4) Every grease interceptor and sediment interceptor shall be installed, operated and maintained in accordance with the manufacturer's instructions, and shall be inspected and cleaned frequently to ensure that it is operating effectively.
- (5) Owners or operators of premises having grease or sediment interceptors shall keep a record of interceptor maintenance including the date(s) on which cleaning/maintenance occurred, the person or contractor responsible, and the method and destination of waste disposal, and upon request these records shall be made available to the Municipality.

Part 13 - PRETREATMENT AND SELF-MONITORING AND REPORTING

13. (1) The Commissioner may require the owner or operator of industrial premises discharging, or proposing to discharge, into the municipal sewage works effluent exceeding the strength, nature, quantity or quality provided for this By-law to install and maintain a pretreatment facility or holding tank so that the effluent will be reduced accordingly.
- (2) The pretreatment facility or holding tank shall be located on the property of the owner or operator of the premises.
- (3) Any pretreatment facility or holding tank installed as required in Section 13(1) shall be designed and constructed in accordance with good engineering practice and the requirements of the Commissioner, and shall be constructed and maintained by the owner or operator of the premises at his/her expense.
- (4) The Commissioner may require the owner or operator of the industrial premises to install and maintain devices to monitor sewage, uncontaminated water or storm water discharges and to submit regular reports regarding the discharges to the Municipality.
- (5) No person with a pretreatment facility or holding tank shall fail to keep a record of cleaning and maintenance and to produce such record to the Municipality on request.

Section 14 - GENERAL

14. (1) No person shall prevent, hinder, obstruct or interfere in any way with the Commissioner or an inspector,
 - (a) entering in or upon any land or premises, except land or premises being used as a dwelling house, at any reasonable time without a warrant;
 - (b) making such tests or taking such samples as he/she deems necessary;
 - (c) inspecting, observing in any plant, machinery, equipment, work or activity for the purpose of administering or enforcing this By-law.
- (2) No person shall uncover, make any connection with, or opening into, break, alter, damage, destroy, deface, or tamper or cause or permit the breaking, damaging, destroying, defacing or tampering with, any part of a sewage works;
or
 - (a) any permanent or temporary device installed in a sewage works for the purpose of flow measuring, sampling and testing of sewage, uncontaminated water or storm water.

- (3) Any person discharging sewage, uncontaminated water or storm water to the municipal sewage works shall be responsible for ensuring that such sewage, uncontaminated water or storm water conforms at all times to the provisions of this By-law, and shall be liable for any damage or expense arising out of his/her failure to properly check and control such discharge, including the cost of investigation, repairing, cleaning or replacing any part of any municipal sewage works damaged thereby.
- (4) Unless specifically authorized by the Commissioner, no person shall enter any sewage works.

Part 15 - SEWER CONNECTIONS

- 15. (1) No person shall:
 - (a) erect or cause or permit to be erected any new building on lands that are serviced by a sanitary sewer unless the new building is connected to the sanitary sewer;
 - (b) construct, install, maintain or cause or permit to be constructed, installed or maintained, whether installed prior to the date of the passing of this by-law or any of its predecessors, a direct or indirect connection to the sanitary sewer connection which would permit anything other than sanitary sewage to discharge into the sanitary sewer connection.
 - (c) construct, install, maintain, or cause or permit to be constructed, installed, or maintained a direct or indirect connection to the sanitary sewer connection without final inspection by the Municipality and all such connections shall require a clean out connection as per municipal standards.
- (2) No person shall construct or excavate to repair a sewer or sewer connection on any road allowance, easement or other public land unless under a contract or agreement with the Municipality.
- (3) Reconstructed Buildings:
 - (a) Whenever an existing building is substantially demolished, the existing municipal sewer connections shall be disconnected at the municipal sewers and inspected at the expense of the owner of the building or agent. The owner or agent holding the permit to construct the replacement building shall be required to apply and pay for the installation of new municipal sewer connections. For the purpose of this section, an existing building is substantially demolished when more than fifty percent of the exterior walls of the first story above grade are removed whether or not they are subsequently replaced.

- (b) An owner or agent who is applying for a permit to construct a replacement building or to disconnect a dwelling from a septic tank to connect to a sanitary sewer connection shall be entitled to use an existing municipal sewer connection, which, upon inspection by the Municipality, is found to be in satisfactory condition. The applicant shall pay for the cost of the inspection, the amount of which shall be determined from time to time by the Municipality.
- (4) The Commissioner may order the temporary disconnection of any sewer connection whenever the Commissioner considers it necessary and for so long as the Commissioner considers it necessary to prevent continued or repeated violations of this By-law, and during that time no person shall use or cause or permit the use of such a connection.
- (5) The Commissioner shall not order such temporary disconnection unless the Commissioner has first mailed to the property owner and occupant, if any, a registered letter specifying the nature of the violation of this By-law and indicating the intention to order temporary disconnection no sooner than thirty days after the date of mailing unless the Commissioner can be satisfied such violations will not continue or recur. The cost of the disconnection and reconnection shall be borne by the property owner and shall be payable before any reconnection is made.
- (6) Any person desiring a sewer connection shall make an application to the Municipality on forms supplied by the Municipality and accompanied by such plans as may be required and pay a fee for the application. The owner of the property to be served, or the owners' agent shall sign the application, and the owner shall be responsible for the completeness and accuracy of the information furnished on such application and plans.
- (7) A sewer lateral or sewer connection on public property between the sewer main and private property shall be installed by the Municipality or under a contract or agreement with the Municipality at the cost of the owner or agent for such work and at rates and to specifications determined from time to time by the Municipality. Sewer connections on private property shall be installed by the owner pursuant to a building permit having been previously issued for such purpose by the Municipality and at the expense of the owner or agent.
- (8) The property owner shall be responsible for maintaining the sewer lateral connecting the owner's building to the sewer main. This shall include the responsibility for maintenance of the portion of the sewer lateral on public property between the sewer main and private property.
- (9) Methods and materials used on the construction of sewer connections shall resist entry of roots and acid or alkali damage, and shall be acceptable to the

Commissioner. Please refer to municipal standards for materials which are acceptable and unacceptable for use in the construction of sewer laterals and connections.

- (10) Double municipal sewer connections will not be permitted.
- (11) A private sewer connection shall not be installed until:
 - (a) all applicable permits including building permits and sewer connection permits have been applied for and issued;
 - (b) the municipal sewers to which the municipal sewer connection is to be made are fully completed and accepted for operation;
 - (c) the municipal sewer connection is satisfactorily installed;
 - (d) the backfilling is properly completed around the building and the lot has been sufficiently graded to eliminate the possibility of any ponding on the property and the sub-flooring has been installed over the foundation to prevent the entry of storm water which could run off through the private sewer connection; and
 - (e) all existing surface water in the excavation or basement has been pumped out.
- (12) In event that any person constructs a municipal sewer connection in a manner other than provided for herein, the Commissioner may order the re-excavation of the connection for the purpose of inspection and testing, and if necessary, reconstruction of the work, and the Commissioner may have these works performed at the expense of the owner or may disconnect the said sewer connection, in which case it shall not be reconstructed except with the approval of the Commissioner.
- (13) Where a private owner has requested:
 - (i) an inspection by means of an excavation or closed circuit television inspection of any existing municipal sewer connection or;
 - (ii) an investigation and/or clean out of any existing municipal sewer connection or lateral by the Municipality;

the owner shall be responsible for any associated costs in accordance with the fees and charges by-law of the Municipality.
- (14) Where a catch basin has been installed on private property to drain storm water from any driveway which slopes towards any structure located on the said property, the installation shall include:
 - (a) a flap gate water valve installed directly downstream of the private catch basin, so that no storm water may back-up from the storm sewer into the private catch basin;

- (b) a sump pump, located in the overflow sump, to discharge any storm water which has collected in the catch basin while the above flap gate backwater valve has closed to prevent a back-up of storm water; and
 - (c) a flap gate backwater valve installed on the weeping tile lead adjacent to the sump pit, so that no storm water may flow from the sump pit into the weeping tile system.
- (15) Appropriate lot level storm water management measures are to be used to reduce storm water quantity and improve storm water quality. The direct connection of any drainage works, including foundation drainage and roof water leaders, to the municipal storm sewer system is prohibited unless, in the opinion of the Commissioner, there is no practical alternate means of drainage available. Where a new connection is deemed necessary for the servicing of hard surface parking or vehicle access areas, the applicant may be required to submit a storm water management report identifying the storm water control measures being proposed for the site to the satisfaction of the Commissioner. Where a new connection is deemed to be necessary for the purposes of providing groundwater drainage, no direct or indirect interconnection between the private drainage system and the municipal sanitary drainage system is permitted, in addition the discharge to the municipal storm sewer must be regulated by means of either,
- (a) a sump pump, that must elevate the water, via a loop system, to an elevation above that of the centre line elevation of the road before being discharged to the municipal storm drainage system. A flap gate check valve shall be installed on the sump pump discharge pipe so that no storm water may flow from the storm sewer back into the private drainage system. The above systems shall be installed and maintained by the owner and operator of the premises at his/her expense; or
 - (b) a backwater valve in circumstances where a storm sewer connection is at such an elevation so as to provide gravity flow. The above system shall be installed and maintained by the owner or operator of the premises at his/her expense.
- (16) The owner of any building which has a roof water leader discharging storm water, either directly or indirectly, into the sanitary sewer connection shall disconnect the down-pipe from the underground portions at grade and shall conduct the storm water away from the building in such a manner that the storm water will not accumulate at or near the building and will not adversely affect adjacent properties.

For the purpose of this section,

- (i) "directly" shall mean by any physical connection or series of connections between the roof water leader and the sanitary sewer system;

- (ii) "indirectly" shall mean in any manner whatsoever whereby storm water enters the sanitary sewer system, and for the greater certainty includes any situation where open joints in underground sewer connections on private property permit storm water to infiltrate the sanitary sewer system.

- (17) No person shall construct, install, maintain, or cause or permit to be constructed, installed or maintained, drainage from any roof water leader or down spout that conveys storm water to the sanitary sewer. The Commissioner may waive this provision in appropriate circumstances.


Part 16 - OFFENCES

- 16. (1) Any person who contravenes any provision of this By-law is guilty of an offence and on conviction is liable to a fine of up to \$10,000 for a first offence and up to \$25,000 for any subsequent offence.
- (2) Notwithstanding subsection 16(1), where a corporation is convicted of an offence under this by-law, the corporation is liable to a fine of up to \$50,000 for a first offence and up to \$100,000 for any subsequent offence.

Part 17 - REPEAL

- 17. (1) By-law number 1195 passed by the former Corporation of the Village of Wellington and By-law number 53-1987 passed by the former Corporation of the Town of Picton are hereby repealed.

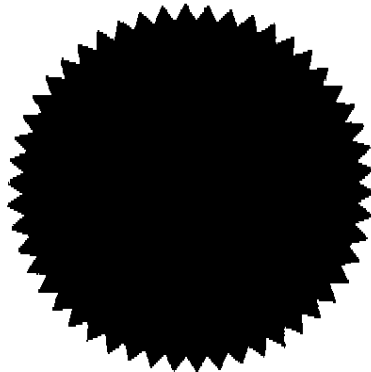
Read a first, second and third time and finally passed this 11th day of September, 2006.



CLERK
Victoria Leskie



MAYOR
Leo P. Finnegan



SCHEDULE 'A'

Short Version of the Discharger Information Report

This completion of this form is required by all Dischargers to the sewage works under By-law No. 1803 -2006 addressing sewer use in the Municipality of Prince Edward.

**Assistance in completing this form is available by calling the Environmental Technician at 613- 476-3537

The completed form is to be forwarded to:
The Corporation of the County of Prince Edward
Attn: Sewer Use Staff
126 County Road 32
R. R. #1
Picton, ON K0K 2T0

Please print clearly while completing the form.

The "Short Version of the Discharger Information Report"	
1	Name of Company
2	Address of Company Phone: Fax:
3	Owner of property (if different from Company listed above) Phone: Fax:

4	Brief Description of Product or Service						
5	Brief Description of the Process(es) used in the Manufacturing or Servicing						
6	<p>“Are there” or “Will there be” any of the following wastewater discharges from the description as provided in #5?</p> <table><tr><td>Process wastewater</td><td>Yes/No</td></tr><tr><td>cooling water</td><td>Yes/No</td></tr><tr><td>other sources of wastewater (other than sanitary) (if yes, brief description)</td><td>Yes/No</td></tr></table>	Process wastewater	Yes/No	cooling water	Yes/No	other sources of wastewater (other than sanitary) (if yes, brief description)	Yes/No
Process wastewater	Yes/No						
cooling water	Yes/No						
other sources of wastewater (other than sanitary) (if yes, brief description)	Yes/No						
7	<p>Does the site have any existing connections to the following sewers?</p> <table><tr><td>sanitary</td><td>Yes/No</td></tr><tr><td>combined</td><td>Yes/No</td></tr><tr><td>storm</td><td>Yes/No</td></tr></table>	sanitary	Yes/No	combined	Yes/No	storm	Yes/No
sanitary	Yes/No						
combined	Yes/No						
storm	Yes/No						

8	Location of process units? Storage of raw materials? Storage of intermediate products? Storage of final products?	Inside / Outside / Outside but covered Inside / Outside / Outside but covered Inside / Outside / Outside but covered Inside / Outside / Outside but covered
9	Does the site have any of the following programs in place to address discharges to the sewer system? Pollution Prevention Best Management Plan Environmental Management System	Yes/No Yes/No Yes/No
Date form completed: Name and Title of Company Representative: Signature of Authorized Company Representative:		
Note: Completion of the "Complete Discharger Information Report" may be required based on this report and/or subsequent verification of the site by the Municipality. For Municipality use only - date completed form received:		

SCHEDULE 'B'

Complete Discharger Information Report

This completion of this form by specific Dischargers to the sewage works as required as defined in By-law No. 1803 -2006 addressing sewer use in the County of Prince Edward.

**Assistance in completing this form is available by calling the Environmental Technician at 613- 476-3537

The completed form is to be forwarded to:
The Corporation of the County of Prince Edward
Attention: Sewer Use Staff
126 County Road 32
R. R. #1
Picton, ON K0K 2T0

Please note the following:

- \$ Print clearly while completing the form.
- \$ Additional information and attachments - are required
- \$ Indicate what material has been attached to ensure that the municipality is aware of all the information provided.

The "Complete Discharger Information Report"	
1	Name of Company
2	Address of Company Phone: Fax:

3	<p>Owner of property (if different from Company listed above)</p> <p>Phone: Fax:</p>
4	<p>General site Operation Information</p> <p>Number of Employees involved in plant: office: other: Total:</p> <p>Number of shifts per day: Number of operating days per week:</p>
5	<p>Description of Product(s) or Service</p> <p>Include Standard Industrial Code (SIC) - state if SIC is Canadian or American</p>
6	<p>Description of the Process(es) used in the Manufacturing or Servicing</p> <p>Include characteristics such as Batch (how many per time period), Continuous, or Both (explanation to be provided), Seasonal Production Cycles, Specific Clean-up Periods and Clean -up Activities</p>

7	<p>Average Daily Water Use and Sources</p> <table><tr><td>Municipal Supply</td><td>Yes / No</td><td>_____m3/day</td><td>Estimated or Measured</td></tr><tr><td>Surface Water**</td><td>Yes / No</td><td>_____m3/day</td><td>Estimated or Measured</td></tr><tr><td>Groundwater*</td><td>Yes / No</td><td>_____m3/day</td><td>Estimated or Measured</td></tr><tr><td>Other sources**</td><td>Yes / No</td><td>_____m3/day</td><td>Estimated or Measured</td></tr></table> <p>If flow rate varies significantly provide peak flow rates per day and month and explanation.</p> <p>* Provide copy of the Permit to Take Water (as required by the OWRA) according to By-law Requirements. ** If "Yes" - provide explanation as an attachment</p>	Municipal Supply	Yes / No	_____m3/day	Estimated or Measured	Surface Water**	Yes / No	_____m3/day	Estimated or Measured	Groundwater*	Yes / No	_____m3/day	Estimated or Measured	Other sources**	Yes / No	_____m3/day	Estimated or Measured
Municipal Supply	Yes / No	_____m3/day	Estimated or Measured														
Surface Water**	Yes / No	_____m3/day	Estimated or Measured														
Groundwater*	Yes / No	_____m3/day	Estimated or Measured														
Other sources**	Yes / No	_____m3/day	Estimated or Measured														
8	<p>Discharge Points from Site</p> <p>List all discharge points and average daily flow in cubic metres per day of sanitary, non-contact cooling water, process wastewater, contact cooling water and other discharge water to the sanitary sewer, combined sewer, storm sewer, groundwater, surface water, evaporation losses (if applicable), and percent of water in final product (if significant and applicable to the site).</p> <p>i.e. process wastewater from manufacturing line to sanitary sewer at an average daily flow of 200 m3/day (measured)</p>																

9	<p>Known Characteristics of Discharges</p> <p>Provide existing data on quality of the discharges listed above in #8 (complete Parameter Information Form for each discharge point as provided with this form)</p>
10	<p>Physical Layout</p> <ul style="list-style-type: none"># Provide sketch of property (to scale or approximate) showing buildings, pretreatment works, property boundaries, effluent lines, and connections to sanitary, combined and storm sewers.# Please identify sewers as listed on the Parameter Information Form as completed above.# Layout may be attached as separate document - leave note to indicate submission with this form.# A flow diagram of the site flows/processes is also required.
11	<p>Regulation 347 Information</p> <p>Provide any Generator Registration Numbers that the site under the requirements of Ontario Regulation 347 under the EPA</p>
12	<p>Extra Strength Surcharge Agreements (ESSA)</p> <p>Does the site have any existing ESSA with the Municipality? Yes / No</p> <p>Did the site previously have an ESSA with the Municipality? Yes / No</p> <p>If yes to either question - Attach a copy of each agreement to this form</p>

13	<p>Pretreatment of Discharges Prior to Discharge</p> <p>Does the site have any pretreatment systems for process effluents prior to discharge to the sewer system?</p> <p>Yes / No</p> <p>If Yes - provide a description of the pretreatment devices, contaminants removed, operational procedures for the device and description of process utilized in the device.</p>						
14	<p>Does the site have any of the following programs addressing discharges to the sewer system in place?</p> <table data-bbox="322 798 1090 931"><tr><td>Pollution Prevention</td><td>Yes / No</td></tr><tr><td>Best Management Plan</td><td>Yes / No</td></tr><tr><td>Environmental Management System</td><td>Yes / No</td></tr></table> <p>If yes - attach copy of each to the form and explanation of implementation.</p>	Pollution Prevention	Yes / No	Best Management Plan	Yes / No	Environmental Management System	Yes / No
Pollution Prevention	Yes / No						
Best Management Plan	Yes / No						
Environmental Management System	Yes / No						
<p>Date form completed: Name and title of Company Representative: Signature of Authorized Company Representative:</p>							
<p>The information submitted in this form may be subject to verification by the municipality:</p> <table data-bbox="231 1343 1073 1423"><tr><td>For Municipality use only</td><td>Date completed form received:</td></tr><tr><td></td><td>Date information verified/approved:</td></tr></table>		For Municipality use only	Date completed form received:		Date information verified/approved:		
For Municipality use only	Date completed form received:						
	Date information verified/approved:						

"Parameter Information Form" for discharges to sanitary sewers

Plant Name and Location:

Date:

For Discharge Point Identified as:

Parameter or Condition*	By-law Limit (mg/L)	Average Concentration or Range (in mg/L)	Significant Variation (Yes or No) and Reasons for the Variations	Additional Information Attached (Yes or No)
pH level*	6.0 - 10.5			
two or more layers*	one			
temperature*	60 ^B C			
B.O.D.	300			
Biochemical Oxygen Demand	300			
Cyanide, Total	2			
Kjeldahl Nitrogen, Total	100			
Phosphorus, Total	10			
Suspended Solids, Total	350			
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			
Antimony, Total	5			
Arsenic, Total	1			

Selenium, Total	5			
Mercury, Total	0.05			
Phenolics (4AAP)	1.0			
Chloroform	0.04			
1,4 - Dichlorobenzene	0.047			
Methylene chloride	0.21			
1,1,2,2 - Tetrachloroethane	0.04			
Tetrachloroethylene	0.05			
Trichloroethylene	0.07			
Benzene	0.01			
Ethylbenzene	0.16			
Toluene	0.27			
o-Xylene	0.52			
Solvent Extractables - mineral or synthetic in origin	15			
Fluoride	10			